

Check Sheet

Company Name: JACKSONVILLE ELECTRIC AUTHORITY
Permit Number: HC 16 85951, - 86189-86190
PSD Number: _____
Permit Engineer: _____

Application:

- Initial Application
 - Incompleteness Letters
 - Responses
 - Waiver of Department Action
 - Department Response
 - Other

Cross References:

- ~~16-190~~ 86190
- ~~16-189~~ 86189
- 16-78586 AC
- AO 16-59264
- AO 16-58584
- 135278
- 135279
- 135276
- OGC CASE 84-0575

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Correspondence with:

- EPA
- Park Services
- Other
- Proof of Publication
 - Petitions - (Related to extensions, hearings, etc.)
 - Waiver of Department Action
 - Other

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

REGULATORY & ENVIRONMENTAL
SERVICES DEPARTMENT
Air Quality Division



March 7, 1995

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

RE: Duval County - Air Pollution
JEA Northside Generating Station Unit No.3
Permit No. A016-207528

Dear Mr. ^{BOB}Leetch:

The City of Jacksonville, Regulatory and Environmental Services Department, Air Quality Division (AQD) received a request on February 16, 1995, from JEA to amend the above referenced permit (attachment). JEA is currently installing a continuous emissions monitor (CEM) for nitrogen oxides (NOx) on the No.3 Unit. The request is to allow the CEM to be used for demonstrating compliance with the applicable emissions standards. 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. Compliance should be determined by calculating the arithmetic average of all hourly emission rates for NOx for 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction. [40CFR60.46a(g)]

Note: JEA has used 40CFR60, Subpart Da as a model for demonstrating compliance using a CEM. The No.3 Unit is not subject to the provision of any NSPS.

2. Quarterly reports should be submitted to the DEP-NED and to AQD. The reports should contain all information as required by 40CFR60.49a.

FAX		DATE	# PGS
TO	Al Linero		
CO	FAX#		
FROM	Bert Gianazza		
CO	PH# 904-632-6247		
MESSAGE	AVERY FX-15		

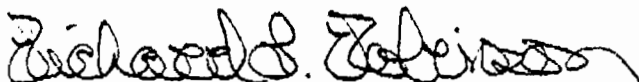


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Mr. Robert Leetch
March 7, 1995
Page 2

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

Very truly yours,



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

RLR/be

Attachment

c: Mr. Richard Breitmoser, P.E. - JEA
Mr. Wayne Tutt, AQD
AQD File 1680-F
AQD Permitting File

JACKSONVILLE ELECTRIC AUTHORITY

21 WEST CHURCH STREET • JACKSONVILLE, FL 32202-3139



February 13, 1995

Mr. Ron Roberson
Associate Engineer
Regulatory and Environmental
Services Department
421 West Church Street, Suite 412
Jacksonville, Florida 32202

Dear Mr. Roberson:

RE: Northside Generating Station Unit #3
Permit No. AO16-207528

The purpose of this letter is to request a permit revision for Northside Unit #3 specifying a 30-day rolling average for demonstrating compliance with the 0.3 lb/MBtu NOx limit. We also request that the the method of compliance be changed from the current annual NOx stack test using method 7e to the certified NOx CEMs using a 30-day rolling average calculated in accordance with Subpart Da. We request that this averaging period take effect on the earlier of January 1, 1996 or the date of CEM certification.

The last time we requested this revision, the statutes regarding this issue were in place (F.S. 403.0872(13)(b)), but no regulations had been promulgated. For this reason we were instructed to go through an equivalency demonstration in order to obtain the permit revision. As you probably know, the regulations commensurate with the statutes were promulgated as part of the recent 62-200 Corrective Amendments thereby eliminating the need for an equivalency demonstration.

We suggest that the following changes be made by way of permit revision:

Specific Condition No. 8

Remove all references to testing intervals and methods for NOx.

Specific Condition to be added

"Effective on the earlier of January 1, 1996 or date of initial NOx CEM certification, this source shall demonstrate compliance for nitrogen oxides (expressed as NO2) based upon a 30-day rolling average. The methodology to be used will follow the criteria set forth in 40 CFR 60, Subpart Da. The calculations shall be consistent with the equations in 40 CFR 60, Appendix A, Reference Method 19, Section 4.2. (July, 1993). Data collected during boiler operating days

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Mr. Ron Roberson
February 13, 1995
Page Two

will be used to calculate the 30-day rolling average except during periods of start-up, shut down, or malfunction, consistent with the provisions of Rule 62-210.700, F.A.C.

For the purpose of calculating a 30-day rolling average, a boiler operating day is defined as a 24-hour period (between 12:01 a.m. and 12:00 midnight) during which fossil fuel is combusted in a steam operating unit for the entire 24-hours.

The continuous emission monitor shall meet the quality assurance requirements and performance specifications contained 40 CFR 75.

A report shall be submitted to the Florida Department of Environmental Protection within 30 days following each calendar quarter. This report shall contain the 30-day rolling average, all time periods of boiler operation as well as a statement of CEM and/or boiler malfunction, start-up or shutdown.

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

Sincerely,



Richard Breitmoser, P.E.
Division Chief
Environmental Affairs

RB/NBG



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

June 6, 1994

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Patty file

Mr. Richard Breitmoser, P.E.
Division Chief
Environmental Affairs
Jacksonville Electric Authority
21 West Church Street
Jacksonville, Florida 32202-3139

RE: JEA—Northside Unit #3—Permit No. AO 16-207528

Dear Mr. Breitmoser:

On April 18, we received a copy of your request for approval of an alternate sampling procedure and standard from the Regulatory & Environmental Services Department of the City of Jacksonville. In order to process the request, the following information is needed: 1) A specific date for implementation of the proposed method of compliance; 2) A proposed schedule for submission of compliance monitoring data; 3) A proposed schedule for submission of excess emissions reports pursuant to 40 CFR 60; 4) A proposed quality assurance plan pursuant to 40 CFR 75 Appendix A; and, 5) The results of each NOx emission test conducted during the last five years.

The review of this request will continue upon receipt of the requested information and a copy will be sent to EPA Region IV for review and comment. If you have any questions, please call Louis Nichols at (904) 488-1344 or write to me.

Sincerely,

Michael D. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section

cc: K. Kirts
R. Roberson
W. Tutt
D. McNeal



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Khurshid Mehta
THRU: Clair Fancy *Bill Thomas*
FROM: Bill Thomas
DATE: July 18, 1988
SUBJ: JEA Northside Unit No. 3, Burner Upgrade Project

I recommend granting JEA the time necessary for testing Unit No. 3 to obtain boiler profiles.

Rule 17-2.250(5) of the Florida Administrative Code, Excess Emissions provision, allows for the granting of a limited time frame within which JEA could conduct boiler profile tests, which may result in brief periods of excess emissions, if the testing results in an eventual environmental benefit.

BT/PR/s

cc: B. Pittman, Esq.

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



RECEIVED

JUN 29 1988

DER-BAQM

June 27, 1988

Mr. Kurshid Mehta
Bio-Environmental Services Division
421 W. Church Street
Jacksonville, FL 32202

Dear Mr. Mehta:

Re: Northside Unit #3 Burner Upgrade Project

JEA has recently initiated a program to upgrade combustion capabilities of the Northside #3 generating unit. One of the main elements of the project is the replacement of the existing burners with state-of-the-art high efficiency, low emission burners. These burners will be custom designed for the unique characteristics of Northside Unit #3. Significant environmental benefits in the area of NOX and particulate emissions should result from the new burner system.

As discussed with Marian DeGrove, Wayne Tutt, and Jerry Woosley of your staff, it is essential that an accurate and complete boiler profile be developed for this unit. Testing to obtain the necessary data will take approximately two weeks and is scheduled for September of this year. Each test will last approximately two hours with up to three tests possible each day. Some short excursions of the NOX standard are expected during testing. Due to the limited duration of the tests and the brief period of projected NOX excursions, we are seeking permission for excess emissions from the Northside #3 generating unit during the test period as allowed under Chapter 17-2.250 (5).

We understand that testing allowing excess emissions is also possible through Chapter 17.103.120 (Testing & Research Programs), however the burdensome, costly, and time intensive procedure required by this chapter does not seem to be warranted for such a limited testing program. It is noted that the provisions of this chapter allow variances up to two years.

TO: Bill
FROM: Clair
DATE: 7/7
SUBJ: JGA Northside Bureau upgrade

DATE DUE: 7/22
DATE COMPLETED: 7/18

Please accomplish the following job assignment by the date due.

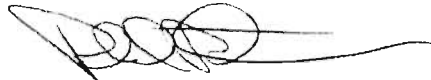
Please prepare memo to Khurshid thru me on what they have to do on this. Please get legal review before giving to me.

Dave PR

Mr. Kurshid Mehta
June 27, 1988
Page Two

Your assistance in facilitating this environmentally beneficial project is appreciated. Please contact me or Bob Kappelmann if you have any questions or need further information on this matter.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Environmental Affairs

RB:RLK:ss

cc: C. Fancy, FDER
B. M. Wirz
H. W. Chapman
W. G. Mercer
A. Holland
J. King
J. Kilgore
R. L. Kappelmann

NSBUGP.RLK

PM
21 Sept. 1987
Jacksonville, FL

C. Jancy
File Copy

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



September 17, 1987

Mr. Dale Twachtmann, Secretary
c/o Office of General Counsel
Department of Environmental Regulations
2600 Blair Stone Road
Tallahassee, Florida 32301

DER
SEP 22 1987
BAQM

Dear Secretary Twachtmann:

Re: Jacksonville Electric Authority
Kennedy Unit No.9 and 10
Air Operating Permit A016-135278, A016-135279
Request for Extension of Time for Filing

On August 24, 1987, the Jacksonville Electric Authority (JEA) received renewal permit A016-135278 and A016-135279 for Unit No.9 and 10 respectively at its Kennedy Generating Station. The permits were jointly signed by Ernest E. Frey, Manager of the Department's Northeast District, and Donald C. Bayly, Chief of the City of Jacksonville's Bio-Environmental Services Division (BESD). Pursuant to the transmittal letter and Florida Administrative Code Rule 17-103.155, JEA had until September 7, 1987 to file a petition for administrative proceedings regarding these permits.

On August 27, 1987, JEA requested an extension of thirty (30) days, to and including October 7, 1987, in which to file a petition for administrative proceedings regarding the permit. This request was made pursuant to Florida Administrative Code Rule 17-103.070, which provides for filing and pleading.

JEA submitted suggested changes to BESD for the above mentioned permits on August 27, 1987 which fully resolved JEA's concerns and was also consistent with all applicable rules and regulations. BESD has informed JEA that they wish to obtain DER concurrence with our suggested changes. Since this process may extend beyond the original time requested for an extension to file a formal petition, JEA is hereby requesting an extension of an additional thirty (30) days, to and including November 6, 1987, in which to file a petition for administrative proceedings regarding these permits. This request is made pursuant to Florida

(CONT.)

Dale Twachtmann
Page 2.
September 17, 1987

Administrative Code rule 17-103.070, which provides for filing and pleading.

This additional time extension request has been discussed with the BESD staff and they indicate no objections.

Accordingly, I request that you formally extend the time allowed to JEA for filing a petition for administrative proceedings regarding permits A016-135278 and A016-135279.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB\RLK

cc: Donald Bayly, BESD
— Claire Fancy, DER - Tallahassee
File 4.2.1.3

KDYPETX.RLK

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

August 6, 1987

Mr. Jerry Woosley
Department of Health, Welfare
and Bio-Environmental Services
Bio-Environmental Services Division
515 West 6th Street
Jacksonville, Florida 32206-4397

Dear Mr. Woosley:

Re: JEA, Kennedy Station, Units 9 and 10

The following are comments from the Bureau of Air Quality Management in response to your questions on the above referenced project.

The addition of natural gas as a fuel for units 9 and 10 would not constitute a modification since there is no projected net increase in emissions over burning No. 6 fuel oil. Compliance tests should be required to confirm that there is no net increase in emissions.

Since the units were originally designed to accommodate natural gas combustion and since the change of fuel results in no net emission increases, the installation of natural gas burners now does not constitute a modification.

A Prevention of Significant Deterioration (PSD) review would not be required if there is no modification.

It is recommended, however, that JEA install low-NOx burners to stay within BACT guidelines, should BACT be applicable in the future.

Mr. Jerry Woosley
Page Two
August 6, 1987

If you have any further questions, please call me at
(904)488-1344 or write to me at the above address.

Sincerely,



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

CHF/PR/s

cc: B. Stewart
R. Breitmoser

PM
7-20-87
Jacksonville, FL

file copy

**DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES**
Bio-Environmental Services Division
Air and Water Pollution Control

DER
JUL 21 1987
BAQM



July 17, 1987

Mr. Bill Thomas, P.E.
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blairstone Road
Tallahassee, FL 32301

**Subject: Jacksonville Electric Authority (JEA)
Kennedy Generating Station
Unit No. 9 and
Unit No. 10**

Dear Mr. Thomas:

Enclosed is a request from JEA concerning the addition of natural gas as a fuel for the captioned sources. The units are currently permitted to burn No. 6 fuel oil (copies of current operating permits enclosed).

Prior to incorporating the requested revision into the renewal permits answers to the following questions are requested:

1. Will Prevention of Significant Deterioration review be required? It is noted that a lbs/hr increase of any one pollutant is not expected, however an actual tons/yr increase may occur over the average actual emissions.
2. How is a modification determined? The units are currently not equipped to burn natural gas (natural gas burners not in place); however, JEA has verbally stated that the units were originally designed to accomodate natural gas combustion.

7.21.87

Bill:
Where to?
Rather to whom!
Thanks,
(G)



Mr. Bill Thomas, P.E.
July 17, 1987
Pg. 2

Any other permitting guidance which you feel may be of assistance
in this matter will be appreciated. /

If further information is needed concerning this request please
advise.

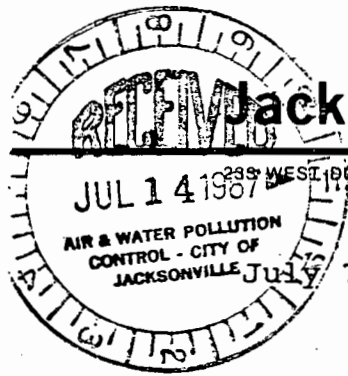
Very truly yours,

for 
Jerry E. Woosley
Associate Air Pollution Control Engineer

Enc: Operating permits

cc: BESD File
Bill Stewart, P.E.
Richard Breitmoser, P.E.

JEW:laj



Jacksonville Electric Authority

239 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



*John Mehta
Woosley
Lucas*
②

July 7, 1987

Mr. Donald C. Bayly, Division Chief
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32207

Dear Mr. Bayly:

Re: Kennedy Station Gas Conversion Project

Pursuant to conversations with Wayne Tutt, Jerry Woosley and Jeremy Lucas of your staff, the following additional information is provided related to JEA's Kennedy Gas Conversion Project.

<u>Kennedy Unit #9</u>		Oil*	Gas**
Emission Rate	Sulfur Dioxide	595 lbs/hr	2.08 lbs/hr
		752 tons/yr	9.1 tons/yr
	Particulate non-soot	46 lbs/hr	neg
	soot	51 tons/yr 84 lbs/hr 13 tons/yr	neg

* based on compliance test 8/6/81
** based on 8760 hours/yr operation

<u>Kennedy Unit #10</u>		Oil*	Gas**
Emission Rate	Sulfur Dioxide	1468 lbs/hr	5.14 lbs/hr
		4007 tons/yr	22 tons/yr
	Particulate non-soot	133 lbs/hr	neg
	soot	217 tons/yr 400 lbs/hr 93 tons/yr	neg

* based on compliance test 9/13/80
** based on 8760 hours/yr operation

Operation of these units on natural gas will result in a greatly reduced emission rate for sulfur dioxide and particulate. Although no emission limit exists for

(CONT.)

Mr. Donald C. Bayly
July 7, 1987
Page 2.


nitrogen oxide on existing units (based on our experience on the Southside Gas Conversion Project), nitrogen oxide emissions will be equal to or less than that from burning oil.

If you require any additional information on this matter, please let me know. Your assistance in expediting this permit revision request is appreciated.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division


RB/RLK/lwr

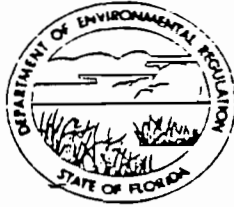
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cc: FDER - NE District
A. Bavington
J. Lucas
Files

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
SUBDISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
SUBDISTRICT MANAGER

APPLICANT:

Jacksonville Electric Authority
P.O. Box 53015
Jacksonville, Florida 32201

PERMIT/CERTIFICATION
NO. A016-59264

COUNTY: Duval

PROJECT:

Steam Generating Boiler
#9, Kennedy Generating
Station

APIS
31-16-0047-18

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2
and 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to
perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and
made a part hereof and specifically described as follows:

For the operation of steam generating boiler number nine (9)
for the production of electricity. Maximum heat input is 541
X 10⁶ BTU's per hour using #6 fuel oil with a maximum sulfur
content of 1% by weight.

Located at 4215 Talleyrand Avenue, Jacksonville, Florida 32206.
UTM E-7440.075 N-3359.130.

In accordance with the application received on August 13, 1982.

BEST AVAILABLE COPY

Permit No.: 17018-5920-
Applicant : Jacksonville Electric Authority

Specific Condition:

Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows:

- A. Plot plans and diagrams
- B. Emission Calculations

The maximum allowable emission rate for each pollutant is as follows:

Pollutant	Emission Rate	Maximum Allowable Emission
Particulates (Non-Soot Blowing)	17-2.650(2)(c)2.	54.1 lbs/hr 207.3 T/yr
(Soot Blowing)	17-2.250(3)	162.3 lbs/hr 88.9 T/yr
Visible Emissions (Non-Soot Blowing)	17-2.650(2)(c)2.	20% opacity
(Soot Blowing)	17-2.250(3)	60% opacity

Sulfur Dioxide	17-2.600(5)(b)3.	595.1 lbs/hr 2606.5 T/yr
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Testing of emissions shall be accomplished at 90% to 100% of the permitted capacity. If testing is performed at a rate less than 90% of the permitted capacity, operation shall be limited to that capacity until such time as an acceptable test is performed at 90% to 100% of permitted capacity. When operation is restricted to a lower capacity, because of testing at such a level, the Department/Bio-Environmental Services Division, upon advanced notification, will allow operation at higher capacities if such operation is for demonstrating compliance at a higher capacity (never to exceed design capacity).

Notify the Jacksonville Bio-Environmental Services Division (BESD) 14 days prior to source testing. Copies of the test report(s) shall be submitted to BESD within 30 days after completion of testing.

The following pollutant(s) shall be tested at intervals indicated from the date of October 1, 1981.

- *Particulates - 12 months
- *Visible Emissions - 12 months
- **Sulfur Dioxide - 12 months

Shall be conducted during soot blowing and non-soot blowing operating modes. Fuel oil analysis may be substituted.

Submit an annual operation report to BESD for this source on the form supplied for each calendar year on or before March 1.

Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

JACKSONVILLE ELECTRIC AUTHORITY
OPERATION AND MAINTENANCE PLAN

In compliance with Section 17-2.650(2)(g)4. of the Florida Administrative Code, the Jacksonville Electric Authority submits its "Operation and Maintenance Plan", to be appended where appropriate to unit operating permits.

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 non-attainment area. These schedules apply to each on-line unit.

Daily:

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:

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

Annually:

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 on a bi-hourly basis.

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.

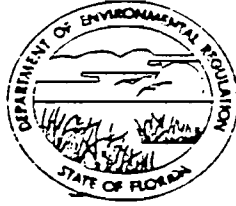
Records

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.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
SUBDISTRICT MANAGER

December 7, 1982

APPLICANT:

Jacksonville Electric Authority
P.O. Box 53015
Jacksonville, Florida 32201

PERMIT/CERTIFICATION
NO. A016-58584

COUNTY: Duval

PROJECT: Steam Generating
Boiler #10, Kennedy
Generating Station

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2
rd 17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to
perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and
made a part hereof and specifically described as follows:

For the operation of steam generating boiler number ten(10)
for the production of electricity. Maximum heat input is
1335 X 10⁶ BTU's per hour firing #6 fuel oil with a maximum
sulfur content of 1% by weight.

Located at 4215 Talleyrand Avenue, Jacksonville, Florida 32206
UTM E-7440.065 N-3359.150

In accordance with the application received on July 19, 1982
and additional information received on November 10, 1982.

BEST AVAILABLE COPY

Permit No. 17-1013-10884

Applicant : Jacksonville Electric Authority

Specific Condition:

Supporting documents are retained in the office file to which they were submitted and not attached as stated in the leading paragraph and General Condition No. 2. They are as follows:

- A. Plot plans and diagrams
- B. Emission Calculations

The maximum allowable emission rate for each pollutant is as follows:

Pollutant	Emission Rate	Maximum Allowable Emission
Particulates (Non-Soot Blowing)	17-2.650(2)(C)2.	133.5 lbs/hr 511.6 T/yr
	(.1 lbs/10 ⁶ BTU input)	
	(Soot Blowing)	
Visible Emissions (Non-Soot Blowing)	17-2.250(3)	400.5 lbs/hr 219.3 T/yr
	(.3 lbs/10 ⁶ BTU input)	
	(Soot Blowing)	
Sulfur Dioxide	17-2.650(2)(C)2.	20% opacity
	17-2.250(3)	60% opacity
	17-2.600(5)(b)3.	1468.5 lbs/hr 6432 T/yr

Testing of emissions shall be accomplished at 90% to 100% of the permitted capacity. If testing is performed at a rate less than 90% of the permitted capacity, operation shall be limited to that capacity until such time as an acceptable test is performed at 90% to 100% of permitted capacity. When operation is restricted to a lower capacity, because of testing at such a level, the Department/Bio-Environmental Services Division, upon advanced notification, will allow operation at higher capacities if such operation is for demonstrating compliance at a higher capacity (never to exceed design capacity).

Notify the Jacksonville Bio-Environmental Services Division (BESD) 14 days prior to source testing. Copies of the test report(s) shall be submitted to BESD within 30 days after completion of testing.

The following pollutant(s) shall be tested at intervals indicated from the date of October 1, 1981.

- *Particulates - 12 months
- *Visible Emissions - 12 months
- **Sulfur Dioxide - 12 months

* Shall be conducted during soot blowing and non-soot blowing operating modes.

** Fuel oil analysis may be substituted.

Submit an annual operation report to BESD for this source on the form supplied for each calendar year on or before March 1.

Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

Permit No.: A016-58584

Applicant : Jacksonville Electric Authority

Specific Conditions:

8. An Operation and Maintenance Plan is attached to and part of this permit pursuant to Chapter 17-2.650(2)(g)4, Florida Administrative Code. All activities shall be performed as scheduled and recorded data made available to BESD upon request. Records shall be maintained on file for a minimum period of two years.
9. Operation is limited to 8760 hours per year.
10. Maximum fuel oil input is 71,460 pounds per hour.

Expiration Date: August 31, 1987 Issued this day of 19

City of Jacksonville
Bio-Environmental Services

State of Florida
Department of Environmental Regulation



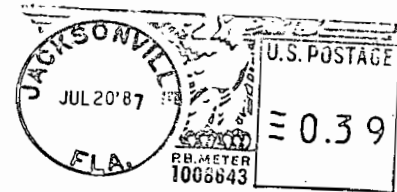
Ronald C. Bayly, (Division Chief

Doug Dutton, District Manager

BIO-ENVIRONMENTAL SERVICES
Water Conservation Activity
515 West 6th Street
Jacksonville, Florida 32206-4397



Mr. Bill Thomas, P.E.
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blairstone Road
Tallahassee, FL 32301



P 408 532 005

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Richard Breitmoser	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date 5/16/86	

PS Form 3800, Feb. 1982

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

May 12, 1986

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, P.E.
Jacksonville Electric Authority
Post Office Box 53015
Jacksonville, Florida 32201

Dear Mr. Breitmoser:

Re: Request to Extend the Expiration Date of Construction
Permit, AC 16-86190

The Department is in receipt of your request to extend the expiration date of the above referenced state construction permit. The Department is in agreement with this request and the following shall be changed:

Expiration Date:

From: June 30, 1986
To: September 30, 1986

This letter must be attached to your construction permit and shall become a part of the permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/ks

cc: Jerry Woosley
Bill Stewart

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

MAY 12 1986

FOR ROUTING TO OTHER THAN THE ADDRESSEE

Office of the Secretary

To: _____ LOCTN: _____
To: _____ LOCTN: _____
From: _____ DATE: _____

TO: Victoria J. Tschinkel

FROM: Clair Fancy *Clair Fancy*

DATE: May 12, 1986

SUBJ: Request to Modify Construction Permit AC 16-86190;
Jacksonville Electric Authority, Southside Station

Attached is a letter for your signature that will extend the expiration date of the above referenced air construction permit. The Bureau of Air Quality Management recommends that this modification be approved.

CHF/MP/s

DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES
Bio-Environmental Services Division
Air and Water Pollution Control



April 18, 1986

DER
APR 22 1986
BAQM

Mr. Clair Fancy, P.E.
Department of Environmental Regulation
2600 Blair Stone Road
Twin Towers Office Bldg.
Tallahassee, Florida 32301

Re: Duval County - AP - Jacksonville Electric Authority (JEA)
Southside Generating Station
Auxiliary Boiler Permit AC 16-86190

Dear Mr. Fancy:

Enclosed is JEA's request to extend the expiration date of the captioned permit. Bio-Environmental Services Division (BESD) supports this request.

If BESD may be of further assistance, please advise.

Very truly yours,

Jerry E. Woosley
Associate Engineer

JEW/ecr

Enc.

cc: Mr. Bill Stewart, P.E., DER
BESD File 1690L
Mr. Richard Breitmoser, P. E.

4/23

Bill T.
please handle.

Clair

5-6-86
Mike,
if you process AC for this,
please handle.

mb



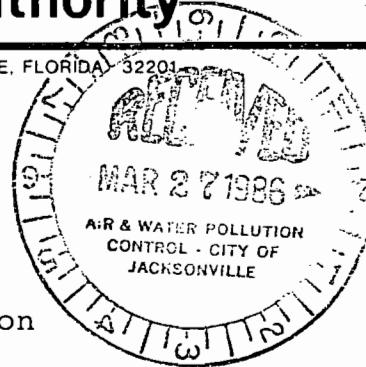
Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



March 24, 1986

Mr. Khurshid Mehta
Pollution Control Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206



Dear Mr. Mehta:

Subject: Southside Auxiliary Boiler
AC 16-86190

The above referenced construction permit is scheduled to expire on June 30, 1986. The latest construction projections indicate that the unit will come on line in early May of 1986. Pursuant to Specific Condition 8 and Rule 17-4.09, FAC, it is requested that the expiration date for permit AC 16-86190 be extended to September 30, 1986. This extension should allow sufficient time for unit startup, testing and the timely submittal of operating permit applications.

Your assistance in this matter is greatly appreciated.

Very truly yours,

Richard Breitmoser, P. E.
Division Chief
Research & Environmental
Affairs Division

RB/RLK/lwr

cc: H. A. Poncher
R. L. Kappelmann
File 1.4.4.4.1.9

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- 1. Show to whom, date and address of delivery.
- 2. Restricted Delivery.

3. Article Addressed to:
 Mr. Richard Breitmoser, P.E.
 Jacksonville Electric Authority
 P. O. Box 53015
 Jacksonville, FL 32201

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	P 408 533 633

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature - Addressee
X *R. Norris*

6. Signature - Agent
X

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)



DOMESTIC RETURN RECEIPT

P 408 533 633

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. Richard Breitmoser	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
10/23/85	

PS Form 3800, Feb. 1982

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 16, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Breitmoser, P.E.
Jacksonville Electric Authority
P. O. Box 53015
Jacksonville, Florida 32201

Dear Mr. Breitmoser:

Re: Request to Extend the Expiration Date of Construction
Permit AC 16-86190

The department is in receipt of your request to extend the expiration date of the above referenced state construction permit. The department is in agreement with the request and the following shall be added or changed:

Expiration Date:

From: September 30, 1985
To: June 30, 1986

This letter must be attached to your construction permit, AC 16-86190, and shall become a part of that permit.

Sincerely

Victoria J. Tschinkel
Secretary

VJT/ks

cc: J. Brown, DER
D. Summerfield, BESD

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

RECEIVED
OCT 18 1985
BAQM

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____	Loctn: _____
To: _____	Loctn: _____
To: _____	Loctn: _____
From: _____	DATE: _____

TO: Victoria J. Tschinkel
FROM: Clair Fancy *Clair Fancy*
DATE: October 17, 1985
SUBJ: Request to Modify Permit No AC 16-86190
Jacksonville Electric Authority

Attached for your signature is a letter extending the expiration date of Permit No. AC 16-86190 to Jacksonville Electric Authority for their Southside generating station auxiliary boiler in Duval County, Florida. The Bureau of Air Quality Management recommends that the modification be approved.

CHF/pa

Attachment

**DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES**
Bio-Environmental Services Division
Air and Water Pollution Control



October 9, 1985

Mr. Clair Fancy, P. E.
Central Air Permitting Section
Bureau of Air Quality Management
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Re: Duval County - AP
Jacksonville Electric Authority
Southside Generating Station
Auxiliary Boiler - Permit AC16-86190

Dear Mr. Fancy:

Attached is a request by Jacksonville Electric Authority to extend the expiration date for the captioned state construction permit. After reviewing this request, Bio-Environmental Services Division supports an extension.

A favorable response from the Department of Environmental Regulation is recommended.

Very truly yours,

Donald Summerfield
Donald Summerfield
Assistant Engineer

DS/ecr

Enc.

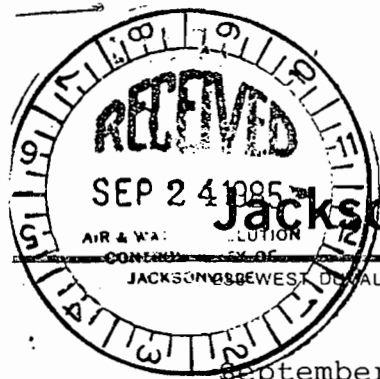
cc: Mr. Mort Benjamin, DER
cc: Mr. Richard Breitmoser, JEA
cc: BESD File/1690-L

DER

OCT 10 1985

BAQM





Jacksonville Electric Authority



September 24, 1985

HAND DELIVERED

Mr. Khurshid Mehta,
Pollution Control Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206

Dear Mr. Mehta:

Subject: Southside Station Auxiliary Boiler
AC 16-86190

The construction permit AC 16-86190 for the Southside Station auxiliary boiler is scheduled to expire on September 30th, 1985. Due to significant vendor and related equipment problems, the completion date for this project has been delayed.

It is requested that the expiration date for this permit be extended to June 30, 1986. This extension will allow for the normal installation, start-up and testing of this unit. Operation permit applications will be submitted 90 days prior to the construction permit expiration date.

Your assistance in this matter is greatly appreciated.

Very truly yours,

Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/RLK/lwr

DER
OCT 10 1985
BAQM

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

May 31, 1985

Mr. Robert L. Kappelmann, P.E.
Research & Environmental Affairs
Division
Jacksonville Electric Authority
P. O. Box 53015
Jacksonville, Florida 32201

Dear Mr. Kappelmann:

Although we understand your concern about the two-year permit for Northside Unit 2, we cannot add a permit proviso such as that suggested in your May 14, 1985, letter because it would commit the department to an action it is not currently authorized to take, namely, the "automatic" extension of a permit. We hereby agree, however, to review and, if appropriate, extend the permit if the two-year rule is changed to allow this to be done. You have the right to such a review whenever a rule affecting one of your permits is changed.

As we discussed, we intend to propose a revision to the two-year rule as part of the corrective amendments to Rule 17-2 which we expect to take to a public workshop later this year. I will place you on the mailing list for the corrective amendments rule so that you can participate in its development.

Sincerely,

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

CHF/LG/s

cc: J. Brown
J. Woosley
C. Forthman
B. Thomas

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



May 14, 1985

DER

MAY 17 1985

BAQM

Mr. Clair Fancy, P.E., Administrator
Fla. Dept. of Env. Regulation
Central Air Permitting Section
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Fancy:

Per our telephone conversation of May 13, 1985, attached is our recommended language for a special permit proviso for JEA Northside Unit #2. As previously discussed, our intent is to clearly establish that this permit expiration date may be extended and permit renewed provided that Chapter 17-2 is modified to allow it. Therefore, changes to the specific language to address DER concerns would not be objectionable provided this intent is preserved.

Your assistance in this matter is greatly appreciated.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'Robert L. Kappelmann', is written over a light-colored background.

Robert L. Kappelmann, P.E.
Research & Environmental
Affairs Division

RLK/lwr

cc: Richard Breitmoser
Files

Attachment: As Noted

The term of this Permit is limited to two years pursuant to Section 17-2.210(2)(c)7, F.A.C. In the event the Department's rules are amended so as to delete the two year limitation on certain operation permit renewals under that provision, the term of this Permit shall be automatically extended to five years from the date of issuance, or for such other time period as is prescribed by the rule as amended.

DER

MAY 17 1985

BAQM

No. **0155548**
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Mr. Royce Lyles	
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE		¢
	SPECIAL DELIVERY		¢
	RESTRICTED DELIVERY		¢
	OPTIONAL SERVICES	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
RETURN RECEIPT SERVICE	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
	TOTAL POSTAGE AND FEES	\$	
POSTMARK OR DATE		4/24/85	

PS Form 3800, Apr. 1976

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- Show to whom, date and address of delivery.
- Restricted Delivery.

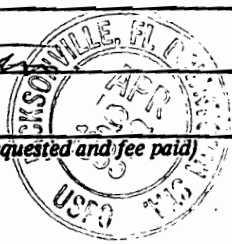
3. Article Addressed to:
 Mr. Royce Lyles
 Jacksonville Electric Authority
 233 West Duval Street
 Jacksonville, Florida 32202

4. Type of Service:	Article Number
<input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail	0155548

Always obtain signature of addressee or agent and DATE DELIVERED.

- 5. Signature - Addressee**
X
- 6. Signature - Agent**
X *Billy Thomas*
- 7. Date of Delivery**
- 8. Addressee's Address (ONLY if requested and fee paid)**

DOMESTIC RETURN RECEIPT



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

April 17, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Lyles:

Re: Request to Extend the Expiration Date of Construction
Permit AC 16-86190, Auxiliary Boiler, Southside Station

The department has received a request to extend the expiration date of the above referenced state construction permit. After reviewing the request, the department is in agreement with the need for this extension and the following shall be added or changed:

Expiration Date:

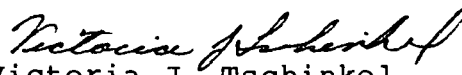
From: July 31, 1985
To: September 30, 1985

Attachments to be Incorporated:

5. Mr. R. Breitmoser's letter dated March 19, 1985
6. Mr. J. Woosley's letter dated March 26, 1985

This letter must be attached to your construction permit, AC 16-86190, and shall become a part of that permit.

Sincerely,


Victoria J. Tschinkel
Secretary

VJT/ks

cc: John Brown
Khurshid Mehta

attachments

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

TO: Victoria J. Tschinkel
FROM: Clair Fancy *Clair Fancy*
DATE: April 15, 1985
SUBJ: Request to Modify Construction Permit AC 16-86190
Jacksonville Electric Authority, Southside Station

RECEIVED

APR 17

Office of the Secretary

Attached is a letter for your signature that will extend the expiration date of the above referenced air construction permit. The Bureau of Air Quality Management recommends that the modification be approved.

CHF/s

Attachment

DER
APR 19 1985
BAQM

DER

MAR 28 1985

BAQM



DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES
Bio-Environmental Services Division
Air and Water Pollution Control

March 26, 1985

Mr. Clair Fancy, P.E.
Central Air Permitting Section
Department of Environmental Regulation
2600 Blainstone Road
Tallahassee, Florida 32301-8241

Re: Jacksonville Electric Authority
Southside Generating Station
Permit AC16-86190

Dear Mr. Fancy:

Bio-Environmental Services Division (BESD) supports JEA's request in the attached letter.

Your favorable response is requested.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

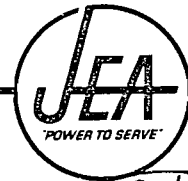
JEW/cb

cc: BESD File/1690-L
Mr. John Brown
Mr. Richard Breitmoser, P.E., JEA



Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



March 19, 1985



Mr. Khurshid Mehta, Air Engineer
Bio-Environmental Services Division
515 W. 6th Street
Jacksonville, FL 32206

Dear Mr. Mehta:

Subject: Southside Station Auxiliary Boiler
AC16-86190

The new auxiliary boiler for Southside Station is on site. It is being installed serially with the Kennedy Station unit, the installation of which is still in progress.

Construction Permit AC16-86190 for the Southside unit expires on July 31, the same date as the Kennedy permit. To allow orderly installation of the second of these two units, including start-up and testing, and then time to prepare the Operating Permit Application, will require an extension of the permit.

Will you please arrange for extension of the expiration of Permit AC16-86190 by two months, to September 30, 1985.

Your assistance in this matter is appreciated.

Very truly yours,

Richard Breitmoser,
Division Chief
Research & Environmental
Affairs

RB:PLS:cb

cc: H.A. Poncher
A.T. Haaland
J.F. Schatmeyer

File: 1.4.4.1.9

DER

APR 2 1985

BAQM

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

November 13, 1984

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

Dear Mr. Lyles:

RE: Southside Station's Auxiliary Boiler, AC 16-86190

Enclosed is a revised copy (Page of 1 of 6) for the auxiliary boiler, AC 16-86190. The revised copy should have the right latitude and longitude information.

Please replace page 1 of 6 of the permit with the revised copy.

Thank you for your letter of November 5, 1984, correcting the latitude of the Southside Station auxiliary boiler.

Sincerely,

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

CHF/BK/s

cc: Richard Breitmoser, JEA
Doug Dutton, NE District
Jerry Woosley, BES

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

PERMITTEE: Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Permit Number: AC 16-86190
Expiration Date: July 31, 1985
County: Duval
Latitude/Longitude: 30° 18' 57" N/
81° 38' 56" W
Project: Oil/Gas Fired Auxiliary
Boiler, 21 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 natural gas) fired auxiliary boiler at the JEA's Southside 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 23, 1984
2. A BACT determination made by DER.
3. JEA's comments to the public notice, received on August 10, 1984.
4. Final Order, dated October 9, 1984, dismissing petition for administrative hearing.

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



November 5, 1984

Mr. C. H. Fancy, Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

DER

NOV 9 1984

BAQM

Dear Mr. Fancy:

Subject: Southside Station Auxiliary Boiler, AC 16-86190

Thank you for your letter of October 23 endeavoring to correct the latitude and longitude in page one of this permit. In reviewing this information, I now find that JEA's original permit application contained a typographical error in the latitude for this unit.

Will you please issue another amended sheet correcting, this time, our error. The correct latitude is 30°18'57"N. The longitude in your letter of October 23, 81°38'56"W is correct. For your convenience, attached is a corrected sheet for the permit application.

I regret this nuisance and appreciate your attention.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Paul L. Suter', is written over the typed name.

Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

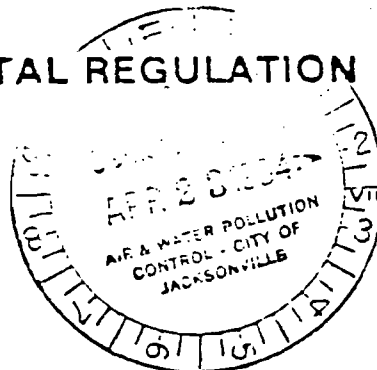
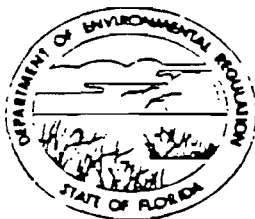
cc: K. Mehta, BESD
G. D. Dutton, DER-NE
H. A. Poncher
R. Breitmoser
C. E. French
File 1.4.4.7

Attachment

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
DISTRICT MANAGER

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Oil/Gas Fired Boiler New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Jacksonville Electric Authority COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Auxiliary Boiler

SOURCE LOCATION: Street 801 Colorado Avenue City Jacksonville

UTM: East 17-437.64 North 3353.82

Latitude 30 ° 18' 57"N Longitude 81 ° 38' 56"W

APPLICANT NAME AND TITLE: Royce Lyles, Managing Director

APPLICANT ADDRESS: 233 West Duval Street, Jacksonville, Florida 32202

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Electric Authority

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed Royce Lyles
Royce Lyles, Managing Director
Name and Title (Please Type)

Date: APR 19 1984 Telephone No. 904-633-4780

Corrected 11/5/84. RS

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

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 23, 1984

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

Dear Mr. Lyles:

Re: Southside Station's Auxiliary Boiler, AC 16-86190

Enclosed is a revised copy (Page 1 of 6) for the auxiliary boiler, AC 16-86190. The revised copy should have the right latitude and longitude information.

Please replace page 1 of 6 the permit by the revised copy.

Sincerely,

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

CHF/BK/s

cc: Richard Breitmoser, JEA
Doug Dutton, NE District
Jerry Woosley, BES

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

PERMITTEE:

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Permit Number: AC 16-86190

Expiration Date: July 31, 1985

County: Duval

Latitude/Longitude: 30° 15' 57" N/
81° 38' 56" W

Project: Oil/Gas Fired Auxiliary
Boiler, 21 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 natural gas) fired auxiliary boiler at the JEA's Southside 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 23, 1984
2. A BACT determination made by DER.
3. JEA's comments to the public notice, received on August 10, 1984.
4. Final Order, dated October 9, 1984, dismissing petition for administrative hearing.

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



October 2, 1984

Mr. Robert Steven Pace, P.E.
Bio-Environmental Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206

DER
OCT 5 1984
BAQM

Dear Mr. Pace:

Subject: Auxiliary Boiler Construction Permits
Kennedy & Southside Stations
Permits AC 16-86189 & 86190

Applications for these two permits were forwarded to you on April 20, 1984. Draft permits were forwarded by DER on July 18. Permit conditions now seem to be finalized so JEA, in hope of having the units in service for winter, is placing equipment orders.

It has been decided to install commercial insulated stacks on the two boilers. These came in prefabricated sections with certain standard design features. Consequently, both stack height and outlet diameter have changed slightly and the diameter change has affected outlet velocity. This does not affect the emission rate or amount and I do not believe it is significant relative to agency action on our permits.

In order that your permit files may be complete and accurate, revised copies of page 6 of the applications are enclosed. Will you please use these to update your files?

Very truly yours,

Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: G. D. Dutton, DER (Jax.)
C. H. Fancy, DER (Tallahassee)
H. W. Chapman
J. A. Lucas
H. A. Poncher

R. Breitmoser
E. R. Joyce
A. T. Haaland
File 1.4.2.1.9
1.4.4.1.9

Enclosure: Revised page 6

10/10

Bill Thomas,

please review to make
sure this will not effect
permits.

Larry — ^{Clark} Since these are
small trailers w/ no modeling
it should be a diff. ⁷ ~~8~~

— Permit file

CHF

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

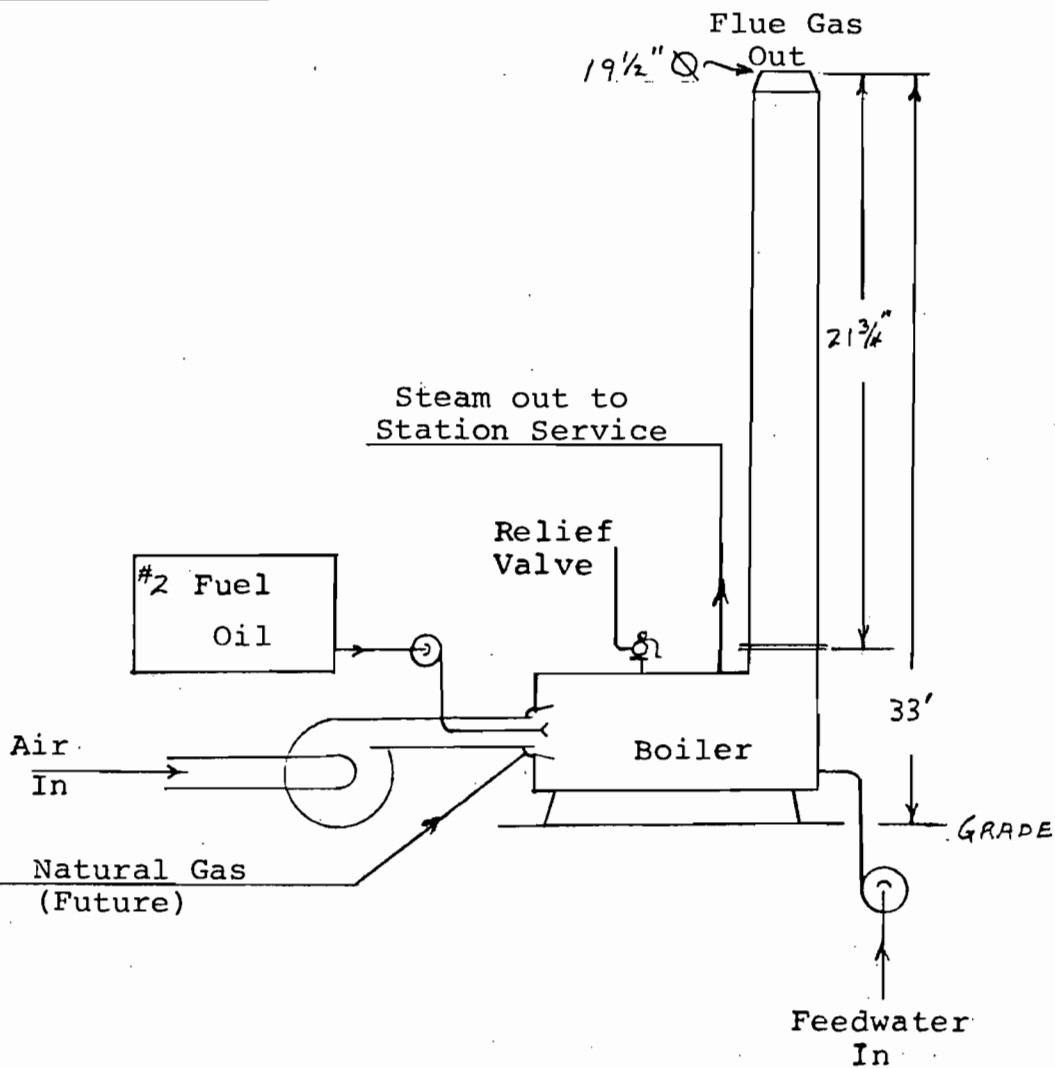
Stack Height: 33 ft. Stack Diameter: 19 1/2" = 1.625 ft.
 Gas Flow Rate: 6850-7050 ACFM 3475-3585 DSCFM Gas Exit Temperature: 400 - 450 °F.
 Water Vapor Content: 16 11 % Velocity: 55 57 FPS
 NG #2 Oil NG #2 Oil

Date
11/3/83

JACKSONVILLE ELECTRIC AUTHORITY

Sheet
1
of 1

Kennedy Generating Station
Auxiliary Boiler Flow Diagram



SK-PS-83-12A 9-25-84 - Rev.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

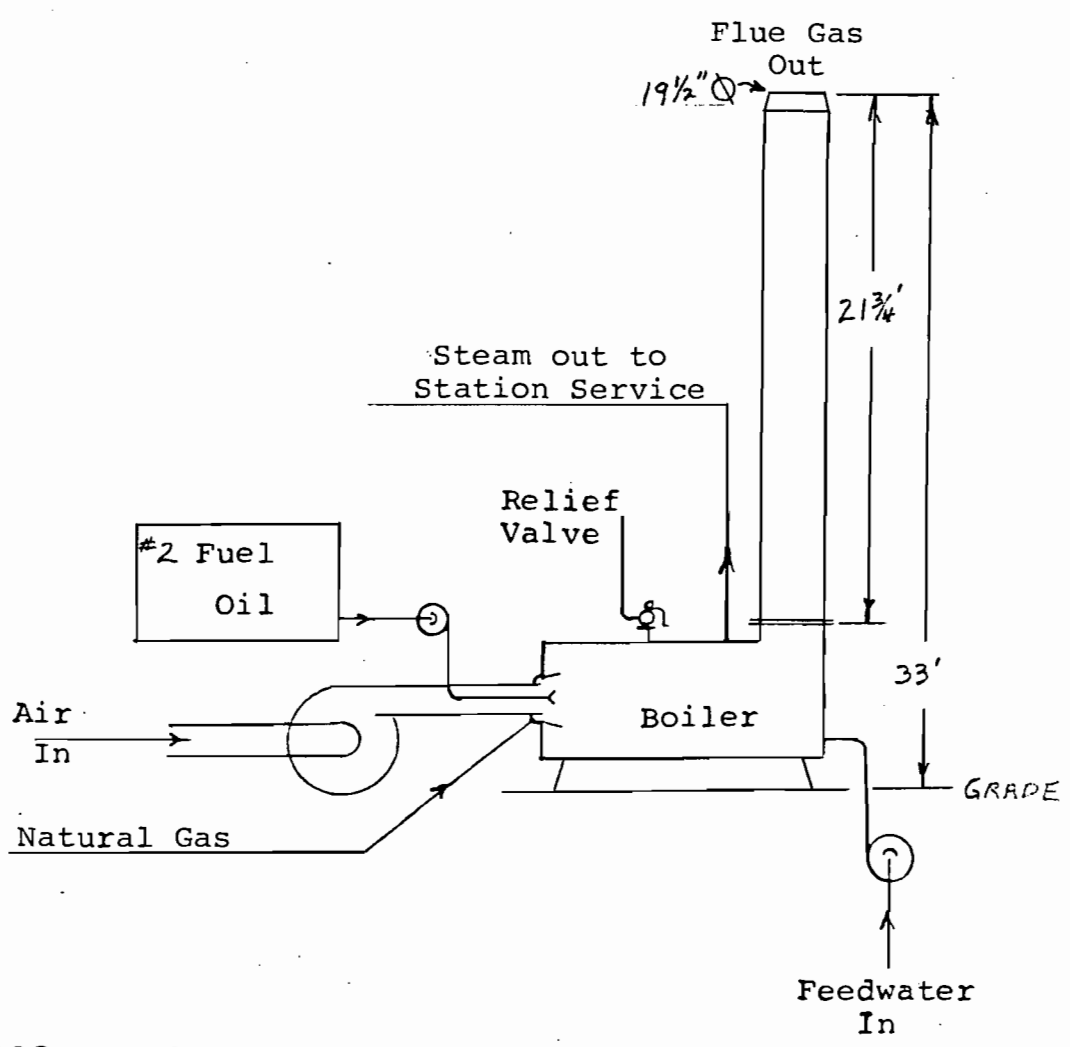
Stack Height: 33 ft. Stack Diameter: 19 1/2" = 1.625 ft.
 Gas Flow Rate: 6850-7050 ACFM 3475-3585 DSCFM Gas Exit Temperature: 400 - 450 °F.
 Water Vapor Content: 16 11 % Velocity: 55 57 FPS
 NG #2 Oil NG #2 Oil

Date
11/3/83

JACKSONVILLE ELECTRIC AUTHORITY

Sheet
1
of 1

Southside Generating Station
Auxiliary Boiler Flow Diagram



SK-PS-83-12B 9-25-84-Rev.

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



September 20, 1984

Mr. Arnold Pollock, Esq., Hearing Officer
Division of Administrative Hearings
Oakland Building
2009 Appalachee Parkway
Tallahassee, Florida 32301

DER
SEP 24 1984
BAQM

Dear Mr. Pollock:

Subject: DOAH Case 84-2895; Jacksonville Electric Authority vs. DER

Jacksonville Electric Authority (JEA), on August 7, 1984, petitioned DER for changes in certain Specific Conditions of three pending air construction permits. The permits were AC 16-85951, AC 16-89189 and AC 16-86190. These permits are for installation of auxiliary service boilers at each of JEA's generating stations.

As indicated in the August 7 letter of petition, JEA continued discussions with the Air Quality Management group relative to the permit conditions. Agreement has now been reached and revised permits are being issued with mutually acceptable permit conditions.

In view of this settlement, JEA requests withdrawal of its petition in this case and termination of any pending or proposed hearings.

Your attention in this matter will be appreciated.

Very truly yours,

Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: C. A. Forthman, Esq., DER	W. R. Steinmeyer
T. R. Welch, Esq., Jax.	H. A. Poncher
R. S. Pace, BESD	R. Breitmoser
G. D. Dutton, DER	W. G. Mercer
C. H. Fancy, DER	File 1.4.2.1.9
H. W. Chapman	1.4.3.1.4
J. A. Lucas	1.4.4.1.9

Enclosure: August 7 letter

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE FLORIDA 32201



August 7, 1984

Office of General Counsel
Fla. Dept. of Env. Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

ATTN: Ms. Nancy Wright, Esquire

Dear Ms. Wright:

Subject: Petition for Administrative Hearing:
Proposed Agency Action, Auxiliary Boiler Air Permits

Notices were published July 23 and 25 relative to proposed Construction Permits for auxiliary boilers at JEA's Northside, Kennedy and Southside Generating Station. JEA wrote the Department July 30, over Richard Breitmoser's signature, questioning certain permit provisions and requesting that the letter be considered, if formal action might be necessary, a petition for an administrative procedure under Section 120.57. After further discussion with the Department, JEA hereby requests that the letter of July 30 be accepted as such petition.

JEA will continue informal discussion with the Air Quality Management group toward mutually agreeable texts for the questioned permit conditions. We will keep you informed of our progress.

Very truly yours,

Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: V. J. Tschinkel, DER	H. A. Poncher
G. D. Dutton, DER	R. Breitmoser
K. Mehta, BESD	W. G. Mercer
T. R. Welch	J. R. Kilgore
H. A. Chapman	Files 1.4.2.1.9
J. A. Lucas	1.4.3.1.4
W. R. Steinmeyer	1.4.4.1.9

Enclosure: July 30 letter

C. A. [unclear]

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

TO: Bob King
THROUGH: Bill Thomas *BT*
FROM: Edward Palagyi, BACT Coordinator *EP*
DATE: September 10, 1984
SUBJECT: BACT Determination
JEA Northside Auxilliary Steam Generator

Jacksonville Electric Authority (JEA) in their letter of July 30, 1984, expressed reservations concernig specific conditions in the preliminary permit, AC 16-85951, for the proposed 116.5 million Btu per hour heat input steam generator to be installed at their Northside generating station. This steam generator heat input is below 250 million Btu per hour, and, therefore subject to Florida Administrative Code Rule 17-2.600(6). This rule requires that a Best Available Control Technology (BACT) review be made to determine particulate matter and sulfur dioxide emissions applicable for this source.

Some of the specific conditions to which JEA has reservations were based upon the BACT determination. JEA's objections to these specific conditions were reviewed by the Jacksonville Bio-Environmental Services and the New Source Review Section in the Bureau of Air Quality Management. Based upon the comments and recommendations received, the following are in response to JEA's objections.

JEA objected to specific conditions No. 2 which requires "Virgin No. 6 fuel oil" and would prohibit JEA from disposing of internally generated waste oil.

This specific condition is required to prevent the burning of sham blended RCRA compounds and dirty bunker "C" residual oil that contains high levels of toxic metals.

JEA has three large steam generators the smallest of which is able to consume over 15,000 gallons per hour of oil. None of these three steam generators are restricted by a "Virgin No. 6" permit condition, and therefore should be able to dispose of any internally generated waste oils. However, to clarify the intent of this specific condition the BACT determination is amended as follows:

To: Bob King
September 10, 1984
Page two

BACT condition 1) is revised to read: This steam generating unit shall be used only as an auxiliary system and shall fire New ⁽¹⁾ oil ⁽²⁾, 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.

Foot note (2) added as follows: 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).

JEA objected to specific condition No. 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.

This BACT condition was intended to read "not to exceed 1.8% sulfur" and is reworded in the above amendment to BACT condition 1).

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 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

To: Bob King
September 10, 1984
Page three

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.

The original BACT to control particulates and sulfur dioxide emissions based upon fuel sulfur content remains unchanged. The energy basis standard proposed by JEA is unacceptable.

JEA objected to the visible emission limit of 15% opacity, and contends there is no basis for such a limit in the Department rules and must protest this arbitrary limit.

As mentioned before, 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 and firing No. 6 oil. JEA has not submitted any data indicating why the proposed steam generators can not meet the 15% opacity limit.

The VE limit of 15% opacity determined as BACT will not be changed.

This letter may be used as an addendum to the original BACT determination, unless JEA gives the Department a waiver to allow time for an amended BACT to be prepared.

EP/agh

**DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES**
Bio-Environmental Services Division
Air and Water Pollution Control

August 28, 1984



9/4 Bill T.

Mr. Clair Fancy, P.E.
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

Re: Jacksonville Electric Authority
Proposed Permit AC16-85951

DER
AUG 31 1984
BAQM

Dear Mr. Fancy:

The Bio-Environmental Services Division (BESD) staff met with JEA representatives to discuss the disputed items as referenced in the attached letter and JEA's petition for Administrative Hearing. The following comments are provided:

- (1) Specific Condition No. 2 - BESD has no objections provided JEA submits written procedures indicating that:
 - (A) The waste oil is thoroughly blended with the virgin oil.
 - (B) Records of waste oil use are kept on an annual basis.
 - (C) PCB contaminated oils shall not be combusted.
 - (D) JEA shall not combust non-virgin (waste) oils purchased or received from off site.
- (2) Specific Condition No. 3 - BESD concurs, however, specific testing should be required (i.e.: Specific gravity and heat content) in addition to sulfur content) relating the oil sulfur content to the emission limit of 1.98 lbs SO₂/10⁶ BTU heat input.
- (3) Specific Condition No. 5 - BESD opposes a change in the 15% opacity BACT emission limit. St. Regis Container recently received a BACT determination of 10% opacity for a boiler which also burns No. 6 fuel oil. Hence, the 15% V.E. limitation is appropriate, and reasonable.
- (4) Specific Condition No. 6 - BESD concurs with the annual testing frequency.
- (5) Specific Condition No. 9 - BESD suggests an expiration date of July 31, 1985 and that a complete operation permit application (including all compliance tests and data) be submitted 90 days prior to expiration of the construction permit.

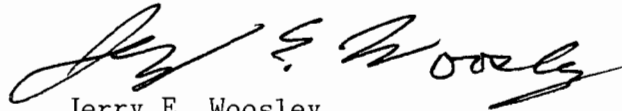
/Continued...



Mr. Clair Fancy, P.E.
PAGE 2

Please direct all questions and comments to the undersigned.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Jerry E. Woosley".

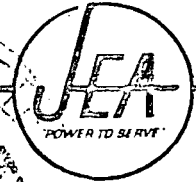
Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER, with enclosure
cc: Mr. Richard Breitmoser, P.E., without enclosure

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



August 22, 1984

Mr. Jerry E. Woosley
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206



Dear Mr. Woosley:

Subject: Jacksonville Electric Authority
Northside Generating Station Auxiliary Boiler
Permit No. AC 16-85951

This is to provide you with additional information concerning the subject permit as a result of our meeting August 20, 1984.

Specific Condition 2: As discussed in our meeting, the JEA from time to time burns internally generated waste oils as a result of our day to day operation. These oils are used for lubricating various machinery within the plant such as the turbine generators, fans, etc. Approximately 60% of the waste oil is No. 6 fuel generated from drains, drips and pump leak-off. The waste fuel contains no PCBs and average less than 1.8% sulfur by weight. The waste oil is blended with the primary fuel supply of the generating station resulting in an extremely low concentration of the waste oil. Its impact on the overall operation of the auxiliary boiler in question or generating station in general is negligible. Your concurrence to permit the burning of internally generated waste oils containing no PCBs is requested.

Specific Condition 3: It is requested that this specific condition refer to a heat input rate of 1.98 Lbs/MBtu as opposed to a sulfur content of 1.8% which may not necessarily correspond to the heat input limitation imposed on this facility. The JEA conducts fuel oil analyses on each shipment that demonstrates this heat input rate by measurement of specific gravity and fuel sulfur content.

Specific Condition 5: It is requested that a 20% allowable opacity with up to 40% opacity be permitted for this auxiliary boiler. Auxiliary boilers normally fire with a higher O₂ rate than large central station boilers. This may produce a slightly white plume under some atmospheric conditions when combined with certain humidity and temperature conditions.

(CONT.)

Mr. Jerry E. Woosley
August 22, 1984
Page 2.

Specific Condition 6: The JEA proposes to maintain on record for inspection by the Jacksonville Bio-Environmental Services Division and the Northeast District of the Department of Environmental Regulation all fuel analyses of fuel received at the Northside Station. A fuel oil analysis of the actual fuel burned will be submitted with the required visible emission test annually.

Specific Condition 9: It is requested that the permit expiration for this construction permit be changed to July 30, 1985 in order to more adequately assess the operation of the auxiliary boiler and to allow ample time, i.e. 90 days prior to construction permit expiration, to submit a complete application for an operating permit.

Your consideration of the above comments will be greatly appreciated. If there are any questions concerning any of the above discussion, please contact me at 633-4517.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/lwr

cc: H. W. Chapman
W. R. Steinmeyer
P. L. Suter
E. R. Joyce
Files

Final Determination

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

Permit Number
AC 16-86189

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

October 11, 1984

Response to Public Comment
Kennedy Station, JEA
AC 16-86189

Jacksonville Electric Authority's application for a permit to construct an auxiliary boiler at the Kennedy 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 25, 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 objects to Specific Condition 3 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 2

JEA objects to Specific Condition 4 which requires fuel oil analysis reports for each oil delivery.

Response

This comment is not accepted by DER.

Comment 3

JEA objects to Specific Condition 8 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.

The final action by the department will be to issue the permit with the changes on the expiration date in the Final Determination.

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

Initial

Date

~~Clair Fancy BAQM~~

2.

Bill T.

9/11

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

DER
AUG 10 1984
BAQM

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

FROM:

Carol A. Forthman

DATE

PHONE

Aug 9

BEFORE THE STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

JACKSONVILLE ELECTRIC AUTHORITY,)

Petitioner,)

v.)

STATE OF FLORIDA DEPARTMENT)

OF ENVIRONMENTAL REGULATION)

Respondent.)

OGC Case No. 84-0575

NOTICE OF PRESERVATION OF RECORD

YOU ARE HEREBY NOTIFIED that the Department of Environmental Regulation is responsible for preserving the record of any evidentiary hearings in this case. Such a record may be preserved by mechanical recording or through the services of a court reporter. The Department will use mechanical recording equipment unless one of the parties makes arrangements to provide a court reporter, including payment of the court reporter's fees.


Whenever a court reporter is used, Florida Administrative Code Rule 28-5.306 provides that the court reporter's recordation becomes the official transcript. The Department may opt to tape a hearing for its own even when a court reporter is present. If the Department opts to tape a proceeding which is also recorded by a court reporter, copies of the tapes can be made available to all parties upon request at cost of reproduction. However, parties should not assume in all instances that the Department will tape a proceeding.

Prior to the hearing, any party arranging for the presence of a court reporter should notify the hearing officer and all parties of the identity, mailing address and telephone number of the court reporter engaged to record the proceeding.

Should you take exception to any finding of fact made by the hearing officer or to appeal the final order of the Department, you will need to submit an official transcript of the proceeding. A transcript may be prepared, at the expense of the

requesting party, from a court reporter's notes or, where there is no court reporter present, from the tapes made by the Department.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


CAROL A. FORTHMAN
Assistant General Counsel
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original and one true copy of the foregoing Notice and Notice of Preservation of Record have been furnished by U. S. Mail to the Division of Administrative Hearings, The Oakland Building, 2009 Apalachee Parkway, Tallahassee, Florida 32301, and a true copy to Richard Breitmoser, P.E., Division Chief, Research and Environmental Affairs Division, 233 West Duval Street, Post Office Box 53015, Jacksonville, Florida 32201 on this 9th day of August, 1984.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



CAROL A. FORTHMAN.
Assistant General Counsel
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 488-9730

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



August 7, 1984

Bill

Office of General Counsel
Fla. Dept. of Env. Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

DER

AUG 10 1984

BAQM

ATTN: Ms. Nancy Wright, Esquire

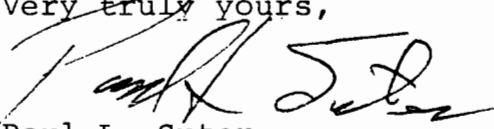
Dear Ms. Wright:

Subject: Petition for Administrative Hearing:
Proposed Agency Action, Auxiliary Boiler Air Permits

Notices were published July 23 and 25 relative to proposed Construction Permits for auxiliary boilers at JEA's Northside, Kennedy and Southside Generating Station. JEA wrote the Department July 30, over Richard Breitmoser's signature, questioning certain permit provisions and requesting that the letter be considered, if formal action might be necessary, a petition for an administrative procedure under Section 120.57. After further discussion with the Department, JEA hereby requests that the letter of July 30 be accepted as such petition.

JEA will continue informal discussion with the Air Quality Management group toward mutually agreeable texts for the questioned permit conditions. We will keep you informed of our progress.

Very truly yours,


Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: V. J. Tschinkel, DER	H. A. Poncher
G. D. Dutton, DER	R. Breitmoser
K. Mehta, BESD	W. G. Mercer
T. R. Welch	J. R. Kilgore
H. A. Chapman	Files 1.4.2.1.9
J. A. Lucas	1.4.3.1.4
W. R. Steinmeyer	1.4.4.1.9

Enclosure: July 30 letter

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



July 30, 1984

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Dear Mr. Fancy:

Subject: Auxiliary Boiler Construction Permit Drafts:
Northside, Kennedy and Southside Generating
Stations, AC 16-85951, AC 16-86189 & AC 16-86190

JEA has reservations on certain of the Specific Permit Conditions in the subject draft permits. I believe these can be clarified informally and so am not formally petitioning the Department to hold action on these permits. If, on review, you believe formal action is necessary, please accept this as our petition under Rule 28-5.201, for relief from the draft Specific Conditions noted herein.

The first two items apply only to AC 16-85951, the Northside Station unit which will burn #6 fuel oil.

Specific Condition No. 2 requires "virgin No. 6 fuel oil". It has been JEA's long term practice to dispose of used lubricating oils by introducing them into the No. 6 fuel oil systems. It is proposed that S. C. No. 2 be amended by deleting the word "virgin" before "No. 6 fuel oil" and adding to the Condition: "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". Please see Mr. Breitmoser's letter of June 13, copy attached, for further discussion.

Specific Condition No. 3 limits the fuel sulfur content to 1.8% by weight. This is not consistent with 17-2 FAC. 1.8% is an approximate average sulfur content of the No. 6 fuel oil at JEA's Northside Station. The actual sulfur content may be higher or lower since the legal limit varies with the heat content of the oil. It is proposed that S. C. No. 3 be restated as follows: "The sulfur content of the No. 6 fuel oil, when stoichiometrically converted to sulfur dioxide, shall not exceed 1.98 pounds of sulfur dioxide per million Btus of heat content".

(CONT.)

Mr. C. H. Fancy
July 30, 1984
Page 2.

The following items apply for all three JEA stations. The first listed Specific Condition indices refer to Kennedy and Southside Stations and the second to Northside.

Specific Conditions No. 3 or 5 state visible emission limits of 15% for each unit. JEA finds no basis for such a limit in the Department rules and must protest this arbitrary limit.

Specific Conditions No. 4 or 6 require annual submissions of "all fuel oil analyses", presumably every test for the past year. This requirement is superfluous since every shipment is checked for sulfur before unloading and records are available for inspection. JEA fuels its boilers from a common storage system at each station and submits the current average fuel sulfur and Btu content with each source test. These reporting conditions, if retained, should require: "The permittee shall submit a current fuel oil analysis for sulfur and Btu content with the annual VE test report".

Specific Condition No. 8 or 9 require a "complete application for an operating permit" prior to 90 days before expiration of the existing permit. This condition, again, is not in accord with Department rules. JEA has no objection to submission 30 days early to afford additional review and processing time and, on notification of pending expiration, would endeavor to meet such a schedule. We object, however, to such an unauthorized permit requirement.

As noted, I believe all of these items can be settled informally. We will be happy to meet with you or with BES and DER's local representatives if any clarification is desired.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

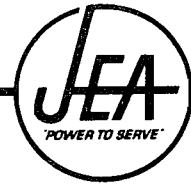
RB/PLS/lwr

cc: V. J. Tschinkel, DER	H. A. Poncher
G. D. Dutton, DER	D. W. Stanley
K. Mehta, BES	J. R. Kilgore
H. W. Chapman	P. L. Suter
J. A. Lucas	Files
W. R. Steinmeyer	

Enclosure: June 13th Letter - As Noted

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



July 30, 1984

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Dear Mr. Fancy:

Subject: Auxiliary Boiler Construction Permit Drafts:
Northside, Kennedy and Southside Generating
Stations, AC 16-85951, AC 16-86189 & AC 16-86190

JEA has reservations on certain of the Specific Permit Conditions in the subject draft permits. I believe these can be clarified informally and so am not formally petitioning the Department to hold action on these permits. If, on review, you believe formal action is necessary, please accept this as our petition under Rule 28-5.201, for relief from the draft Specific Conditions noted herein.

The first two items apply only to AC 16-85951, the Northside Station unit which will burn #6 fuel oil.

Specific Condition No. 2 requires "virgin No. 6 fuel oil". It has been JEA's long term practice to dispose of used lubricating oils by introducing them into the No. 6 fuel oil systems. It is proposed that S. C. No. 2 be amended by deleting the word "virgin" before "No. 6 fuel oil" and adding to the Condition: "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". Please see Mr. Breitmoser's letter of June 13, copy attached, for further discussion.

Specific Condition No. 3 limits the fuel sulfur content to 1.8% by weight. This is not consistent with 17-2 FAC. 1.8% is an approximate average sulfur content of the No. 6 fuel oil at JEA's Northside Station. The actual sulfur content may be higher or lower since the legal limit varies with the heat content of the oil. It is proposed that S. C. No. 3 be restated as follows: "The sulfur content of the No. 6 fuel oil, when stoichiometrically converted to sulfur dioxide, shall not exceed 1.98 pounds of sulfur dioxide per million Btus of heat content".

(CONT.)

Mr. C. H. Fancy
July 30, 1984
Page 2.

The following items apply for all three JEA stations. The first listed Specific Condition indices refer to Kennedy and Southside Stations and the second to Northside.

Specific Conditions No. 3 or 5 state visible emission limits of 15% for each unit. JEA finds no basis for such a limit in the Department rules and must protest this arbitrary limit.

Specific Conditions No. 4 or 6 require annual submissions of "all fuel oil analyses", presumably every test for the past year. This requirement is superfluous since every shipment is checked for sulfur before unloading and records are available for inspection. JEA fuels its boilers from a common storage system at each station and submits the current average fuel sulfur and Btu content with each source test. These reporting conditions, if retained, should require: "The permittee shall submit a current fuel oil analysis for sulfur and Btu content with the annual VE test report".

Specific Condition No. 8 or 9 require a "complete application for an operating permit" prior to 90 days before expiration of the existing permit. This condition, again, is not in accord with Department rules. JEA has no objection to submission 30 days early to afford additional review and processing time and, on notification of pending expiration, would endeavor to meet such a schedule. We object, however, to such an unauthorized permit requirement.

As noted, I believe all of these items can be settled informally. We will be happy to meet with you or with BES and DER's local representatives if any clarification is desired.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

²⁵
RB/PLS/lwr

cc: V. J. Tschinkel, DER	H. A. Poncher
G. D. Dutton, DER	D. W. Stanley
K. Mehta, BES	J. R. Kilgore
H. W. Chapman	P. L. Suter
J. A. Lucas	Files
W. R. Steinmeyer	

Enclosure: June 13th Letter - As Noted

*Copies for
Nancy
Bob K.
Ed P.
made 8/3*

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



June 13, 1984

Mr. J. E. Woosley, Assistant Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32207

Dear Mr. Woosley:

Subject: Draft Requirements - Waste Oil Burning

JEA appreciates the opportunity to comment on the proposed requirements for waste oil burning. It is recommended that this text be applied to any who handle waste oil in commerce as well as to those who burn it. In many circumstances, waste oil will be impractical to trace after delivery to a customer's tank.

It is further recommended that, in section (3), the words "independent laboratory" be substituted for "independent contractor". This, specifically, would permit JEA to maintain its analytical relationship for PCB's with BESD. Also, the first sentence of section (3) should read, in part, "prior to the combustion of any such batch of oil". The draft, as written, would require PCB sampling, prior to combustion of virgin oil.

JEA also recommends that the last part of the sentence be made to read: "with any other oil already stored for combustion on the premises". JEA's system is such that very small quantities (a few quarts) are often drained from equipment. These small quantities are consolidated and held and the total can be sampled before transfer to the fuel oil storage system. Sampling, and retaining samples, of the individual lube drain quantities would be extremely onerous for all concerned.

Finally, we would like consideration for total exemption from this rule for any operating entity (such as JEA) which is combusting only its own, internally generated, waste oil from known sources. JEA does not buy or receive any waste oil. It uses only specification lube oils in its equipment and there is no cross connection at any point between lube

(CONT.)

Mr. J. E. Woosley
June 13, 1984
Page 2.


oils and electrical insulating oils. No PCB content insulating oils are stocked for electrical systems so there is no possibility of PCB contamination by taking oil from a wrong barrel. It is believed that such an exemption in the proposed text would be fully justified.

I will appreciate being kept information as any redrafts are made of this text.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division


RB/PLS/lwr

cc: H. W. Chapman
J. A. Lucas
W. R. Steinmeyer
H. A. Poncher
C. E. French
Files

Enclosure to internal copyholders: Waste Oil Draft received
June 4th

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 26, 1984

DER

JUL 31 1984

BAQM

Mr. C. H. Fancy, P.E.
Fla. Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Dear Mr. Fancy:

Subject: Legal Notices, BACT Determinations
Southside & Kennedy Auxiliary Boiler

Enclosed are "Proof of Publication" affidavits for the notices of the proposed BACT Determinations for JEA's auxiliary boilers at the Southside and Kennedy generating stations. We will appreciate being informed if responses are received relative to either project.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Paul L. Suter', is written over a faint, larger version of the same signature.

Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: K. Mehta, BES
R. Breitmoser
A. Haaland
File 1.4.2.1.9
1.4.4.1.9

Enclosure: Publication Affidavits (2)

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201

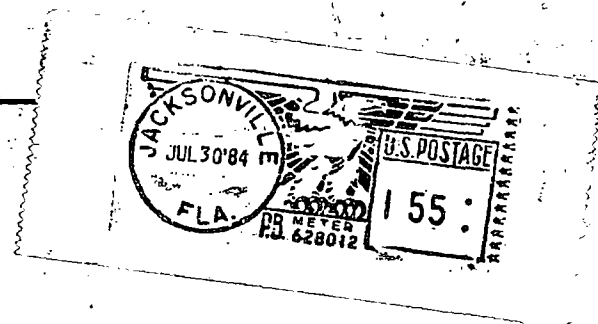


DER

JUL 31 1984

BAQM

Mr. C. H. Fancy, P.E.
Fla. Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241



CERTIFIED

P 285 111 475

MAIL

RETURN RECEIPT REQUESTED





FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared _____

George A. Dan _____ who on oath says that he is

Retail Advertising Manager of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a _____

Legal Notice

Notice of Proposed Agency Action

in the matter of _____

Colorado Drive

in the _____ Court,

Florida Times Union

was published in _____

July 25

in the issues of _____

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me

this 25th day of July 1984 A.D.

Signature of Notary Public

Notary Public, State of Florida at Large.

My Commission Expires _____

My Commission Expires Oct. 2, 1987

Bonded Title Trust Fain - Insurance, Inc.

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application
The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Southside Station located at 801 Colorado Drive in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.
Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department of 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.
The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207
Bio Environmental Services
515 West 6th Street
Jacksonville, Florida 32206
Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301
Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared _____

George A. Dan

who on oath says that he is

Retail Advertising Manager

of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a _____

Legal Notice

Notice of Proposed Agency Action

in the matter of _____

Talleyrand Ave.

in the _____ Court,

Florida Times Union

was published in _____

July 25

in the issues of _____

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me

this 25th day of
July, A.D. 19 84

Notary Public,
State of Florida at Large.

My Commission Expires _____
Notary Public, State of Florida
My Commission Expires Oct. 2, 1987

DA 444

Bonded Thru Troy Fain - Insurance, Inc

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Kennedy Station located at 4215 Talleyrand Avenue in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207
Bio Environmental Services
515 West 6th Street

Jacksonville, Florida 32206
Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



July 24, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. H. Fancy, P. E.
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

DER
JUL 26 1984
BAOM

Dear Mr. Fancy:

Subject: Legal Notice, BACT Determination, Northside Boiler

Enclosed is proof of publication of the public notice for the proposed BACT Determination for JEA's Northside Auxiliary Boiler. We will appreciate being informed if any response is received relative to this project.

Very truly yours,

Paul L. Suter
Environmental Engineer

Encl: FTU Affidavit

cc: R. Breitmoser
E. R. Joyce

File: 1.4.3.1.4



FLORIDA PUBLISHING COMPANY

Publishers

JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA }
COUNTY OF DUVAL }

Before the undersigned authority personally appeared Bill Champion

_____ who on oath says that he is

Retail Advertising Supervisor

_____ of The Florida Times-Union, and

Jacksonville Journal, daily newspapers published at Jacksonville in Duval County,

Florida; that the attached copy of advertisement, being a _____

Legal Notice

in the matter of Notice of Proposed Agency Action Boiler

in the _____ Court,

was published in The Florida Times Union

in the issues of July 23

Affiant further says that the said The Florida Times-Union and Jacksonville Journal are each newspapers published at Jacksonville, in said Duval County, Florida, and that the said newspapers have each heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, and Jacksonville Journal each day except Sundays, and each has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Sworn to and subscribed before me

this 23rd day of July 1984

[Signature]

Notary Public

State of Florida at Large

My Commission Expires Oct. 2, 1987

My Commission Expires Oct. 2, 1987

Bonded thru Troy Felt Insurance, Inc

[Signature]

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Northside Station located at 4377 Heckscher Drive in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the

allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

- Dept of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207
- Dept of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301
- Bio Environmental Services
515 West 4th Street
Jacksonville, Florida 32206

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

No. **0156530**
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Mr. Royce Lyles	
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	\$	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	¢	
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢	
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			
7/18/84			

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1978

● SENDER: Complete Items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
 Show to whom and date delivered..... ¢
 Show to whom, date and address of delivery..... ¢
 RESTRICTED DELIVERY
 Show to whom and date delivered..... ¢
 RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery. \$ _____

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
 Mr. Royce Lyles
 233 W. Duval Street
 Jacksonville, FL 32202

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0156530	

 (Always obtain signature of addressee or agent)

I have received the article described above.
 SIGNATURE Addressee Authorized agent

4. DATE OF DELIVERY *Billy Coleman* POSTMARK

5. ADDRESS (Complete only if requested)

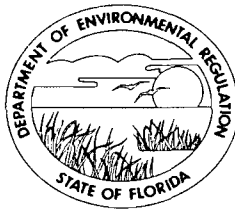
6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆ GPO : 1979-360-459

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

July 18, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

Dear Mr. Lyles:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct an oil/gas fired auxiliary boiler at JEA's Northside Station in Jacksonville, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Duval County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

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

CHF/pa

Attachments

cc: Richard Breitmoser
Doug Dutton
Jerry Woosley

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter on an)
Application for Permit by:)
)
Jacksonville Electric Authority) DER File No. AC 16-85951
233 West Duval Street)
Jacksonville, Florida 32202)
)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Jacksonville Electric Authority, applied on April 20, 1984, to the Department of Environmental Regulation for a permit to construct an oil/gas fired auxiliary boiler at JEA's Northside Station located at 4377 Heckscher Drive, Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witness and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exception to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahase, Florida, 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statues.

Executed the 18 day of July, 1984, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Royce Lyles
Richard Breitmoser
Doug Dutton
Jerry E. Woosley

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Northside Station located at 4377 Heckscher Drive in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Bio Environmental Services
515 West 6th Street
Jacksonville, Florida
32206

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Preliminary Determination
and
Technical Evaluation

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

July 6, 1984

I. Application and Source Location

A. Applicant

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

B. Source Location

The proposed construction of an auxiliary boiler will occur at the JEA's Northside Station located at 4377 Heckscher Drive, Duval County, Florida. The UTM coordinates are: Zone 17-446.9 km east and 3365.0 km north.

II. Project Description

JEA proposes to construct an oil/gas fired auxiliary boiler with maximum heat input of 120 million Btu per hour at its Northside Station. The station has three oil-fired steam generators and an auxiliary boiler. JEA found that the capacity of the existing auxiliary boiler was inadequate to keep the station available for winter start-up. The proposed bigger auxiliary boiler is used in lieu of one of the three main units when energy consumption demands at the facility are low. The auxiliary boiler may also be needed for any main unit start-up operation. The boiler will not be operated when all three main units have reached significant loads.

III. Emissions and Controls

The proposed boiler will use No. 6 fuel oil, and it may use No. 2 fuel oil or L.G. gas in the future. The sulfur content of the No. 6 fuel oil can be as high as 1.8 percent. The maximum possible emissions from the boiler are listed as follows:

<u>Pollutant</u>	<u>lb/hr</u>	<u>T/yr</u>
Sulfur Dioxide, SO ₂	227	994
Particulate Matter, PM	11.6	51
Nitrogen Oxides, NO _x	47	206

JEA estimates that the actual emissions from the boiler in tons per year will be 20 for SO₂, 1 for PM, and 4.1 for NO_x, because actual operation hours are about 5% of 8760 hours per year.

IV. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (FAC).

The existing facility, at which a new auxiliary boiler will be added, is a major facility located in a nonattainment area for ozone and an attainment area for other pollutants. This facility is within the area of influence of the Jacksonville particulate nonattainment area. Based on air quality modeling analysis performed and submitted by Environmental Science and Engineering, Inc., there will not be a significant increase in emissions when the auxiliary boiler is used instead of one of the main units. Therefore, the project will not be subject to the Rule 17-2.500, Prevention of Significant Deterioration, and Rule 17-2.510, New Source Review for Nonattainment Areas. The proposed source shall be permitted in accordance with FAC Rule 17-2.600(6), Fossil Fuel Steam Generators with less than 250 million Btu per hour heat input. The rule requires a BACT determination for particulate matter and sulfur dioxide.

V. Control Technology Review

No add-on air emission control equipment has been proposed by the applicant for this source. The department made a BACT determination to regulate PM and SO₂ emissions from the subject source.

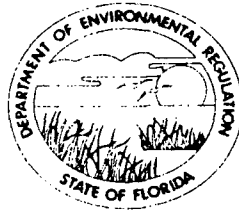
VI. Conclusions

Based on an evaluation of the application, the department believes that compliance with related state air regulations will be achieved provided certain specific conditions are met, as set forth in the attached draft state permit (AC 16-85951).

DRAFT

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

PERMITTEE: Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Permit Number: AC 16-85951
Expiration Date: June 30, 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.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: June 30, 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.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: June 30, 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.

DRAFT

PERMITTEE:

Jacksonville Electric Authority

I. D. Number:

Permit Number: AC 16-85951

Expiration Date: June 30, 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.

DRAFT

PERMITTEE: Jacksonville Electric Authority
I. D. Number: Permit Number: AC 16-85951
Expiration Date: June 30, 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 virgin No. 6 fuel oil, virgin No. 2 fuel oil, or L.P. gas.
3. The sulfur content of the No. 6 fuel oil shall be less than 1.8 percent by weight as determined by ASTM Method D-219.

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: June 30, 1985

SPECIFIC CONDITIONS:

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. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the BESD office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-85951
Expiration Date: June 30, 1985

SPECIFIC CONDITIONS:

Issued this ___ day of _____, 1984

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

page 7 of .7

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

The applicant plans to install an auxiliary fossil-fuel-fired steam generator at their 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) oil having a sulfur content, by weight, less than 1.8 percent 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.

Compliance shall be determined by requiring that whenever one of the main steam generators is down (NS #1, NS #2, or NS #3) that fact 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 is justified.

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 disallows the use of re-refined or waste oil or any 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:

Steve Smallwood, Chief BAQM

Date:_____

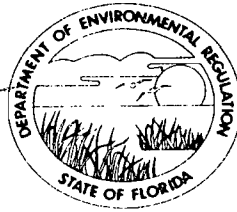
Approved:

Victoria J. Tschinkel, Secretary

Date:_____

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

July 18, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

Dear Mr. Lyles:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct an oil/gas fired auxiliary boiler at JEA's Kennedy Station in Jacksonville, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Duval County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

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

CHF/pa

Attachments

cc: Richard Breitmoser
Doug Dutton
Jerry Woosley

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter on an)
Application for Permit by:)
)
Jacksonville Electric Authority) DER File No. AC 16-86189
233 West Duval Street)
Jacksonville, Florida 32202)
)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Jacksonville Electric Authority, applied on April 23, 1984, to the Department of Environmental Regulation for a permit to construct an oil/gas fired auxiliary boiler at JEA's Kennedy Station located at 4215 Talleyrand Avenue, Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

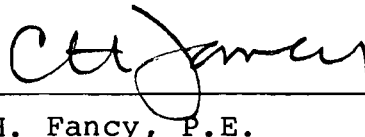
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witness and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exception to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahase, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statues.

Executed the 18 day of July, 1984, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Royce Lyles
Richard Breitmoser
Doug Dutton
Jerry E. Woosley

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Kennedy Station located at 4215 Talleyrand Avenue in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Bio Environmental Services
515 West 6th Street
Jacksonville, Florida
32206

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Preliminary Determination
and
Technical Evaluation

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

Permit Number
AC 16-86189

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

June 27, 1984

is within the area of influence of Jacksonville particulate nonattainment area. Since the proposed auxiliary boiler will operate only in lieu of main units, it will not increase total emissions from the facility. Therefore, the source will not be subject to the Rule 17-2.500 and Rule 17-2.510. The proposed source shall be permitted in accordance with FAC Rule 17-2.600(6), Fossil Fuel Steam Generators with less than 250 million Btu per hour heat input. The rule requires a BACT determination for particulate matter and sulfur dioxide.

V. Control Technology Review

No add on air emission control equipment has been proposed by the applicant for this source. The applicant proposes to use No. 2 fuel oil or natural gas as fuel for air pollution control. The BACT determination made by the department is in agreement with JEA's proposal to control PM and SO₂ emissions from the subject source.

VI. Conclusions

.Based on an evaluation of the application, the department believes that compliance with related state air regulations will be achieved provided certain specific conditions are met, as set forth in the attached draft state permit (AC 16-86189).

I. Application and Source Location

A. Applicant

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

B. Source Location

The proposed construction of an auxiliary boiler will occur at the JEA's Kennedy Station located at 4215 Talleyrand Avenue, Jacksonville, Florida. The UTM coordinates are: Zone 17-440.1 km east and 3359.2 km north.

II. Project Description

JEA proposes to construct an oil/gas fired auxiliary boiler with maximum heat input of 20.7 million Btu per hour at the Kennedy Station. This boiler will operate as a standby unit to provide steam for essential station services when the main units are shutdown. It will provide hot fuel oil to permit clean start-up of the main station units after outages. Since it will operate only in lieu of main units, it will not increase total station emissions. The proposed auxiliary boiler will not be used for generating electric power.

III. Emissions and Controls

No. 2 fuel oil or natural gas (primary fuel when available) will be fired at the proposed boiler. The maximum sulfur content of the No. 2 fuel oil is 0.5 percent. The possible maximum emissions from the boiler are listed as follows:

<u>Pollutant</u>	<u>lb/hr</u>	<u>T/yr</u>
Sulfur Dioxide, SO ₂	10.5	46
Particulate Matter, PM	0.3	1.3
Nitrogen Oxides, NO _x	3.0	13

JEA estimates that the actual emissions from the boiler in tons per year will be 11.5 for SO₂, 0.33 for PM, and 3.3 for NO_x, which is based on 2190 hours per year.

IV. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (FAC).

The existing facility, at which a new auxiliary boiler will be added, is a major facility located in a nonattainment area for ozone and an attainment area for other pollutants. This facility

DRAFT

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

PERMITTEE: **Permit Number: AC 16-86189**
Jacksonville Electric Authority **Expiration Date: June 30, 1985**
233 West Duval Street **County: Duval**
Jacksonville, Florida 32202 **Latitude/Longitude: 30° 21' 53" N/
81° 37' 26" W**
**Project: Oil/Gas Fired Auxiliary
Boiler 21, 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 a natural gas or oil fuel fired auxiliary boiler at the JEA's Kennedy 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 contract Air Pollution Sources, DER Form 17-1.122(16), received on April 23, 1984
2. A BACT determination made by DER.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86189
Expiration Date: June 30, 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.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86189.
Expiration Date: June 30, 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.

DRAFT

PERMITTEE:

Jacksonville Electric Authority

I. D. Number:

Permit Number: AC 16-86189

Expiration Date: June 30, 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.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86189
Expiration Date: June 30, 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 2) 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 boiler is allowed to fire virgin No. 2 fuel oil or natural gas only. Natural gas will be primary fuel when available. The sulfur content of the No. 2 fuel oil is limited to 0.5 percent by weight.
3. 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(b)(6)9, FAC) shall be used for the performance test conducted by the permittee.

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PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86189
Expiration Date: June 30, 1985

SPECIFIC CONDITIONS:

4. The permittee shall submit all fuel oil analyses (every oil delivery needs a fuel analysis report) with the required visible emissions test to DER's Northeast District and Jacksonville Bio-Environmental Services Division (BESD) annually.
5. 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 BESD 14 days prior to source testing.
6. The boiler is allowed to operate only when at least one of the main station units at the facility is under stand-by condition.
7. 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.
8. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the BESD office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.

Issued this ___ day of _____, 1984

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

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

The JEA plans to install one auxiliary boiler at their Southside generating station and one auxiliary boiler at their Kennedy generating station. Both units will be fossil-fuel-fired and have a design heat input of 20 million Btu/hour. The fuel will be natural gas or No. 2 distillate oil.

JEA is currently modifying the local electrical in-town distribution network and anticipate that the existing stabilizing generator located at the two generating stations will be placed on cold standby. The auxiliary boilers will be used to supply the station steam requirements to allow the stabilizing generators to respond to above normal network power demands.

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

Particulate emissions are nil when firing natural gas and less than one pound per hour when firing distillate fuel oil. The amount of particulate emissions will not have a significant impact within the nonattainment area, and therefore the two sources are exempt from Rule 17-2.510 New Source Review for Nonattainment Areas. Each source will be subject to a BACT determination as set forth in Rule 17-2.600(6) - Emission Limiting and Performance Standards.

BACT Determination Requested by the Applicant:

Pollutant	Emission Limit
Particulates	0.3 lb/hr maximum
SO ₂	10.5 lb/hr maximum
NOx	3.0 lb/hr maximum

Date of Receipt of a BACT application:

May 14, 1984

Date of Publication in the Florida Administrative Weekly:

June 1, 1984

Review Group Members:

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

BACT Determined by DER:

The amount of particulate and sulfur dioxide emissions emitted from this source are to be controlled by the firing of natural gas or No. 2 new (1) distillate oil having a sulfur content not to exceed 0.50 percent.

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.

(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.

BACT Determination Rationale:

Sulfur in fuel oil is a primary air pollution concern, in that most of the fuel sulfur becomes SO₂. The emission factors for SO₂ and particulate emissions from oil burning are related to the sulfur content. The department agrees with the applicant's proposal that the firing of No. 2 distillate oil, containing less than 0.5% sulfur or natural gas is BACT for the two auxiliary boilers.

The term "new oil" disallows the use of re-refined or waste oil or any 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:

C. H. Fancy, Deputy Bureau Chief

Date

Approved:

Victoria J. Tschinkel, Secretary

Date

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

July 18, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

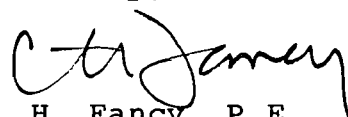
Dear Mr. Lyles:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed permit to construct an oil/gas fired auxiliary boiler at JEA's Southside Station in Jacksonville, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Duval County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permit.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,


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

CHF/pa

Attachments

cc: Richard Breitmoser
Doug Dutton
Jerry Woosley

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter on an)
Application for Permit by:)
)
Jacksonville Electric Authority) DER File No. AC 16-86190
233 West Duval Street)
Jacksonville, Florida 32202)
)

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Jacksonville Electric Authority, applied on April 23, 1984, to the Department of Environmental Regulation for a permit to construct an oil/gas fired auxiliary boiler at JEA's Southside Station located at 801 Colorado Drive, Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

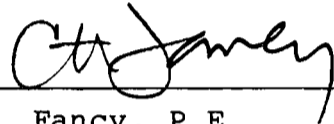
Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witness and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exception to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahase, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statues.

Executed the 18 day of July, 1984, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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

Copies furnished to:

Royce Lyles
Richard Breitmoser
Doug Dutton
Jerry E. Woosley

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Jacksonville Electric Authority to construct an oil/gas fired auxiliary boiler at their Southside Station located at 801 Colorado Drive in Jacksonville, Duval County, Florida. A determination of best available control technology (BACT) was required.

Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Bio Environmental Services
515 West 6th Street
Jacksonville, Florida
32206

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Preliminary Determination
and
Technical Evaluation

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

Permit Number
AC 16-86190

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

June 27, 1984

I. Application and Source Location

A. Applicant

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

B. Source Location

The proposed construction of an auxiliary boiler will occur at the JEA's Southside Station located at 801 Colorado Avenue, Jacksonville, Florida. The UTM coordinates are: Zone 17-437.6 km east and 3353.8 km north.

II. Project Description

JEA proposes to construct an oil/gas fired auxiliary boiler with maximum heat input of 20.7 million Btu per hour at the Southside Station. This boiler will operate as a standby unit to provide steam for essential station services when the main units are shutdown. It will provide hot fuel oil to permit clean start-up of the main station units after outages. Since it will operate only in lieu of main units, it will not increase total station emissions.

III. Emissions and Controls

No. 2 fuel oil or natural gas (primary fuel) will be fired at the proposed boiler. The maximum sulfur content of the No. 2 fuel oil is 0.5 percent. The maximum possible emissions from the boiler are listed as follows:

<u>Pollutant</u>	<u>lb/hr</u>	<u>T/yr</u>
Sulfur Dioxide, SO ₂	10.5	46
Particulate Matter, PM	0.3	1.3
Nitrogen Oxides, NO _x	3.0	13

JEA estimates that the actual emissions from the boiler in tons per year will be 11.5 for SO₂, 0.33 for PM, and 3.3 for NO_x, which is based on 2190 hours per year.

IV. Rule Applicability

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (FAC).

The existing facility, at which a new auxiliary boiler will be added, is a major facility located in a nonattainment area for ozone and an attainment area for other pollutants. This facility is within the area of influence of Jacksonville particulate

nonattainment area. Since the proposed auxiliary boiler will operate only in lieu of main units, it will not increase total emissions from the facility. Therefore, the source will not be subject to the Rule 17-2.500 and Rule 17-2.510. The proposed source shall be permitted in accordance with FAC Rule 17-2.600(6), Fossil Fuel Steam Generators with less than 250 million Btu per hour heat input. The rule requires a BACT determination for particulate matter and sulfur dioxide.

V. Control Technology Review

No add on air emission control equipment has been proposed by the applicant for this source. The applicant proposes to use No. 2 fuel oil or natural gas as fuel for air pollution control. The BACT determination made by the department is in agreement with JEA's proposal to control PM and SO₂ emissions from the subject source.

VI. Conclusions

Based on an evaluation of the application, the department believes that compliance with related state air regulations will be achieved provided certain specific conditions are met, as set forth in the attached draft state permit (AC 16-86190).

DRAFT

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

PERMITTEE:

Jacksonville Electric Authority
233 West Duval Street
Jacksonville, Florida 32202

Permit Number: AC 16-86190

Expiration Date: June 30, 1985

County: Duval

Latitude/Longitude: 30° 21' 53" N/
81° 37' 26" W

Project: Oil/Gas Fired Auxiliary
Boiler, 21 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 natural gas) fired auxiliary boiler at the JEA's Southside 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 23, 1984
2. A BACT determination made by DER.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86190
Expiration Date: June 30, 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.

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PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86190
Expiration Date: June 30, 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.

DRAFT

PERMITTEE: Jacksonville Electric Authority I. D. Number:
Permit Number: AC 16-86190
Expiration Date: June 30, 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.

DRAFT

PERMITTEE: Jacksonville Electric Authority
I. D. Number: Permit Number: AC 16-86190
Expiration Date: June 30, 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 2) 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 boiler is allowed to fire virgin No. 2 fuel oil or natural gas only with natural gas as the primary fuel. The sulfur content of the No. 2 fuel oil is limited to 0.5 percent by weight.
3. 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.

DRAFT

PERMITTEE:
Jacksonville Electric Authority

I. D. Number:
Permit Number: AC 16-86190
Expiration Date: June 30, 1985

SPECIFIC CONDITIONS:

4. The permittee shall submit all fuel oil analyses (every oil delivery needs a fuel analysis report) with the required visible emissions test to DER's Northeast District and Jacksonville Bio-Environmental Services Division (BESD) annually.
5. 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 BESD 14 days prior to source testing.
6. The boiler is allowed to operate only when at least one of the main station units at the facility is under stand-by condition.
7. 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.
8. Prior to 90 days before the expiration of this permit, a complete application for an operating permit shall be submitted to the BESD office. Full operation of the source may then be conducted in compliance with the terms of this permit until expiration of this permit or receipt of an operating permit.

Issued this day of , 1984

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

 pages attached.

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

The JEA plans to install one auxiliary boiler at their Southside generating station and one auxiliary boiler at their Kennedy generating station. Both units will be fossil-fuel-fired and have a design heat input of 20 million Btu/hour. The fuel will be natural gas or No. 2 distillate oil.

JEA is currently modifying the local electrical in-town distribution network and anticipate that the existing stabilizing generator located at the two generating stations will be placed on cold standby. The auxiliary boilers will be used to supply the station steam requirements to allow the stabilizing generators to respond to above normal network power demands.

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

Particulate emissions are nil when firing natural gas and less than one pound per hour when firing distillate fuel oil. The amount of particulate emissions will not have a significant impact within the nonattainment area, and therefore the two sources are exempt from Rule 17-2.510 New Source Review for Nonattainment Areas. Each source will be subject to a BACT determination as set forth in Rule 17-2.600(6) - Emission Limiting and Performance Standards.

BACT Determination Requested by the Applicant:

Pollutant	Emission Limit
Particulates	0.3 lb/hr maximum
SO ₂	10.5 lb/hr maximum
NO _x	3.0 lb/hr maximum

Date of Receipt of a BACT application:

May 14, 1984

Date of Publication in the Florida Administrative Weekly:

June 1, 1984

Review Group Members:

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

BACT Determined by DER:

The amount of particulate and sulfur dioxide emissions emitted from this source are to be controlled by the firing of natural gas or No. 2 new (1) distillate oil having a sulfur content not to exceed 0.50 percent.

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.

(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.

BACT Determination Rationale:

Sulfur in fuel oil is a primary air pollution concern, in that most of the fuel sulfur becomes SO₂. The emission factors for SO₂ and particulate emissions from oil burning are related to the sulfur content. The department agrees with the applicant's proposal that the firing of No. 2 distillate oil, containing less than 0.5% sulfur or natural gas is BACT for the two auxiliary boilers.

The term "new oil" disallows the use of re-refined or waste oil or any 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:

C. H. Fancy, Deputy Bureau Chief

Date

Approved:

Victoria J. Tschinkel, Secretary

Date

Jancy

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



July 16, 1984

DER

JUL 18 1984

Mr. J. E. Woosley, Assistant Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206

BT

Dear Mr. Woosley:

Subject: Northside Generating Station
Auxiliary Boiler B (Existing)

We seem to have a consensus on the wording for a Specific Condition for total fuel limits for the proposed new auxiliary boiler at Northside Station. It is recommended that the same condition be used in the permit for the existing unit. This should permit us to avoid the necessity for an Administration Hearing relative to this permit.

The proposed revised wording for Specific Condition No. 9 of Operating Permit AP 16-78586 is:

"Maximum load compliance shall be determined by whatever main steam generator is down (NS #1, #2 or #3) being recorded in the auxiliary boiler log. Whenever electrical power demand requires the simultaneous service of all three main steam generating units and an auxiliary boiler is also needed, total station residual fuel usage will be recorded every four hours. The total residual fuel usage shall not exceed 1,440 K lb of oil in any period of three consecutive hours when the auxiliary boiler is in operation.

"The total station residual fuel log shall be retained for two years for review".

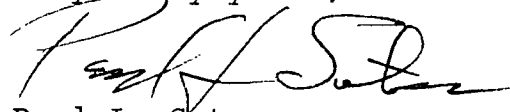
BT 7/18
~~Bill Thomas~~
~~Bob King~~
~~Ed [unclear]~~
Pa. Hy
file - Northside permit

(CONT.)

Mr. J. E. Woosley
July 16, 1984
Page 2.

A copy of the proposed total fuel log is attached. If you have any questions on this proposal, please let me know so that we can have full agreement before the hearing date.

Very truly yours,



Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: G. D. Dutton - DER Jax.
✓ C. H. Fancy - DER Tallahassee
K. Mehta - BESD
H. W. Chapman
W. R. Steinmeyer
R. Breitmoser
D. W. Stanley

JACKSONVILLE ELECTRIC AUTHORITY
DEPARTMENT OF FINANCE

364432

ORDER NUMBER 022493

REFERENCE NUMBER	ACCOUNT NUMBER	SUB ACCOUNT	INVOICE NUMBER	AMOUNT	DISCOUNT AMOUNT	NET AMOUNT
07741	2118931117	18000921091		1,000.00	.00	1,000.00
CONSTRUCTION PERMIT FEE AUXILIARY BOILER AIR PERMIT NORTHSIDE GEN STA						
TOTALS						1,000.00

DETACH BEFORE CASHING CHECK



JACKSONVILLE ELECTRIC AUTHORITY
JACKSONVILLE, FLORIDA

VOID 90 DAYS FROM DATE
DATE 4-25-84

CHECK NUMBER 364432

PAY EXACTLY *****1,000.00 DOLLARS AND 00 CENTS

*****1,000.00*
CHECK AMOUNT

PAY TO THE ORDER OF

FLA DEPT OF ENVIRONMENTAL
REGULATION

[Signature]
Doyce Tyle

63-234 SUN BANK/NORTH FLORIDA, NATIONAL ASSOCIATION
630

⑈ 364432⑈ ⑆ 063002346⑆ 2340000337⑈

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 76028

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Jacksonville Electric Authority Date May 18, 1984

Address Jacksonville, FL Dollars \$ 1,000.00

Applicant Name & Address Same as above

Source of Revenue _____

Revenue Code 001001 Application Number AC 16-45451

By Patricia H. Adams

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



May 15, 1984

Mr. Robert King, Permitting Specialist
Fla. Dept. of Environmental Regulation
2100 Blair Stone Road
Tallahassee, Florida 32301

DER

MAY 16 1984

BAQM

Dear Mr. King:

Subject: Permit and BACT Application -
Proposed Auxiliary Boiler,
Northside Generating Station

Your Notice of Incomplete Application, of which we have been given phone notification, requests additional information and assurances. Herewith, by items, are additional data or explanations.

1. \$1000 application fee was forwarded through Jacksonville Bio-Environmental Services Division on May 1. This is probably an excessive fee based on actual loadings for most operating years but the "potential emission per year" on which the fee is based definitely exceeds 100 Tons for SO₂.

2. You ask for quantification of the phrase "any significant loads" used in the fifth paragraph of our April 19 transmittal letter. This is discussed further in a letter of May 3 to Ms. Tschinkel relative to the existing auxiliary boiler at the station. A "significant load" on any main station unit is the minimum stable operating load plus enough steam to permit the unit to carry its own auxiliary steam requirement including soot blowing. For the three main units, these loads are approximately:

Unit #1: 30 MW + 10 MBtu/hr.
Unit #2: 225 MW + 10 MBtu/hr.
Unit #3: 130 MW + 10 BMtu/hr.

The auxiliary boiler may be needed when any main unit is off-line or is operating below its indicated minimum heat input. It will not normally be operated when all three main units are above their respective indicated minimums.

3. The auxiliary boiler will never operate so as to increase total momentary station heat input above the combined permitted total of the three main units.

(CONT.)

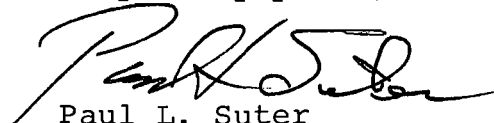
4. It is very unlikely that the auxiliary unit will ever operate 8760 hours per year. That possibility exists, however, as new coal fired units come on line and Northside's oil fired units may be needed even less than at present. JEA, therefore, requests that no limitation be placed on operating time for the proposed auxiliary boiler.

5. An operating log will be maintained for the auxiliary boiler. It will include operating time and loads and metered fuel consumption.

6. The Bailey "Network 90" combustion control is a solid state logic control system which will meter air and fuel flows and match those flows to each other and to the load requirements. More information on the control system is provided in the attached pamphlet.

I believe this information covers that requested. If you need any clarification or any further material, please let me know.

Very truly yours,



Paul L. Suter
Research & Environmental
Affairs Division

PLS/lwr

cc: W. R. Steinmeyer
D. W. Stanley
R. Breitmoser
E. R. Joyce
R. S. Pace, BESD
G. D. Dutton, DER Northeast

Enclosure: Bailey Data

No. 0156507

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO			
Mr. Royce Lyles			
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE	\$		
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES	SHOW TO WHOM AND DATE DELIVERED	¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢	
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢	
TOTAL POSTAGE AND FEES	\$		
POSTMARK OR DATE			
5/14/84			

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1978

SENDER: Complete items 1, 2, and 3. Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)

Show to whom and date delivered. ¢

Show to whom, date and address of delivery. ¢

RESTRICTED DELIVERY
Show to whom and date delivered. ¢

RESTRICTED DELIVERY.
Show to whom, date, and address of delivery. \$ _____

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:

Mr. Royce Lyles
233 West Duval Street
Jacksonville, Florida 32201

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0156507	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE Addressee Authorized agent


Betty Estimate

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S INITIALS



RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL.

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

May 14, 1984

CERTIFIED MAIL - RECEIPT REQUESTED

Mr. Royce Lyles, Managing Director
233 West Duval Street
Jacksonville, Florida 32201

Re: Auxiliary Boiler, Northside Station, JEA
Air Construction Permit: AC 16-85951

Dear Mr. Lyles:

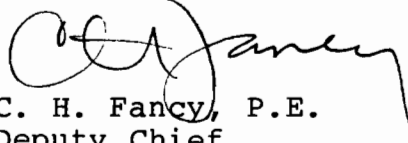
The Bureau of Air Quality Management received your application on April 20, 1984, for a construction permit of a oil/gas fired auxiliary boiler in Duval County, Florida. After reviewing the application, the bureau has determined it to be incomplete. Before the application can be further processed, the bureau requires an application fee and additional information as following:

1. Please quantify what "significant" means as per the statement on your cover letter, "The unit will never operate additive to main units at any significant load so the combined mode is not investigated."
2. Would the proposed boiler be operated in the event of unusually hot weather that requires high power generating capacity from all three main units?
3. What is the proposed boiler's actual maximum operation hours which can be used as a limit for the permits specific condition?
4. Will there be an operating log maintained for the auxiliary boiler?
5. Please provide more information about the Bailey "Network 90" combustion control system.
6. Please submit an application fee for the construction permit.

Mr. Royce Lyles
Page Two
May 14, 1984

When the additional information and an application fee are received, we will resume processing your application. If you have any questions related to the application, please write me at the above address or call Bob King, Review Engineer, at (904)488-1344.

Sincerely,



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

CHF/BK/s
cc: Doug Dutton
Donald Bayly
Richard Breitmoser

DEPARTMENT OF HEALTH, WELFARE
& BIO-ENVIRONMENTAL SERVICES
Bio-Environmental Services Division

May 11, 1984



Mr. Clair Fancy, P.E.
Deputy Bureau Chief
Central Air Permitting Section
Dept. of Environmental Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

DER

MAY 14 1984

BAQM

Re: Jacksonville Electric Authority
Northside, Southside, and Kennedy
Generating Station

Dear Mr. Fancy:

Enclosed are construction permit applications for auxiliary boilers at Southside and Kennedy Generating Stations. Comments are provided as follows on these two applications as well as the construction permit application for the auxiliary boiler at Northside Generating Station which was previously sent directly to your Office:

- (1) The proposed auxiliary boiler at the Northside Generating Station is subject to (BACT) Rule 17-2.600(6), Florida Administrative Code(FAC).
- (2) The proposed auxiliary boilers at Southside and Kennedy Generating Stations appear to be subject to the following:
 - (A) (RACT) Rule 17-2.650(2)(a)2. FAC.
 - (B) (BACT) Rule 17-2.600(6). FAC.

Note: Neither Rule seems to exclude the applicability of the other.

The processing fee(\$1,000 Check No. 364432) for the Northside Auxiliary Boiler Construction Permit application is also enclosed.

If this Agency may be of further assistance in this matter, please advise.

Very truly yours,

Jerry E. Woosley
Assistant Engineer

JEW/vj
Enclosure

cc: Mr. Doug Dutton - DER, without enclosure
cc: Mr. Richard Breitmoser, P.E., without enclosure



AREA CODE 904 / 633-3318 / 515 WEST 6TH STREET / JACKSONVILLE, FLORIDA 32206

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

Initial

Date

2.

Clair Faney

Initial

Date

3.

Bill T. ...

Initial

Date

4.

Bob K

Initial

Date

REMARKS:

DER
MAY 24 1984
BAC

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

FROM:

F. Watkins, Jr.

DATE

5/23/84

PHONE

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



April 20, 1984

Mr. Robert Steven Pace, P.E.
Bio-Environmental Engineer
Bio-Environmental Services Division
515 West Sixth Street
Jacksonville, Florida 32206



Dear Mr. Pace:

Subject: Auxiliary Boiler Permit Applications -
Kennedy and Southside Stations

Enclosed are two applications for Air Construction Permits. These apply to identical 500 HP package boilers proposed for JEA's in-town generating stations.

138 KV "injector" circuits are now under construction to stabilize voltage in the in-town distribution network. It is anticipated that the enhanced network will no longer need stabilizing generation from Southside and Kennedy stations. If this proves true, the main units at both of these stations can be shutdown cold except when they are actually needed for system load.

The two stations, however, need small amounts of steam so that fuel oil and boiler water services will be available for protection and start-up of the generating units. The proposed auxiliary boilers, which will have no electrical generating capability, will provide these services with minimal fuel consumption.

JEA wishes to license the new units for #2 oil and natural gas. Gas will be burned, when available, at Southside and as soon as it can be made available at Kennedy. It is expected to be the major fuel for these units at both stations. Total emissions from the new units alone will be very small.

As stated in the applications, these units will operate in lieu of the generating units at both stations and will permit drastic reductions in all normal emissions at both stations. October was the lightest month in 1983 for combined oil consumption at the two stations; 52,000 barrels was the combined consumption for the month. If the two auxiliary boilers ran at max rating for 8760 hours, they would burn only 65,000 barrels in a year. Their expected combined operation is only equivalent to 15-20,000 barrels per year and this will be significantly reduced by gas availability.

(CONT.)

Mr. Robert Steven Pace
April 20, 1984
Page 2.

Permits are requested for 0.5% max. sulfur oil because that is the specification for No. 2 oil available in the open market in Jacksonville. Experience indicates, however, that the oil sulfur content will average no higher than 0.3%.

The maximum fuel consumption for each package is less than 4 bbl per hour and the minimum load level for the smallest available station unit is about 30 bbl per hour. Considering the size of the units, the fuels and their mode of operation vis-a-vis the existing generating units, JEA believes that (17-2.510(1)(a)): "The combined impact of new emissions - - - and existing emissions with any non-attainment area" will not "interfere with reasonable further progress toward attainment of ambient air quality standards" for particulates. Under the same consideration, it is apparent that there will be no consumption of increment of any other priority pollutant.

We believe that these units can be permitted under 17-2.520 as "Sources Not Subject to PSD or NA Requirements" and request that the permits be so issued. Because of the Potential Emission level for SO2 they appear to be in the "greater than 25 T/yr" category. We are, therefore, forwarding a \$250.00 check for each permit.

After review, will you please forward a copy of these applications to DER for BACT review and permit issuance.

If there are any questions relative to these applications, please let me know.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

RB/PLS/lwr

cc: H. W. Chapman
J. A. Lucas
H. A. Poncher
D. W. Stanley
A. T. Haaland
P. L. Suter
File 1.4.2.1.9
1.4.4.1.9

Enclosure: Permit Applications

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
DISTRICT MANAGER

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Oil/Gas Fired Boiler [X] New¹ [] Existing¹

APPLICATION TYPE: [X] Construction [] Operation [] Modification

COMPANY NAME: Jacksonville Electric Authority COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Auxiliary Boiler

SOURCE LOCATION: Street 4215 Talleyrand Avenue City Jacksonville

UTM: East 17-440.050 North 3359.175

Latitude 30 ° 21' 53 "N Longitude 81 ° 37 ' 26 "W

APPLICANT NAME AND TITLE: Royce Lyles, Managing Director

APPLICANT ADDRESS: 233 West Duval Street, Jacksonville, Florida 32202

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Electric Authority

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed *Royce Lyles*
Royce Lyles, Managing Director
Name and Title (Please Type)

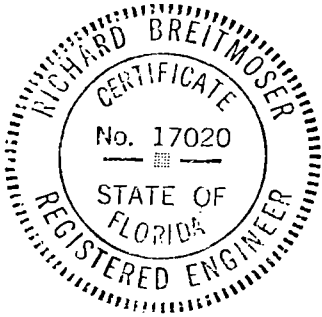
Date: APR 19 1984 Telephone No. 904-633-4730


B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed 
Richard Breitmoser
Name (Please Type)
Jacksonville Electric Authority
Company Name (Please Type)
Box 53015, Jacksonville, Fla. 32201
Mailing Address (Please Type)
Florida Registration No. 17020 Date: 4/19/84 Telephone No. 904-633-4517

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Proposed unit is a stand-by auxiliary boiler to provide steam for essential station services during outages of main generating units. It will provide hot fuel oil to permit clean start-up of the main station units after outages. Since it will operate only in lieu of main units, it will not increase total station emissions.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction 7/2/84 Completion of Construction 12/31/84

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Pollution control will be accomplished with the combustion control system, an essential operating component of the boiler system, in conjunction with premium fuels.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

This unit will operate during outages of:
JDK#9, AO 16-59264, 10/12/82, expires Aug. 31, 1987, and
JDK #10, AO 16-58584, 12/9/82, expires Aug. 31, 1987

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;
 if power plant, hrs/yr 8760; if seasonal, describe: This unit will operate only as a
standby unit to provide essential services when the station generating units are
shutdown. It is estimated to operate less than 25% of the time but may be needed
full time in winter or prior to start-up of a generating units.

F. If this is a new source or major modification, answer the following questions.
 (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? Yes
 - a. If yes, has "offset" been applied? No
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? Yes
 - c. If yes, list non-attainment pollutants. Particulate
 2. Does best available control technology (BACT) apply to this source?
 If yes, see Section VI. Yes
 3. Does the State "Prevention of Significant Deterioration" (PSD)
 requirement apply to this source? If yes, see Sections VI and VII. No
 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
 apply to this source? No
 5. Do "National Emission Standards for Hazardous Air Pollutants"
 (NESHAP) apply to this source? No
- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
 to this source? No
- a. If yes, for what pollutants? _____

b. If yes, in addition to the information required in this form,
 any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
 cation for any answer of "No" that might be considered questionable.

F.1. This unit, at approximately 20 MBH input, operates only in lieu of other
 units, the smallest of which is 541 MBH. The stacks are less than 50 m.
 apart and emissions from the facility, as modified, will always be less
 when the proposed unit is in operation than emissions from the unmodified
 facility. Particulate emissions from the proposed premium fuels will be
 so low as to constitute LAER. The Department can determine, under
 17-2.520(3)(b) that the proposed modification will not interfere with
 reasonable progress toward attainment.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

NA

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): NA

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Calculated on basis of #2 fuel oil, the normal fuel, @ 25% L.F. and 0.3% average sulfur.

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
SO ₂	10.5	6.9	BACT	10.5	10.5	46	Stack
NO _x	3.0	3.3	NA	NA	3.0	13	outlet
Particulate	0.30	0.33	LAER	0.30	0.30	1.3	
(Particulate data based on			AP-42, 0.015 Lb/MBtu.				
Vendor projects 0.01 Lb/MBtu).							

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3). Per AP-42:

SO₂ = 142 S/K Gal., @ 135 K Btu/Gal = 1.05 S/MBtu. 1.05 X 0.5 X 20 MBH = 10.5 Lb SO₂/hr.
 NO_x = 20 #/K Gal., @ 135 K Btu/Gal = 0.15 Lb/MBtu. 0.15 X 20 = 3.0 Lb NO_x/hr.
 TSP = 2 #/K Gal., @ 135 K Btu/Gal = 0.015 Lb/MBtu. 0.015 X 20 = 0.30 Lb TSP/hr.

D. Control Devices: (See Section V, Item 4)

NA

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
#2 Fuel Oil	20	145	19.8
Natural Gas	0	0.021	20.7

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: #2 Oil

Percent Sulfur: < 0.5 Percent Ash: < 0.01
 Density: ± 6.8 lbs/gal Typical Percent Nitrogen: 0.1
 Heat Capacity: ± 19,500 BTU/lb ± 135,000 BTU/gal
 Other Fuel Contaminants (which may cause air pollution): None known
 N. Gas: 0.0035 %S, 1000 Btu/scf, 0.4% N₂ (vol)

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average 5 Maximum 25

G. Indicate liquid or solid wastes generated and method of disposal.

None

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

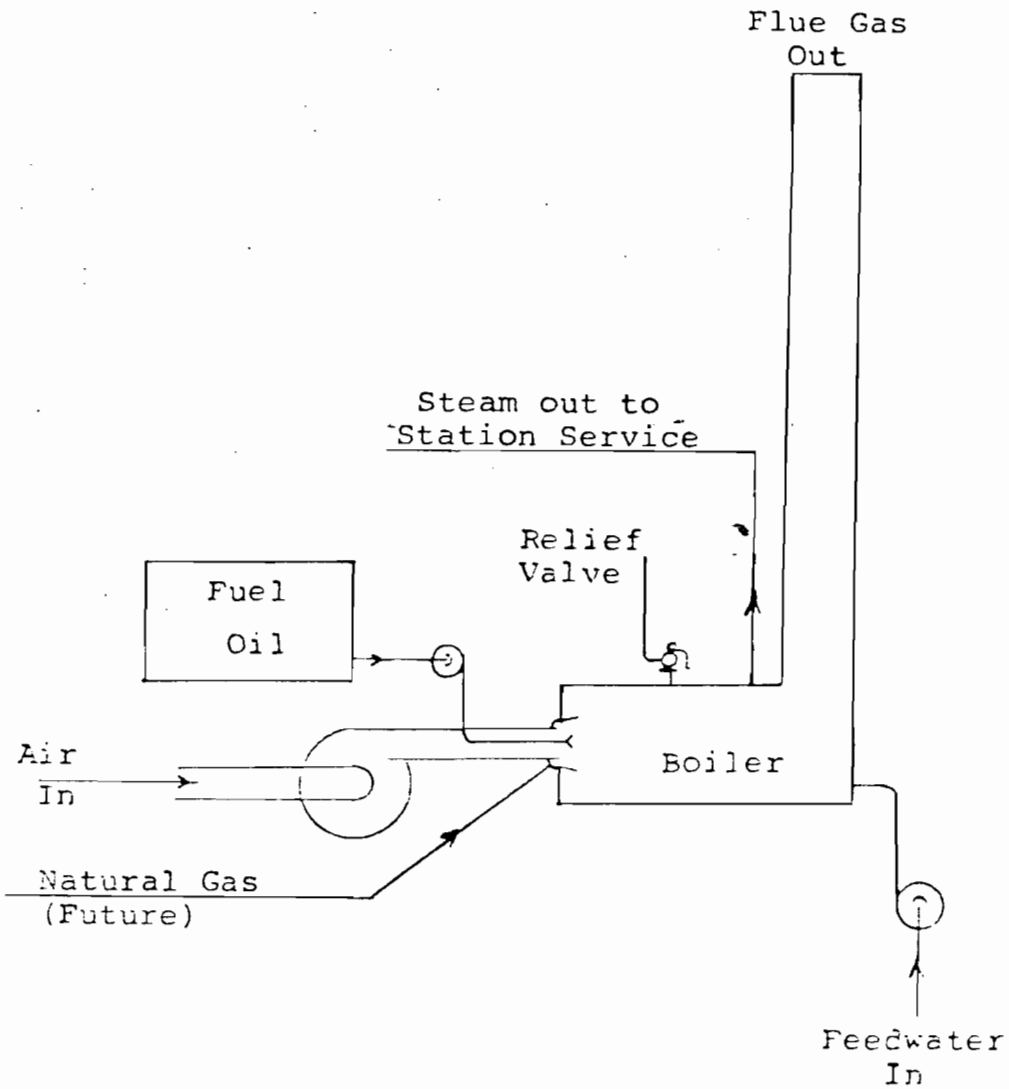
Stack Height: 30 ft. Stack Diameter: 2.0 ft.
 Gas Flow Rate: 6840-7050 ACFM 3475-3585 DSCFM Gas Exit Temperature: 400-450 °F.
 Water Vapor Content: 16 11 % Velocity: 36 37 FPS
NG #2 oil NG #2 oil

Date
11/3/83

JACKSONVILLE ELECTRIC AUTHORITY

Sheet
1
of
1

Kennedy Generating Station
Auxiliary Boiler Flow Diagram



SK-PS-83-12

Brief description of operating characteristics of control devices: NA

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NA

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[] Yes [X] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[] Yes [X] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration
SO ₂	10.5 Lb/hr max., 1.6 Lb/hr Avg.
NO _x	3.0 Lb/hr max., 0.75 Lb/hr Avg.
TSP (BACT & LAER)	0.30 Lb/hr max., 0.075 Lb/hr Avg.

D. Describe the ^{proposed} ~~existing~~ control and treatment technology (if any).

- | | |
|---|--------------------------|
| 1. Control Device/System:
Positioning fuel/air proportioning with oxygen trim; fuel sulfur spec. | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |
| NA | Included in boiler cost |

*Explain method of determining

- 5. Useful Life: Boiler life
- 7. Energy: None additional
- 9. Emissions:

- 6. Operating Costs: None additional
- 8. Maintenance Cost: \$1000/yr.

Contaminant	Rate or Concentration
SO ₂	10.5 Lb/hr Max., 1.6 Lb/hr Ave.
NO _x	3.0 Lb/hr Max., 0.75 Lb/hr Avg.
TSP	0.30 Lb/hr Max., 0.075 Lb/hr Avg.

10. Stack Parameters

- a. Height: 30 ft.
- b. Diameter: 2.0 ft.
- c. Flow Rate: 7,000 ACFM
- d. Temperature: 400 °F.
- e. Velocity: 36 FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

No other control technologies are known to be used on units of this type, size and fuel
 1. except less sophisticated combustion control.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

Because of the great reduction in total emissions, PSD evaluation is not believed necessary.

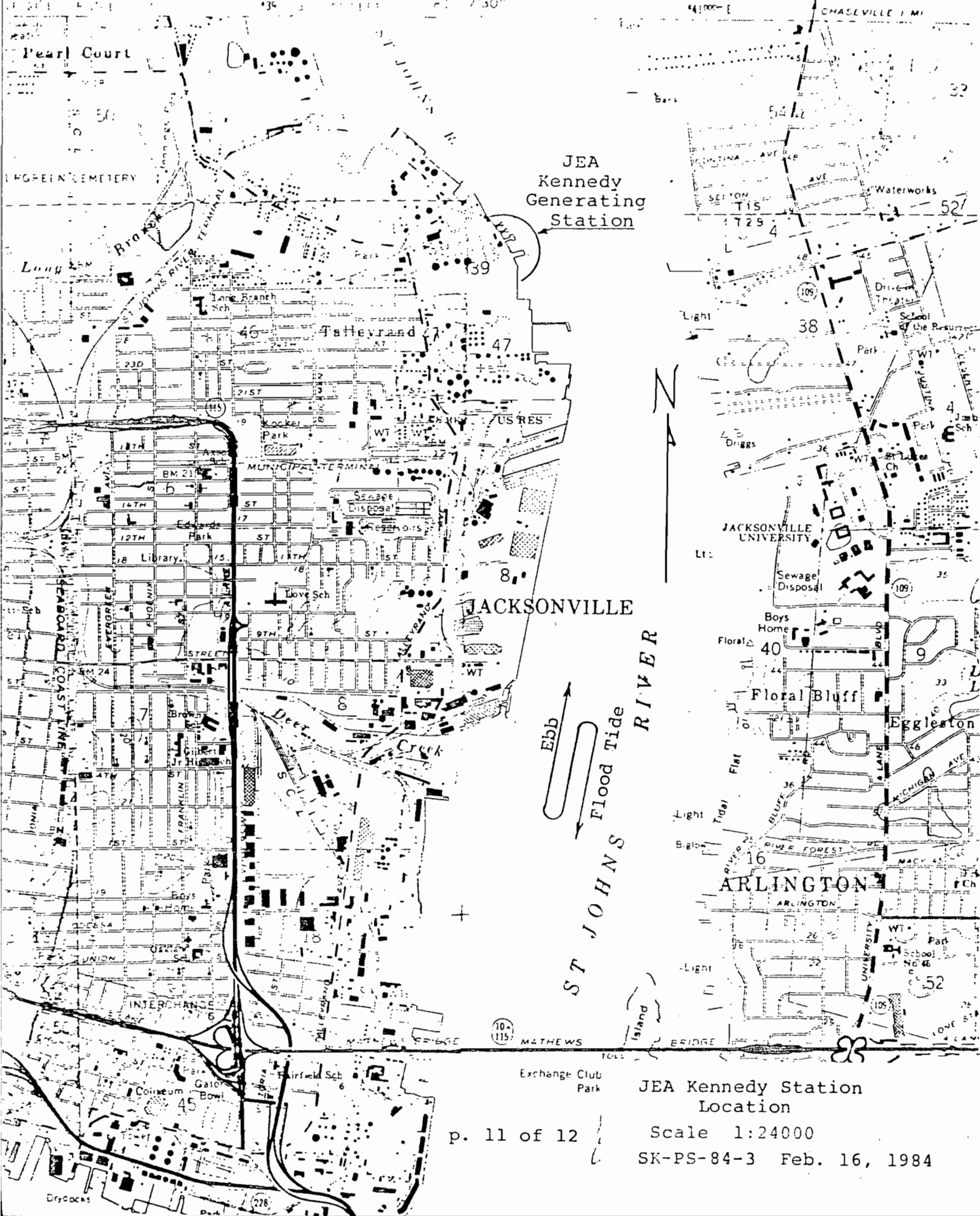
*Specify bubbler (B) or continuous (C).

Best Available Copy

730

41000-E

CHASLEVILLE 1 MI



JEA
Kennedy
Generating
Station

JACKSONVILLE

ST JOHNS RIVER
Ebb
Flood Tide

ARLINGTON

JEA Kennedy Station
Location



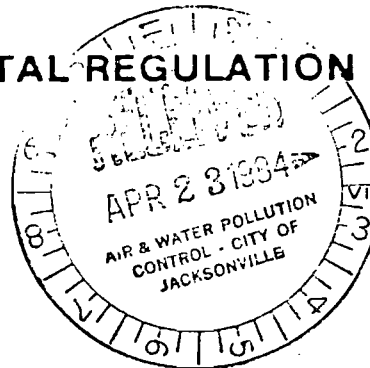
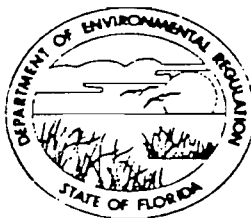
JEA KENNEDY STATION
FROM R S & N PLOT PLAN
76126-D 1510-2 7/8/79
SK-PS-81-4 3/11/81



DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT

3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

G. DOUG DUTTON
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Oil/Gas Fired Boiler [X] New¹ [] Existing¹

APPLICATION TYPE: [X] Construction [] Operation [] Modification

COMPANY NAME: Jacksonville Electric Authority COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Auxiliary Boiler

SOURCE LOCATION: Street 801 Colorado Avenue City Jacksonville

UTM: East 17-437.64 North 3353.82

Latitude 30° 15' 57"N Longitude 81° 38' 56"W

APPLICANT NAME AND TITLE: Royce Lyles, Managing Director

APPLICANT ADDRESS: 233 West Duval Street, Jacksonville, Florida 32202

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Electric Authority

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: Royce Lyles

Royce Lyles, Managing Director
Name and Title (Please Type)

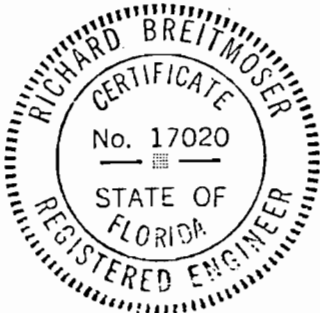
Date: APR 19 1984 Telephone No. 904-633-4780

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed [Signature]
Richard Breitmoser
Name (Please Type)
Jacksonville Electric Authority
Company Name (Please Type)
Box 53015, Jacksonville, Fla. 32201
Mailing Address (Please Type)

Florida Registration No. 17020 Date: 4/17/84 Telephone No. 904-633-4517

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Proposed unit is a stand-by auxiliary boiler to provide steam for essential station services during outages of main generating units. It will provide hot fuel oil to permit clean start-up of the main station units after outages. Since it will operate only in lieu of main units it will not increase total station emissions.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction 7/2/84 Completion of Construction 12/31/84

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Pollution control will be accomplished with the combustion control system, an essential operating component of the boiler system, in conjunction with premium fuels.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

This unit will operate during outages of:
SS #4 AO 16-19287, rev. 6/16/83, expires 11/30/84, and
SS #5 AO 16-59262, rev. 6/16/83, expires 8/31/87.

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wka/yr 52; if power plant, hrs/yr 8760; if seasonal, describe: This unit will operate only as a standby unit to provide essential services when the station generating units are shut down. It is estimated to operate less than 25% of the time but may be needed full time in winter or prior to start-up of a generating units.

F. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this zone of influence for a source in a non-attainment area for a particular pollutant? Yes
- a. If yes, has "offset" been applied? No
- b. If yes, has "Lowest Achievable Emission Rate" been applied? Yes
- c. If yes, list non-attainment pollutants. Particulate
2. Does best available control technology (BACT) apply to this source? Yes
If yes, see Section VI.
3. Does the State "Prevention of Significant Deterioration" (PSD) requirement apply to this source? If yes, see Sections VI and VII. No
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No
- H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No
- a. If yes, for what pollutants? _____
- b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

This unit, at approximately 20 MBH input, operates only in lieu of other units, the smallest of which is 380 MBH. The auxiliary stack will be less than 75 m. from existing stacks and emissions from the facility, as modified, will always be less when the proposed unit is in operation than emissions from the unmodified facility. Particulate emissions from the proposed premium fuels will be so low as to constitute LAER. The Department can determine, under 17-2.520(3)(b) that the proposed modification will not interfere with reasonable progress toward attainment.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

NA

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): NA

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Calculated on basis of #2 fuel oil, the normal fuel, @ 25% L.F. and 0.3% average sulfur.

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/hr	T/yr	
SO ₂	10.5	6.9	BACT	10.5	10.5	46	Stack
NO _x	3.0	3.3	NA	NA	3.0	13	outlet
Particulate	0.30	0.33	LAER	0.30	0.30	1.3	
(Particulate data based on AP-42, projects 0.01 Lb/MBtu).			0.015 Lb/MBtu.	Vendor			

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

SO₂ = 142 S/K Gal., @ 135 K Btu/Gal = 1.05 S/MBtu. 1.05 X 0.5 X 20 MBH = 10.5 Lb SO₂/hr.

NO_x = 20 #/K Gal., @ 135 K Btu/Gal = 0.15 Lb/MBtu. 0.15 X 20 = 3.0 Lb NO₂/hr.

TSP = 2 #/K Gal., @ 135 K Btu/Gal = 0.015 Lb/MBtu. 0.015 X 20 = 0.3 Lb TSP/hr.

D. Control Devices: (See Section V, Item 4) NA

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
#2 Fuel Oil	20	145	19.8
Natural Gas	0	0.021	20.7

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: #2 Oil

Percent Sulfur: < 0.5 Percent Ash: < 0.01

Density: + 6.8 lbs/gal Typical Percent Nitrogen: 0.1

Heat Capacity: + 19,500 BTU/lb + 135,000 BTU/gal

Other Fuel Contaminants (which may cause air pollution): None known

Nat. Gas: 0.0035 %S, 1000 Btu/scf, 0.4% N2 (vol).

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average 5 Maximum 20

G. Indicate liquid or solid wastes generated and method of disposal.

None

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

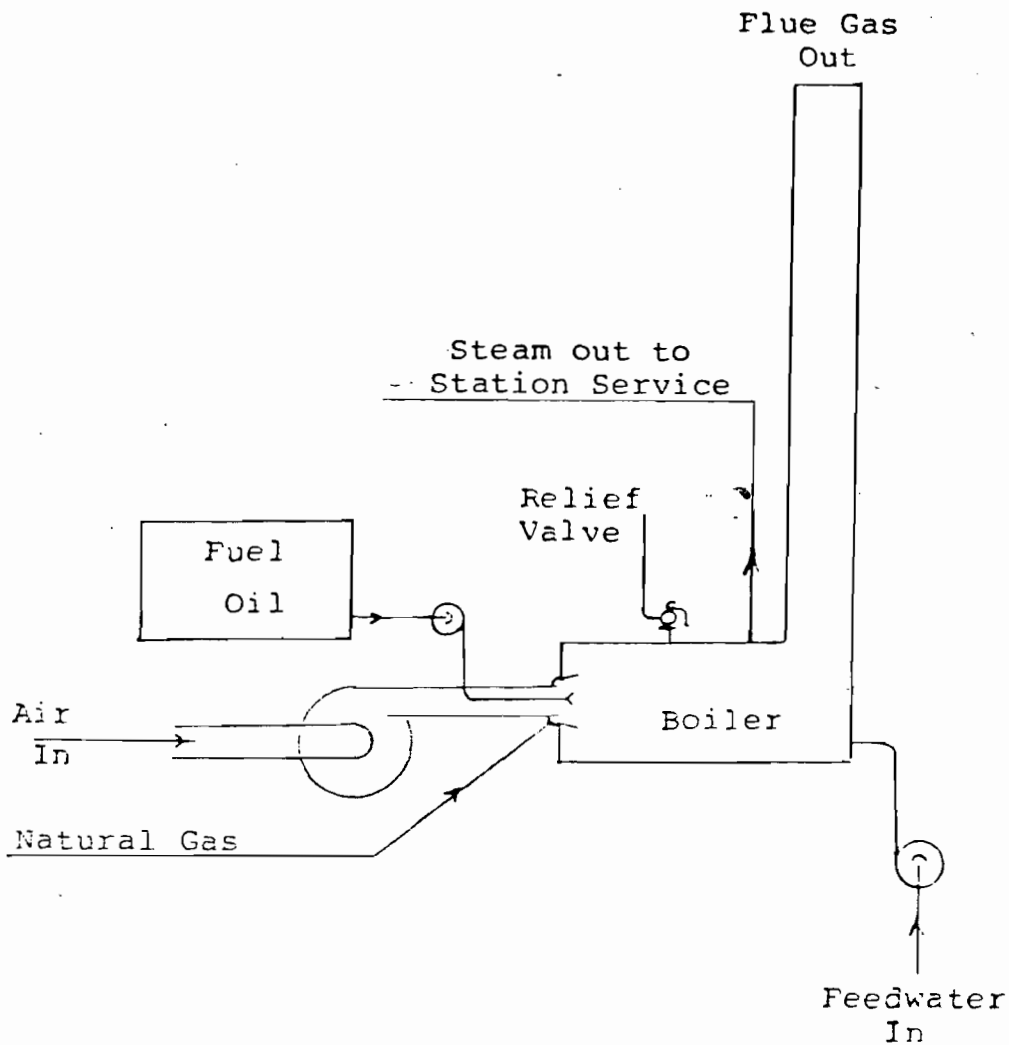
Stack Height: 30 ft. Stack Diameter: 2.0 ft.
 Gas Flow Rate: 6840-7050 ACFM 3475-3585 DSCFM Gas Exit Temperature: 400-450 °F.
 Water Vapor Content: 16 % 11 % Velocity: 36 37 FPS
 NG #2 oil NG #2 oil

Date
11/3/83

JACKSONVILLE ELECTRIC AUTHORITY

Sheet
1
of 1

Southside Generating Station
Auxiliary Boiler Flow Diagram



SN-PS-83-12

Brief description of operating characteristics of control devices: NA

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NA

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant

Rate or Concentration

SO ₂	10.5 lb/hr Max., 1.6 lb/hr Avg.
NO _x	3.0 lb/hr Max., 0.75 lb/hr Avg.
TSP (BACT & LAER)	0.30 lb/hr Max., 0.075 lb/hr Avg.

proposed

D. Describe the ~~existing~~ control and treatment technology (if any).

1. Control Device/System:

Positioning fuel/air proportioning with oxygen trim; fuel sulfur spec.

3. Efficiency:*

NA

2. Operating Principles:

4. Capital Costs:

Included in boiler cost.

*Explain method of determining

- 5. Useful Life: Boiler Life
- 7. Energy: None additional
- 9. Emissions:

- 6. Operating Costs: None additional
- 8. Maintenance Cost: \$1000/yr

Contaminant	Rate or Concentration
SO ₂	10.5 Lb/hr Max., 1.6 Lb/hr Avg.
NO _x	3.0 Lb/hr Max., 0.75 Lb/hr Avg.
TSP	0.30 Lb/hr Max., 0.075 Lb/hr. Avg.

10. Stack Parameters

- a. Height: 30 ft.
- b. Diameter: 2.0 ft.
- c. Flow Rate: 7000 ACFM
- d. Temperature: 400 °F.
- e. Velocity: 36 FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

No other control technologies are known to be used on units of this type, size and fuel
 1. except less sophisticated combustion control.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

- 2.
- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

- 3.
- a. Control Device:
 - b. Operating Principles:
 - c. Efficiency:¹
 - d. Capital Cost:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - h. Maintenance Cost:
 - i. Availability of construction materials and process chemicals:
 - j. Applicability to manufacturing processes:
 - k. Ability to construct with control device, install in available space, and operate within proposed levels:

- 4.
- a. Control Device:
 - b. Operating Principles:
 - c. Efficiency:¹
 - d. Capital Costs:
 - e. Useful Life:
 - f. Operating Cost:
 - g. Energy:²
 - h. Maintenance Cost:
 - i. Availability of construction materials and process chemicals:
 - j. Applicability to manufacturing processes:
 - k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

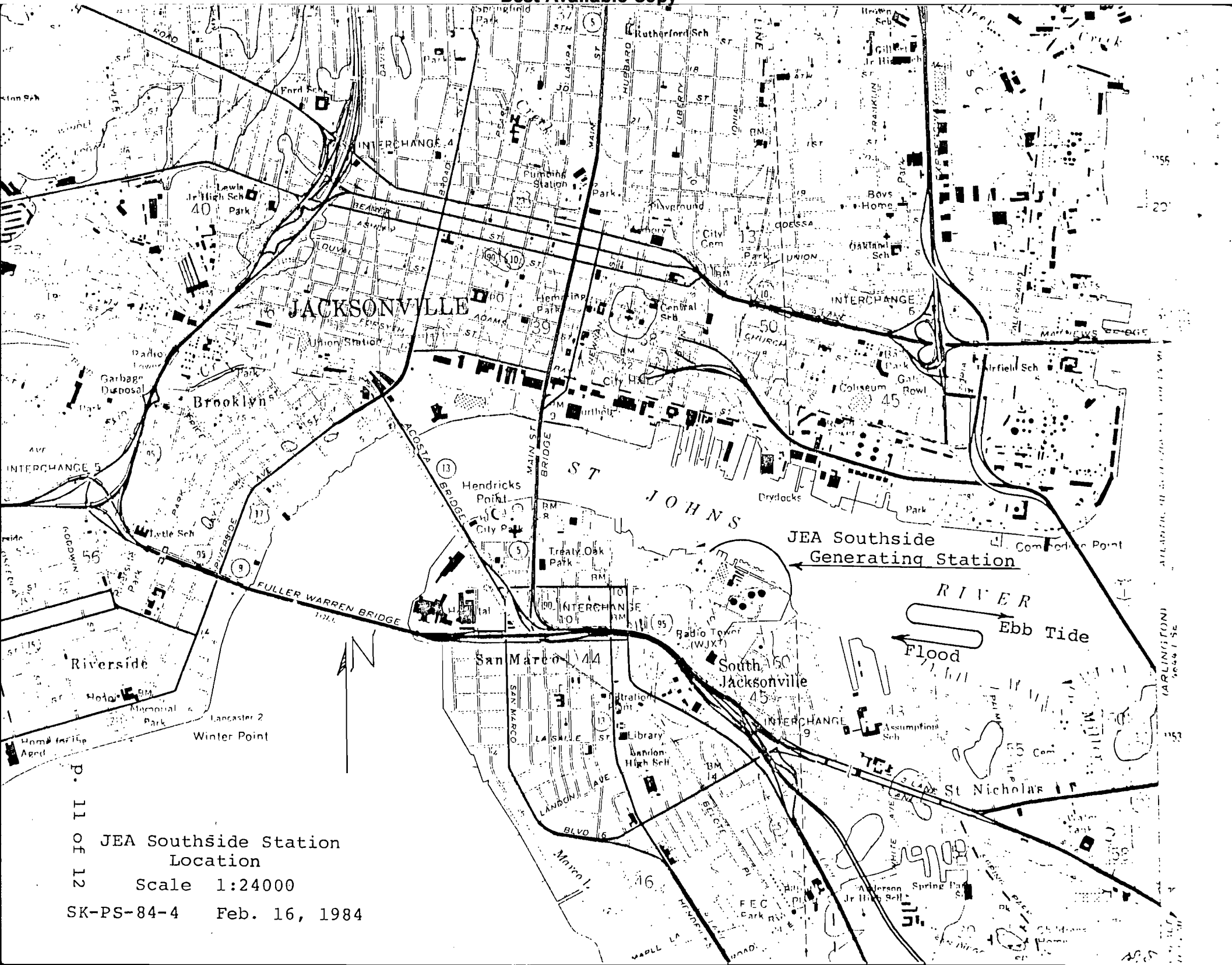
1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.
Because of the great reduction in total emissions, PSD evaluation is not believed necessary.

*Specify bubbler (B) or continuous (C).



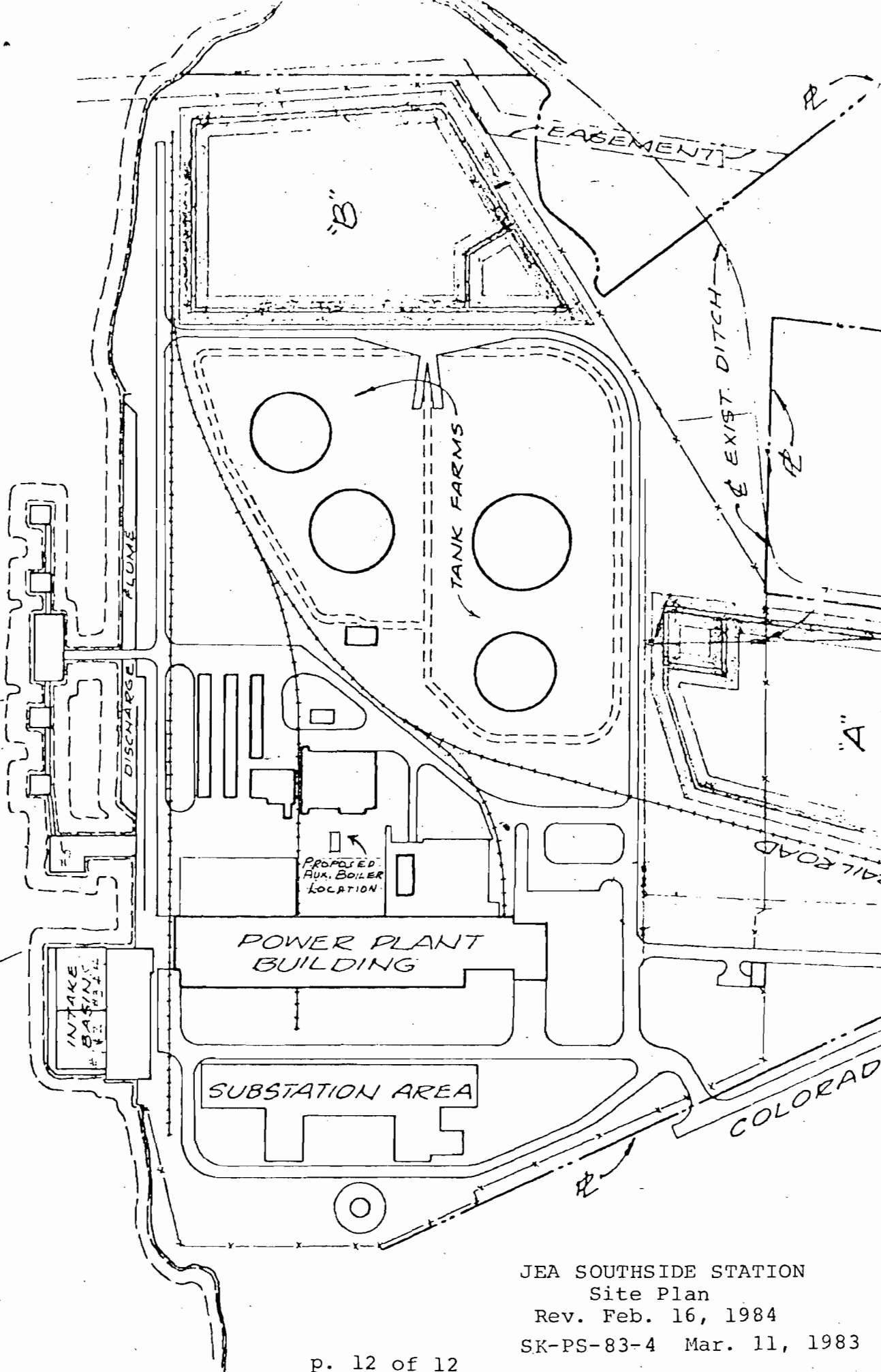
P. 11 OF 12

JEA Southside Station Location

Scale 1:24000

SK-PS-84-4 Feb. 16, 1984

ST. JOHNS RIVER



JEA SOUTHSIDE STATION
Site Plan
Rev. Feb. 16, 1984
SK-PS-83-4 Mar. 11, 1983

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



May 3, 1984

RECEIVED

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. V. J. Tschinkel, Secretary **MAY 7 1984**
Fla. Dept. of Env. Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301 **Office of the Secretary**

DER
MAY 9 1984
BAQM

Dear Ms. Tschinkel:

Subject: Permit No. AO 16-78586
Northside Auxiliary Boiler "B"

JEA hereby petitions, under Rule 28-5.201, for relief from Specific Condition No. 9 of the subject newly issued permit. The permit, dated April 24 at DER's Northeast District Office, was received by JEA on April 26.

The permit is satisfactory except for the noted condition which states:

"Operation shall not be simultaneous with Unit No. 1 except during start-up of Unit No. 1".

This condition presumes that when Unit No. 1 is on line it will always have excess steam available to provide auxiliary services for the other two units at the generating station. It also presumes that interconnections can always be set up for transfer of steam among the three generating systems. Neither of these conditions can be assured in all operating situations.

Considering past modes of station operation and the very low operating time of the auxiliary boiler, Specific Condition No. 9 really seems superfluous. If the Department believes, however,

that protection is needed from addition of the auxiliary boiler output to the normal total station emission cap, the following statement is proposed as a revised Specific Condition No. 9:

"The unit shall not operate additive to main station units at significant loads".

"Significant loads" in this context would be loads sufficiently above minimum load on each main unit to permit each main unit in operation to provide its own sootblowing steam. This is because when any main unit is at minimum load it may require an external source (the auxiliary boiler) for soot blowing steam.

Please note that JEA wrote to District Manager G. D. Dutton on April 30 requesting this relief. This petition formalizes the earlier request.

Your consideration in this matter is earnestly solicited. We will be happy to discuss this situation, if desired, with you or your delegate.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

^{PLS}
RB/PLS/lwr

cc: G. D. Dutton, NE Office
R. S. Pace, BESD
H. W. Chapman
W. R. Steinmeyer
P. L. Suter
Files

Jacksonville Electric Authority

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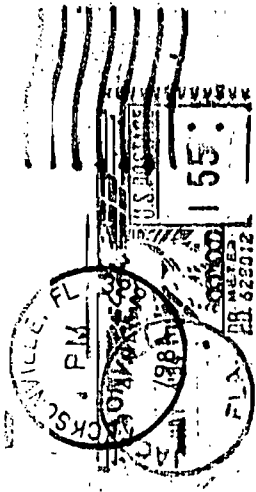
RETURN RECEIPT
REQUESTED

CERTIFIED

P 285 111 474

MAIL

RETURN RECEIPT REQUESTED



Ms. V. J. Tschinkel, Secretary
Fla. Dept. of Env. Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

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DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO
57
ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION) <i>Steve Smallwood</i>	Initial
	Date
2. <i>Clair Farnes</i>	Initial
	Date
3. <i>Slip Patty</i>	Initial
	Date
4.	Initial
	Date

REMARKS:

*Please handle
Please call Dutton's office
about Friday (ask for Frank Watkins)
and see what action they plan to
take. Let me know,*

*Clair
620-5295*

*Patty -
This is probably
done. Let me
know. You
new will file
it*

INFORMATION

- Review & Return
- Review & File
- Initial & Forward

DISPOSITION

- Review & Respond
- Prepare Response

- For Processing
- Initial & Return

FROM:

Cam

DATE *5/8*
PHONE

Jacksonville Electric Authority

233 WEST DUVAL STREET • P. O. BOX 53015 • JACKSONVILLE, FLORIDA 32201



April 19, 1984

Mr. C. H. Fancy, Deputy Bureau Chief
Fla. Dept. of Environmental Regulation
Montgomery Building
Koger Center
Tallahassee, Florida 32301-8241

DER
APR 20 1984
BAQM

Dear Mr. Fancy:

Subject: Permit and BACT Application - Proposed Auxiliary
Boiler, Northside Station

Enclosed is an application for an Air Permit to Construct an oil fired auxiliary boiler for JEA's Northside Generating Station. This unit is to replace one of two smaller auxiliary boilers installed with the original generating unit at the station about 1966.

The station grew from 1966 to 1977 to four times its original capability. It was not until the cold weather this past winter, when the main steam units were not being used for electrical generation, that it was demonstrated that the existing auxiliary capacity was inadequate to keep the station available for winter start-up. The proposed new auxiliary boiler is required to remedy this situation.

The only alternative to the new unit would be to operate an existing generating unit all winter, whether needed for system capability or not. These large units are not efficient at minimum loads and cannot be operated except at significantly higher heat inputs, almost ten times higher than the maximum heat input of the proposed auxiliary.

The Northside Generating Station is approximately 9 km. from the Jacksonville TSP non-attainment area, 60 km from the nearest Class I area, the Okefenokee National Wildlife Refuge, and 15 km from a Jacksonville downtown ambient SO₂ monitor which threatens SO₂ non-attainment under certain weather conditions. Pertinent impacts at all of these receptors have been evaluated.

JEA contracted with Environmental Science and Engineering, Inc., of Gainesville, to model the impacts. ES&E's complete study is enclosed with the permit application. The impact of the proposed boiler alone, its normal operating mode, is studied. The unit will never operate additive to main units at any significant loads so the combined mode is not investigated. As noted above, any main station unit could be operated at minimum load as an alter-

Mr. C. H. Fancy
April 19, 1984
Page 2.

native to the proposed boiler. Therefore, the differential impacts have been modeled for the proposed unit vs. each of the main station units at minimum load. It will be noted that, despite the load disparities in these comparisons, there can be positive differentials. This is because of the very low stack velocity from the proposed unit.

The existing auxiliary boiler flue is ducted to the No. 1 main unit stack. The proposed auxiliary will be housed in common with the existing unit and they will share the stack entry. This gives the proposed unit the advantage of a 240 foot stack and it is so treated in the ES&E study.

Number six fuel oil, less than 1.8% sulfur, is the only fuel presently available for boiler operation at the Northside station. It is, therefore, the proposed boiler fuel. A small amount of LPG is available for burner ignition service but the supply is not adequate even for auxiliary operation. Permitting for #2 oil is also requested in case this becomes in the future a justifiable stand-by fuel.

The combustion control for the proposed unit will be a Bailey "Network 90" full metering and proportioning system. This is a much more sophisticated system than normally provided for a boiler as small as the auxiliary. JEA is providing the system in the belief that it constitutes LAER for particulate control.

It is requested that this proposed installation, with the fuel and control system outlined, ducted to the 240 foot stack, be determined BACT and, where required, LAER. The ES&E study seems to well justify such determination.

The proposed unit is essential for continued economical operation of the Northside Station with minimal emission impacts. Expeditious processing of the permit application is requested. A check for the \$1000 permit fee is being forwarded.

If further information is required, or you wish to discuss any aspect of this project, please let me know.

Very truly yours,



Richard Breitmoser, P.E.
Division Chief
Research & Environmental
Affairs Division

 RB/PLS/lwr

cc: R. S. Pace H. W. Chapman D. W. Stanley P. L. Suter
 G. D. Dutton W. R. Steinmeyer E. R. Joyce Files

Attachment

DEPARTMENT OF ENVIRONMENTAL REGULATION

DER

TWIN TOWERS OFFICE BUILDING
90 BLAIR STONE ROAD
LALASSEE, FLORIDA 32301



BOB GRAHAM
GOVERNOR
VICTORIA J. SCHINKEL
SECRETARY

APR 20 1984

BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Oil/Gas Fired Boiler New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Jacksonville Electric Authority COUNTY: Duval

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peeking Unit No. 2, Gas Fired) Auxiliary Boiler

SOURCE LOCATION: Street 4377 Heckscher Drive City Jacksonville

UTM: East 17-446.949 North 3365.023

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

APPLICANT NAME AND TITLE: Royce Lyles, Managing Director

APPLICANT ADDRESS: 233 West Duval St., Jacksonville, Fla. 32201

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Jacksonville Electric Authority

I certify that the statements made in this application for a Construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed Royce Lyles
Royce Lyles, Managing Director
Name and Title (Please Type)

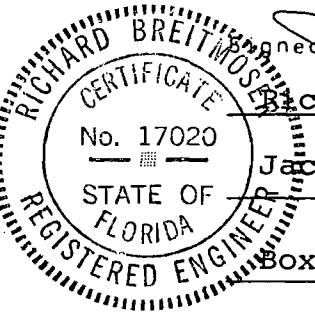
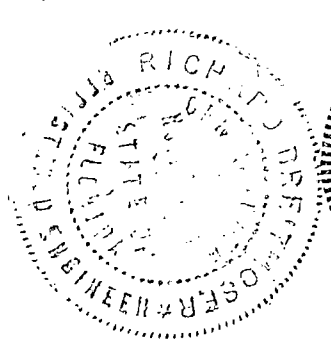
Date: APR 19 1984 Telephone No. 904-633-4730

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Richard Breitmoser
Name (Please Type)

Richard Breitmoser
Name (Please Type)

Jacksonville Electric Authority
Company Name (Please Type)

Box 53015, Jacksonville, Florida 32201
Mailing Address (Please Type)

Box 53015, Jacksonville, Florida 32201
Mailing Address (Please Type)

Box 53015, Jacksonville, Florida 32201
Mailing Address (Please Type)

Florida Registration No. 1702 Date: 4/19/84 Telephone No. 904-633-4517

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Proposed unit is a stand-by auxiliary boiler to provide steam for essential station services during outages of main generating units. It will provide hot fuel oil to permit clean start-up of the main station units after outages. Since it will operate only in lieu of main units, it will not increase total station emissions.

The boiler is a Nebraska Model NS-F-82SH.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction 6/15/84 Completion of Construction 12/31/84

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

The only pollution control system is the combustion control system, an essential operating component of the boiler system.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

This unit will operate during outages of:

NS #1 - AO 16-44730, rev. 10/5/81, expires 7/31/86,

NS #2 - AO 16-28929, 7/31/80, expires 6/30/85

NA #3 - AO 16-48311, rev. 5/13/82, expires 3/31/87.

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E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;
 if power plant, hrs/yr 8760 ; if seasonal, describe: This unit will operate only as a
stand-by unit to provide essential services when the station generating units are shut-
down. It is estimated to operate, over the permit period, at less than 5% of its rated
capability. It may be needed at near full capability during very cold winter period or
prior to start-up of a generating unit.

F. If this is a new source or major modification, answer the following questions.
 (Yes or No)

zone of influence for a

- | | |
|---|------------|
| 1. Is this source in a non-attainment area for a particular pollutant? | <u>YES</u> |
| a. If yes, has "offset" been applied? (See below) | <u>YES</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>NO</u> |
| c. If yes, list non-attainment pollutants. <u>Particulate</u> | |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>YES</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>YES</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>NO</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>NO</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? | <u>NO</u> |
| a. If yes, for what pollutants? _____ | |
| b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted. | |

Attach all supportive information related to any answer of "Yes". Attach any justifi-
 cation for any answer of "No" that might be considered questionable.

F la This unit, at less than 120 MBH max. input, operates only in lieu of other units,
 the smallest of which is 2350 MBH. It will discharge through a common stack with one
 of the generating units. This great net emissions decrease precludes the need for
 LAER since emissions from the facility, with the new boiler in operation, will always
 be much less than previous normal emissions from the facility. Thus, the Department
 can determine, under 17-2.510(2)(a)2b, that the proposed modification will not have
 a significant impact within the non-attainment area. This is demonstrated in the
 modeling study, Attachment 1.

BEST AVAILABLE COPY

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

Raw Materials and Chemicals Used in your Process, if applicable:

NA

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): NA

2. Product Weight (lbs/hr): _____

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/xxHr	T/yr	
SO ₂	227	20	1.98	227	227	994	Flue
NO _x	47	4.1	NA	NA	47 est	206	Gas
Particulate	11.6	1.0	0.1	11.6	11.6	51	Out

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input) Limits are assumed same as main station units, 17-2.600(5)(b) 1, 2 & 3, although the proposed unit is only 5% of the size

³Calculated from operating rate and applicable standard. of the smallest main unit. Since the installation includes no specific emission control systems,

⁴Emission, if source operated without control (See Section V, Item 3). potential emission is calculated on the same basis as the main units.

D. Control Devices: (See Section V, Item 4) NA

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	Annual avg/hr	Online max./hr	
#6 Fuel Oil	16	300	116.5
#2 Fuel Oil	17	330	118.0
LP Gas	120	2200	123.5

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis: #6 Oil #2 Oil L.P. Gas #6 Oil #2 Oil L.P. Gas

Percent Sulfur: 1.8 <1/4 0.0035 Percent Ash: <0.1 <0.001 ---

Density: + 8.0 + 7.0 --- lbs/gal Typical Percent Nitrogen: 0.5 0.1 <1.0 (vol

Heat Capacity: + 18500 + 19500 + 21400 BTU/lb + 148,000 + 136,500 2700 BTU/CF BTU/gal

Other Fuel Contaminants (which may cause air pollution): None known

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average 2 Maximum 10

G. Indicate liquid or solid wastes generated and method of disposal.

There will be some flyash generated from #6 oil. The amount will be negligible in total station operation.

H. Emission or Stack Geometry and Flow Characteristics (Provide data for each stack):

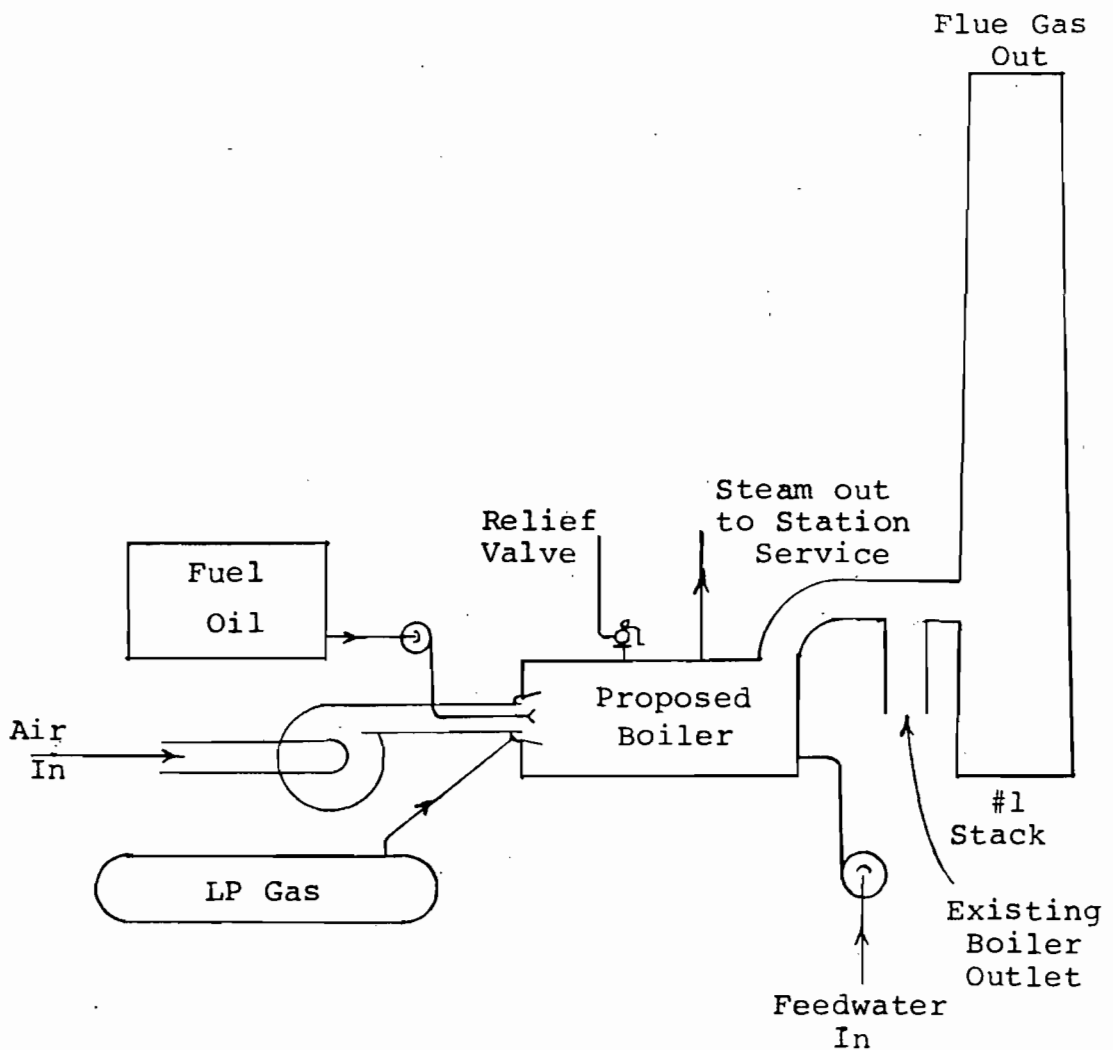
Stack Height: 240 ft. Stack Diameter: (Top) 16 1/2 ft.
 Gas Flow Rate: 52-54-52 K ACFM 20.8-20.7-18.8 K DSCFM Gas Exit Temperature: 735 750 745 °F.
 Water Vapor Content: 8 12 16 % Velocity: 2.1 2.2 2.1 FPS
#6 oil #2 oil LPG #6 #2 oil LPG

Date
11/3/83

JACKSONVILLE ELECTRIC AUTHORITY

Sheet
1
of 1

Northside Generating Station
Auxiliary Boiler Flow Diagram



SK-PS-83-12c (2/23/84)

Brief description of operating characteristics of control devices: The boiler will be pressure fired using metered oil flow/air flow for combustion control. Steam atomization will be used for best turn-down ratio. The combustion control will be a Bailey "Network 90" system.

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

The small amount of oil ash will be disposed of with the ash from the main generating units. Any boiler blowdown will go to the station waste treatment system.

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration
Visible Emission	20% except 40% for 2 min/hour
Particulate Matter	0.1 Lb/MBtu
Sulfur Dioxide	1.98 Lb/MBtu
Oxides of Nitrogen	No regulation

D. Describe the existing control and treatment technology (if any). **None**

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Sulfur dioxide will be controlled by fuel specification. Other emissions will be controlled through operating attention, using the combustion control and burner systems described on pp. 7 and 9.

10. Stack Parameters

- a. Height: 240 ft.
- b. Diameter: Top ID: 16 1/2 ft.
- c. Flow Rate: 52-54 max KACFM
- d. Temperature: 700 °F.
- e. Velocity: 2.0 max FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1. Manual Control

- a. Control Device: Valves & dampers
- b. Operating Principles: Manual adjustment for clean fire.
- c. Efficiency:¹ Poor
- d. Capital Cost: None
- e. Useful Life: Life of boiler
- f. Operating Cost: None
- g. Energy:² None
- h. Maintenance Cost: Minimal
- i. Availability of construction materials and process chemicals: Available
- j. Applicability to manufacturing processes: Will result in reduced fuel efficiency.
- k. Ability to construct with control device, install in available space, and operate within proposed levels: No problems.

2. Positioning controls

- a. Control Device: Mechanical linkage
- b. Operating Principles: Mechanical alignment of fuel valves & dampers.
- c. Efficiency:¹ Fair
- d. Capital Cost: \$5000
- e. Useful Life: Life of boiler
- f. Operating Cost: No additional
- g. Energy:² No additional
- h. Maintenance Cost: \$1000/yr.
- i. Availability of construction materials and process chemicals: Available

¹ Explain method of determining efficiency.

² Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes: Will result in moderate fuel efficiency
- k. Ability to construct with control device, install in available space, and operate within proposed levels: No problems.

3. Positioning controls with oxygen trim

- a. Control Device: Mechanical linkage with ratio adjustment.
- b. Operating Principles: Mechanical alignment of fuel valves and dampers.
- c. Efficiency:¹ Good
- d. Capital Cost: \$60,000
- e. Useful Life: Ten years
- f. Operating Cost: No additional
- g. Energy:² No additional
- h. Maintenance Cost: \$25,000/yr
- i. Availability of construction materials and process chemicals: Available
- j. Applicability to manufacturing processes: Will result in good fuel efficiency
- k. Ability to construct with control device, install in available space, and operate within proposed levels: No problems

4. See "F" below.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected: Air and fuel flows are measured and then controlled in parallel.

- 1. Control Device: Bailey "Network 90" Combustion Control.
- 2. Efficiency:¹ NA
- 3. Capital Cost: \$140,000
- 4. Useful Life: Life of boiler
- 5. Operating Cost: No additional
- 6. Energy:² No additional
- 7. Maintenance Cost: Est. \$25,000/yr
- 8. Manufacturer: Bailey Meter Co.
- 9. Other locations where employed on similar processes: No other locations are known where so sophisticated a combustion control is being used on
 - a. (1) Company: an auxiliary boiler.
 - (2) Mailing Address:
 - (3) City: (4) State:

¹ Explain method of determining efficiency.

² Energy to be reported in units of electrical power - KWH design rate.

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(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂ _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.
See Attachment 1.

*Specify whether (B) or continuous (C).

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2. Instrumentation, Field and Laboratory

a. Was instrumentation [EPA referenced or its equivalent?] Yes [] No

b. Was instrumentation calibrated in accordance with Department procedures? [] Yes [] No [] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. 5 Year(s) of data from 1 / 1 / 70 to 12 / 31 / 74
month day year month day year

2. Surface data obtained from (location) Jacksonville, FL

3. Upper air (mixing height) data obtained from (location) Waycross, GA

4. Stability wind rose (STAR) data obtained from (location) NA

C. Computer Models Used

1. ISCST, Rural Modified? If yes, attach description.

2. Modified? If yes, attach description.

3. Modified? If yes, attach description.

4. Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data See Attachment 1.

Table with 2 columns: Pollutant, Emission Rate. Rows for TSP (grams/sec) and SO2 (grams/sec).

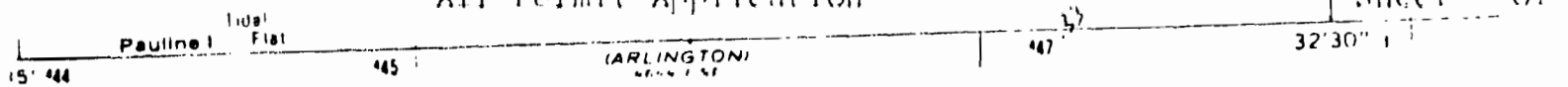
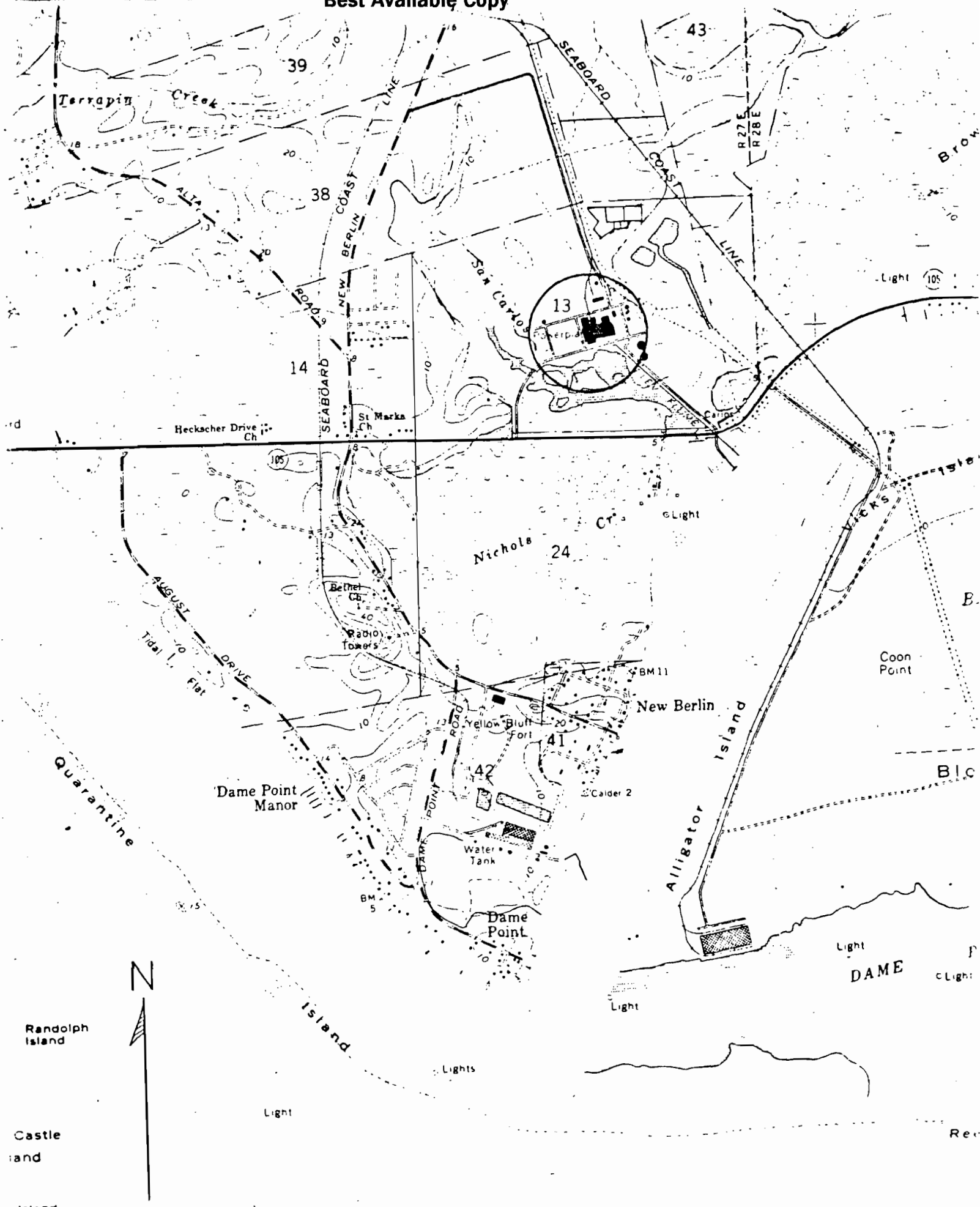
E. Emission Data Used in Modeling

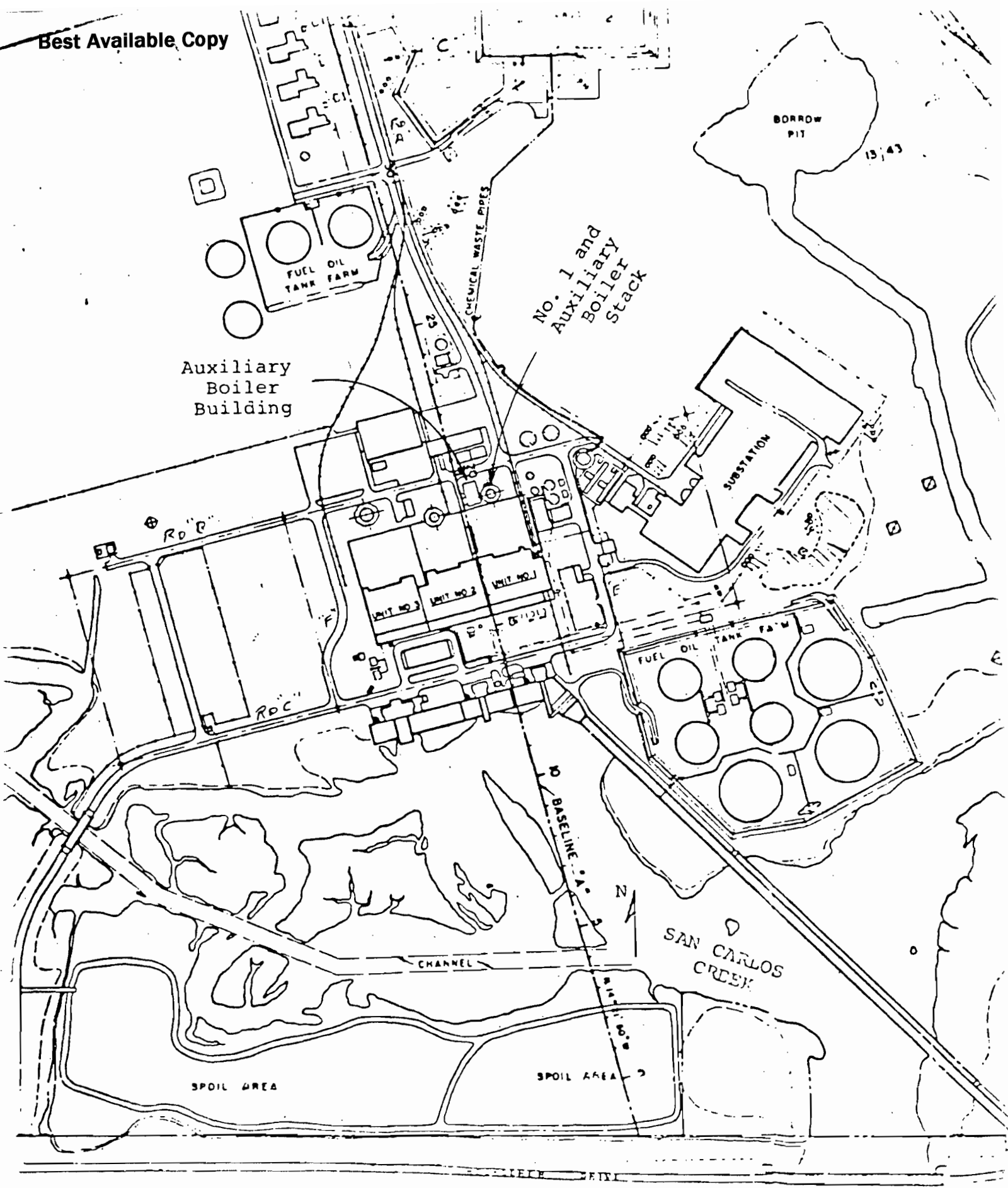
Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.





ATTACHMENT 1

Air Quality Modeling Analysis For The Proposed Auxiliary Boiler At The Northside Plant

INTRODUCTION

Environmental Science and Engineering, Inc. has completed an air quality dispersion modeling analysis of sulfur dioxide (SO_2) and total suspended particulate (TSP) concentrations for Jacksonville Electric Authority's (JEA) proposed installation of an auxiliary boiler at the Northside plant. The proposed boiler will have a maximum rated capacity of 116.5 million British Thermal Units per hour (10^6 Btu/hr) and be used in lieu of one of the three existing units when energy consumption demands at the plant are low. The emissions from the proposed boiler will be discharged through a common stack for existing Unit No. 1. The project is located in attainment areas for SO_2 and TSP concentrations and 9 km from the TSP nonattainment area in Jacksonville.

The proposed project will be subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (FAC). Because there will not be a significant increase in emissions when the auxiliary boiler is used instead of one of the existing permitted units, the project will not be subject to the provisions of Section 17-2.500, Prevention of Significant Deterioration (PSD) review. The proposed boiler will be located in the area of influence of a nonattainment area (i.e., within 50 km), and, therefore, may be subject to Section 17-2.510, New Source Review for Nonattainment Areas. However, the project may be exempt from these provisions if the emissions from the new boiler will not have a significant impact within the nonattainment area. For sources not subject to 17-2.500 or 17-2.510, the project must comply with 17-2.520 and show that it would not interfere with the attainment and maintenance of any state or national ambient air quality standard (AAQS) or maximum allowable increase, or interfere with reasonable further progress toward the AAQS in nonattainment areas.

Therefore, the objectives of this analysis were to determine:

1. The net change in SO_2 and TSP concentrations due to the difference in emissions between the auxiliary boiler and each of the existing units. Concentrations were predicted in the vicinity of the plant, at the PSD Class I area in the Okefenokee national Wilderness Area and SO_2 concentrations at a monitor location in Jacksonville to demonstrate that impacts from the proposed boiler would not interfere with attainment or maintenance of AAQS and PSD increments.
2. The TSP concentration due to the proposed boiler only in the TSP nonattainment area to demonstrate that impacts from the proposed boiler would not interfere with reasonable further progress of AAQS in the nonattainment area.

MODELING METHODS AND ASSUMPTIONS

Stack and operating data for the auxiliary boiler and three existing units are presented in Table 1. Operating data for the existing units are provided for 50, 75, 100 percent and minimum loads. Minimum load data were interpolated from values given for the other loads. In the modeling analysis, the existing units were considered to operate at minimum load because it represents the condition for which the existing units would operate if the auxiliary boiler was not installed. Also, the difference in maximum predicted concentrations between the auxiliary boiler and each of the existing units is the least at minimum load than for any other load. For modeling purposes, the stacks at the facility were assumed to be colocated and centered at Unit No. 1's stack location.

The Industrial Source Complex Short-Term (ISCST) model, which is approved by U.S. Environmental Protection Agency (EPA) and Florida Department of Environmental Regulation (FDER), was used in the rural mode to predict maximum ground-level concentrations with five years of hourly meteorological data. Surface and upper air meteorological data measured from 1970 to 1974 at the National Weather Service (NWS) stations in Jacksonville, Florida and

Waycross, Georgia, respectively were used in conjunction with the ISCST. Since five years of meteorological data were used, the highest, second-highest short-term concentrations were evaluated.

Concentrations around the plant were calculated for each of the units at 216 receptors in a radial grid centered on the facility. Receptors were located at downwind distances of 0.1, 0.4, 0.8, 1.2, 1.6 and 2.0 km along 36 radials spaced at 10 degree intervals. Three receptors were placed along the boundaries of the PSD Class I and TSP nonattainment areas that were nearest to the plant site. An additional receptor was located at the City of Jacksonville monitor at Southside, Saroad No. 1960-080-H, which measures SO₂ concentrations.

Based on the building dimensions given in Figure 1, building downwash conditions were considered a factor in predicting concentrations around the facility since the stacks may be considered less than Good Engineering Practice (GEP) heights. The building dimensions and directions for which building downwash conditions were considered in the modeling are presented in Table 2.

MODEL RESULTS

A summary of the maximum SO₂ and TSP concentrations for the auxiliary boiler only is presented in Table 3. The maximum 24-hour and annual TSP concentrations in the TSP nonattainment area are 0.1 and 0.02 ug/m³, respectively. Because these concentrations are below the 24-hour and annual significant impact levels of 5 and 1 ug/m³, respectively, the nonattainment review requirements will not apply to the proposed project.

The maximum predicted concentrations are well below the Florida SO₂ and TSP AAQS in areas that attain the AAQS and represent 5 percent or less of AAQS. The maximum SO₂ and TSP concentrations are also below the significant impact levels in the PSD Class I area and the SO₂ monitor location in Jacksonville. In the plant vicinity, the maximum concentrations are predicted to be slightly greater than the SO₂ significant impact levels but less than the TSP significant impacts.

A summary of the change in predicted short-term SO₂ and TSP concentrations in the plant vicinity due to the difference in emissions between the auxiliary boiler and each of the existing units is presented in Table 4. Two sets of concentrations are shown in this table:

- . range in concentration changes in the receptor grid which is based on evaluating the difference in maximum concentrations between the auxiliary boiler and each existing unit at each receptor, and;
- . average concentration for all receptors which is based on adding concentrations at all receptors for each unit and dividing by the total number of receptors.

Results for annual average concentrations are not presented since predicted concentrations for the auxiliary boiler alone are not significant for TSP and only slightly greater than the significant impact levels for SO₂ concentrations.

As shown in Table 4, the predicted increase in SO₂ and TSP concentrations at any receptor for all modeling cases are less than the significant impact levels. In all cases, the lower limit of the concentration changes more than offsets the upper limit, indicating that the maximum concentrations due to existing units are higher than those for the auxiliary boiler. The highest increases in 3-hour and 24-hour SO₂ concentrations are 9 and 23 ug/m³, respectively, while the highest increase in the 24-hour TSP concentration is 0.5 ug/m³. These increases in concentrations occur for the modeling case which considers the difference in impacts between the auxiliary boiler and Unit No. 3. Similarly, the least change in concentrations also occurs for the modeling case which includes the auxiliary boiler and Unit No. 3.

As shown in Table 4, the average concentration over the entire receptor grid due to the auxiliary boiler are much lower than those for each of the existing units. The average concentration due to the auxiliary boiler is

predicted to be about 2 to 4 times lower than the average concentration for each of the existing units.

These model results are similar to those for receptors located in the PSD Class I and TSP nonattainment area and SO₂ monitor location in Jacksonville. As shown in Table 5, there are only decreases in concentrations at each receptor considered in the modeling when the differences in concentrations between the auxiliary boiler and each existing unit are evaluated.

Therefore, based on these modeling results, the maximum concentrations due to the proposed project are predicted not to interfere with the attainment and maintenance of AAQS, PSD increments or with reasonable further progress toward the AAQS in nonattainment areas.



UTM Ref: # 1 Stack
3365.023 km N, 446.949 km E

SK-PS-84-6
March 12, 1984
1" = 100'
FL Jeter

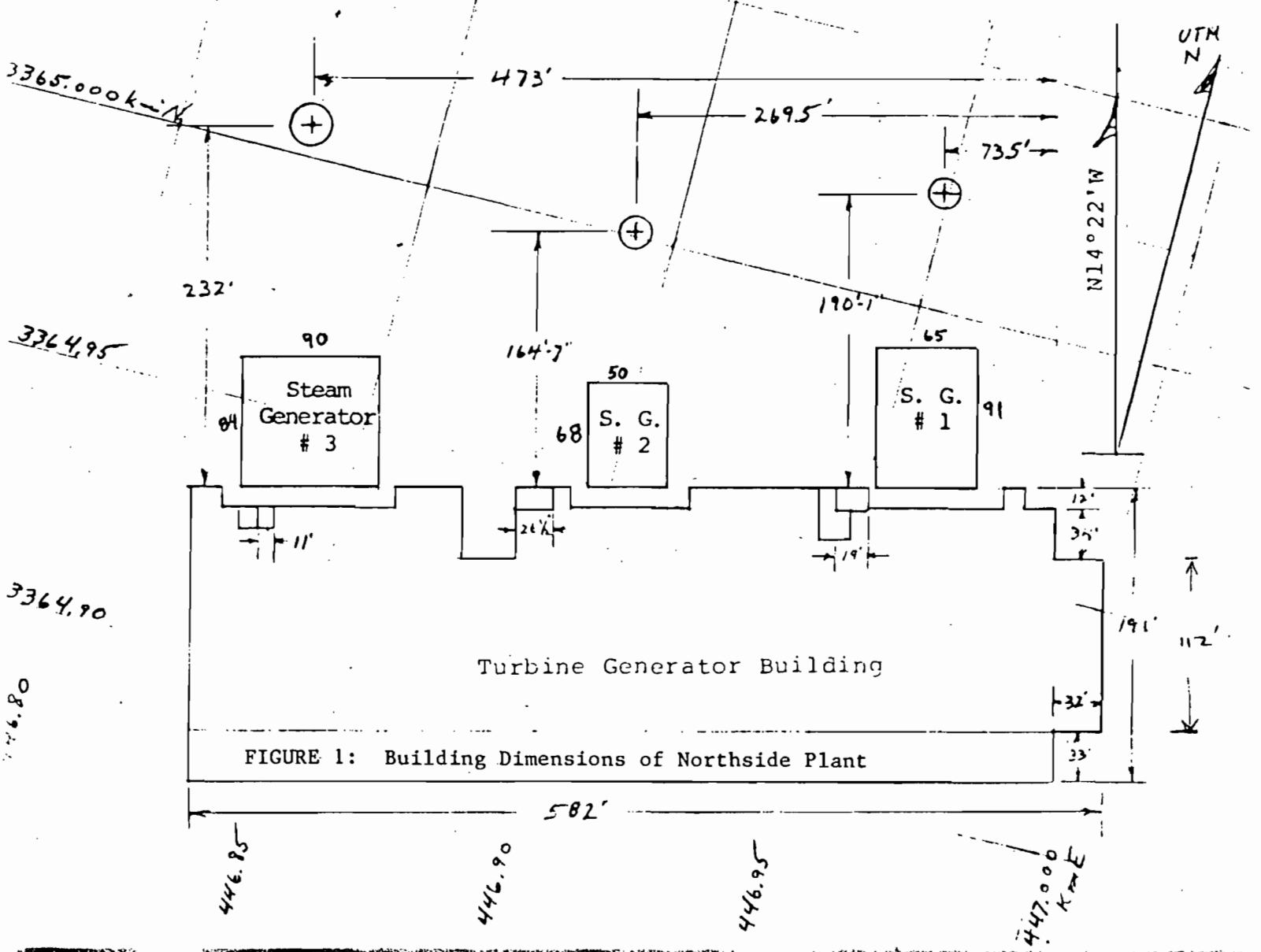
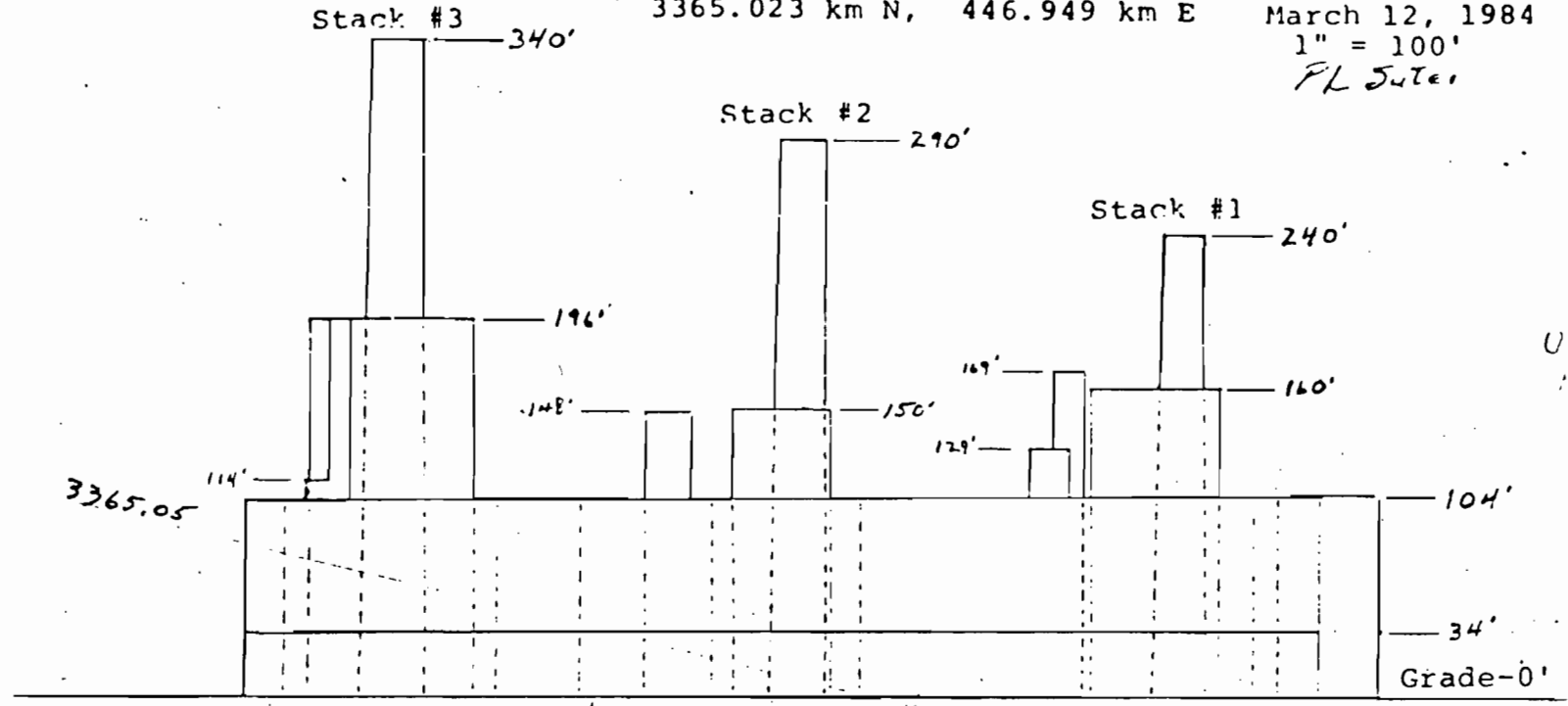


FIGURE 1: Building Dimensions of Northside Plant

Table 1: Stack and Operating Data for the Proposed Auxiliary and Existing Boilers at Northside Plant

Parameters	Proposed Auxiliary Boiler	Unit No. 1					Unit No. 2				Unit No. 3			
<u>Stack Data*</u>														
UTM x,y coordinates, km	446.949	446.949					446.89				446.83			
	3365.023	3365.023					3365.000				3365.006			
Height, ft.	240	240					290				340			
Diameter, ft.	16.5	16.5					16.83				23.0			
<u>Operating Data</u>														
Operating load, percent	100	100	75	50	44+	100	75	50	37+	100	75	50	28+	
Heat input, 10 ⁶ Btu/hr	116.5	2767	2075	1384	1210	2352	1764	1176	880	5033	3774	2517	1430	
Temperature, °F	700	262	255	245	242	250	245	235	228	330	310	285	263	
Flow rate, 1000x ACFM	51	842	650	450	398	570	440	300	227	1565	1200	800	449	
Exit velocity, ft/s	3.98	66	51	35	31	43	33	22.5	17	63	48	32	18	
<u>Emissions**</u>														
SO ₂ , lb/hr	230.7	5479	4109	2739	2396	4657	3493	2328	1742	9965	7474	4983	2831	
PM, lb/hr	11.65	276.7	207.5	138.4	121.0	235.2	176.4	117.6	88.0	503.3	377.4	251.7	143.0	

*Emissions from auxiliary boiler will be vented through the stack for Unit No. 1. For modeling purposes, all stacks were assumed to be collocated at Unit No. 1's stack location.

+Minimum load considered in modeling.

**SO₂ and PM emission limits are 1.98 and 0.1 lb/10⁶ Btu, respectively.

Table 2: Building Dimensions and Directions Used
In Building Downwash

Stack*	Influencing Building	BUILDING DIMENSIONS			Building Downwash Directions (degrees)
		Height (m)	Length (m)	Width (m)	
Auxiliary Boiler and Unit 1	Steam Generator 1	48.8	27.7	19.8	330 - 20 150 - 200
	Steam Generator 2	45.7	20.7	15.2	30 - 40 210 - 220
	Steam Generator 3	59.7	25.6	27.4	50 - 70 230 - 250
Unit 2	Steam Generator 1	48.8	27.7	19.8	270 - 305 90 - 125
	Steam Generator 3	59.7	25.6	27.4	30 - 60 210 - 240

*Building downwash conditions were assumed not to occur for the stack for Unit 3.

Table 3: Summary of Maximum Air Quality Impacts
Due to The Auxiliary Boiler Only

Pollutant/ Averaging Time	Concentration (ug/m ³)				Significant Impact Levels
	Plant Vicinity	PSD Class I Area	PSD Nonattainment Area	SO ₂ Monitor	
TSP					
Annual	0.07	0.0	0.02	N/A*	1
24-Hour	0.6	0.5	0.1	N/A	5
SO ₂					
Annual	1.3	0.0	N/A*	0.2	1
24-hour	12	1.0	N/A	2.0	5
3-hour	42	6.9	N/A	10.6	25

Note: Florida AAQS - 3-, 24-hour, and annual SO₂ concentrations are 1300, 260, and 60 ug/m³, respectively; 24-hour and annual TSP concentrations are 150 and 60 ug/m³, respectively.

* N/A = Not Applicable

Table 4: Summary Of Changes In Predicted SO₂ And TSP Concentrations In The Plant Vicinity

Modeling Case of Pollutant and Averaging Time, Considering Auxiliary Boiler With:	Concentrations (ug/m ³)				
	Range of Changes* in the receptor grid		Average for All Receptors		
	Upper Limit	Lower Limit	Auxiliary Boiler	Unit	Difference Btwn. Aux. Boiler and Unit
<u>Unit 1</u>					
SO ₂					
24-Hour	1	-44	5	18	-13
3-Hour	6	-157	21	96	-75
TSP					
24-Hour	0.05	-2	0.3	0.9	-0.6
<u>Unit 2</u>					
SO ₂					
24-Hour	7	-37	5	17	-12
3-Hour	12	-163	21	89	-68
TSP					
24-Hour	0.4	-2	0.3	0.9	-0.6
<u>Unit 3</u>					
SO ₂					
24-Hour	9	-23	5	12	-7
3-Hour	23	-131	21	74	-53
TSP					
24-Hour	0.5	-1	0.3	0.6	-0.4

*Difference in concentration between auxiliary boiler and unit at same receptor.

+Average concentration for all receptors based on summing concentrations at all receptors and dividing by the number of receptors.

Table 5: Summary Of Changes In Predicted SO₂ And TSP Concentrations At The PSD Class I Area, Non-Attainment Area And SO₂ Monitor Location

Modeling Case of Pollutant and Averaging Time, Considering Auxiliary Boiler With:	Range of Concentration Changes (ug/m ³) In The Receptor Grid				
	PSD Class I Area		TSP Non-Attainment Area		SO ₂ Monitor Location, Jacksonville
	Upper Limit	Lower Limit	Upper Limit	Lower Limit	
<u>Unit 1</u>					
Sulfur Dioxide					
24-Hour	-3.2	-4.6	N/A+	N/A+	-13.4
3-Hour	-18.4	-25.1	N/A	N/A	-35.3
Particulate					
24-Hour	-0.2	-0.3	-0.8	-0.8	N/A+
<u>Unit 2</u>					
Sulfur Dioxide					
24-Hour	-2.3	-3.5	N/A	N/A	-10.1
3-Hour	-12.8	-18.2	N/A	N/A	-30.1
Particulate					
24-Hour	-0.2	-0.2	-0.5	-0.7	N/A
<u>Unit 3</u>					
Sulfur Dioxide					
24-Hour	-1.8	- 2.6	N/A	N/A	-11.4
3-Hour	-7.0	- 14.0	N/A	N/A	-24.5
Particulate					
24-Hour	-0.06	- 0.16	-0.6	-0.6	N/A

*Three receptors were located in both the PSD Class I and TSP nonattainment areas.

One receptor was located at the SO₂ monitor.

+N/A = Not Applicable