

To: Charles Collins, PE, District Air Program Administrator
 From: Alan D. Zahm, PE, Supervisor, Air Permitting *AZ*
 From: John Turner, Air Permitting Engineer *JT*
 Date: August 23, 1991
 Subject: Position Paper on FP & L Request to Cofire Orimulsion with
 Natural Gas at Sanford Unit #4

Our review of the application indicates three major incompleteness items.

1. The company should submit the results of a computer analysis which satisfies the department's No Threat Level as defined in the Florida Air Toxics Working List. Using the annual comparison as directed by John Glunn, our screen model indicates an emissions of nickel seven times over the No Threat Level. In addition, the combined emissions from existing power plant at the facility and in the region should be modelled.

No Threat Level	Nickel	Screen Model
-	1 hour	0.31 ug/cu m
0.5 ug/cu m	8 hour	0.22 ug/cu m
0.12 ug/cu m	24 hour	0.125 ug/cu m
0.0042 ug/cu m	annual	0.031 ug/cu m

2. The company should demonstrate the emissions will be lower than the existing operation, as stated to the department and contained in a press release when orimulsion was to be tested on an experimental basis. The application did not provide a listing of current emissions. Our records indicate the following values.

Opacity	
Steady State - 4%	
Soot-blowing - 8%	
Sulfur dioxide	1.2 lb/mmbtu/hr
Particulate	0.06 lb/mmbtu/hr

3. Since the orimulsion/natural gas fuel does not have several years of testing, the appropriate standard is particulate testing annually and a VE of 20%. The application requested annual particulate testing and a 35% VE limit. If particulates are tested quarterly, then the opacity limit can be made 35%.



November 5, 1991
FPL

C. H. Fancy, Chief
Bureau of Air Regulation
State of Florida
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

RECEIVED
NOV 6 1991
Division of Air
Resources Management

RE: **Sanford Plant, Unit No. 4**
Orimulsion Test Burn

Dear Mr. Fancy:

I am writing in response to your letter of October 15, 1991. Although FPL considers the recent Orimulsion Test Burn at Sanford Unit No. 4 an operational success and ceased burning Orimulsion fuel in early June, 1991, the Test Burn has not been formally determined to be completed, especially in view of the presence of remaining Orimulsion fuel, both on site and at the Jacksonville terminal. Once FPL determines the Test Burn to be completed, a formal notification will be submitted to the Department as required by the Test Burn permit.

As was discussed during our meeting on October 22, 1991, FPL management is in the process of further evaluating future generation needs and potential fuel alternatives, including conversion of a portion of that generation to Orimulsion. Throughout the evaluation process, management has called upon the Orimulsion Project Team to provide data and rationale on which to base conclusions. As a result of such time demands, the Team has been unable to complete the report of the results of the Test Burn pilot pollution control equipment.

Although FPL has not to date notified the Department of the conclusion of the Test Burn, we recognize the need to complete the report of the pilot pollution control equipment test and share its findings and conclusions with the Department. The report is presently partially completed. We estimate it will take approximately two weeks to complete. Thus, we hereby request your understanding and indulgence until the report is completed, at which time it will be submitted to you and to the Central District Office.

Please call me at (407) 697-6926 if you have any questions.

Sincerely,

Elsa A. Bishop
Senior Environmental Specialist
Florida Power & Light Company

EAB:jm

cc: A. Alexander - DER/Orlando
Charles Collins - DER/ Orlando
Cindy Phillips - DER/ Tall

BEST AVAILABLE COPY

Sanford Herald

An Independent Newspaper
SANFORD, SEMINOLE COUNTY, FLORIDA

STATE OF FLORIDA
COUNTY OF SEMINOLE

Before the undersigned authority personally appeared _____

Wayne D. Doyle who on oath says that he is

Publisher of the SANFORD HERALD, a Newspaper Pub-

lished at Sanford, in Seminole County, Florida; that the attached copy of advertise-
ment, being a LEGAL NOTICE in the matter of

NOTICE OF APPLICATION RE: FLOIRDA POWER & LIGHT COMPANY

~~XXXX~~ ~~XXXX~~

was published in said newspaper in the issues of July 9, 1992

Affiant further says that said SANFORD HERALD is a newspaper published by the Sanford Herald, at Sanford, in said Seminole County, Florida, and that the said newspaper has heretofore been continuously published in said Seminole County, Florida, and has been entered as second class mail matter at the post office in Sanford, in said Seminole 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 the said newspaper.

Sworn to and subscribed before me this

9th day of

July A. D. 19 92



SHIRLEY C. THOMAS
My Commission Expires
Aug. 1, 1993
Notary Public
Comm. No. CC 035565

Wayne D. Doyle

State of Florida
Department of
Environmental Regulation
Notice of Application
The Department announces receipt of an application for permit change from Florida Power and Light Company to allow the firing of a mixture of natural gas and Orimulsion fuel in Unit No. 4 at the Sanford Power Plant, which is located at Lake Monroe, off Highway U-92, northwest of Sanford, in Volusia County, Florida.
This application is being processed and 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 Department of Environmental Regulation, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. Any comments or objections should be filed in writing with the Department at this address. Comments or objections should be submitted as soon as possible to insure that there is adequate time for them to be considered in the Department's decision on the application.
Publish: July 9, 1992
DEU-94



5/3/91

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

Florida Power & Light Company
Post Office Box 078768
West Palm Beach, Florida 33407-0768

Attention: Martin A. Smith, Ph.D., Manager
Environmental Permitting and Programs

Volusia County - AP
Sanford Power Plant, Unit No. 5
Permit No. A064-132060
Notice of Air Permit Amendment

Dear Dr. Smith:

The referenced permit, is hereby temporarily amended with the following additional change:

ADD: SPECIFIC CONDITION No. (2) Permitted Fuels: Prior to June 1, 1991, this unit shall not operate during such times as Orimulsion is combusted in Unit No. 4, unless the steady-state opacity from Unit 4 is 60 percent or less.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this permit amendment. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition 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.

The petition shall contain the following information; (a) the name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or

modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

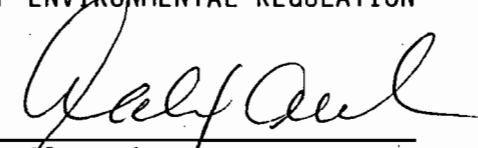
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment have the right to petition to become a party to the proceeding. The petition must conform to the days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for an extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further Order of the Department.


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


Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

c.m.c. 
A. Alexander
Deputy Assistant Secretary
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Section 120.52, Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.


Clerk 5/3/91
Date

AA/azt 

Copies furnished to:
Elsa A. Bishop
✓ Clair Fancy
Bill Green, Esq.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed before the close of business on May 3, 1991 to the listed persons by Theresa Bouldin.



4/4/91 Clair Fawcett
Tallahassee

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

Florida Power & Light Company
Post Office Box 078768
West Palm Beach, Florida 33407-0768

Attention: Martin A. Smith, Ph.D., Manager
Environmental Permitting and Programs

Volusia County - AP
Sanford Power Plant, Unit No. 5
Permit No. AO64-132060
Notice of Air Permit Amendment

Dear Dr. Smith:

In order to allow the continued testing of Orimulsion fuel at a higher opacity in Unit No. 4, the referenced permit, amended October 16, 1990, is hereby temporarily amended with the following additional change:

FROM: SPECIFIC CONDITION No. (2) Permitted Fuels: This source shall only be fired with natural gas, No. 2 Fuel Oil and/or No. 6 Fuel Oil with equivalent sulfur content (by weight) of one (1%) or less.

TO: SPECIFIC CONDITION No. (2) Permitted Fuels: This source shall only be fired with natural gas, No. 2 Fuel Oil and/or No. 6 Fuel Oil with equivalent sulfur content (by weight) of one percent (1%) or less. Prior to June 1, 1991, this unit shall not operate during such times as Orimulsion is combusted in Unit No. 4.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this permit amendment. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition 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.

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

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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment have the right to petition to become a party to the proceeding. The petition must conform to the days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for an extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further Order of the Department.

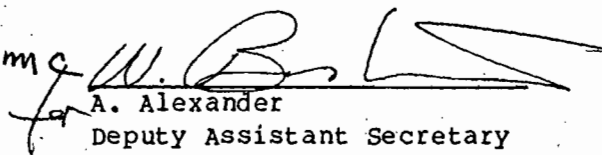
When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy

Florida Power & Light Company
A064-132060
Page Three

of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

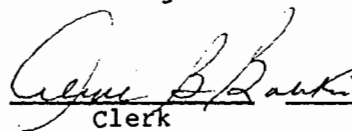
Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

amc

A. Alexander

Deputy Assistant Secretary
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Section 120.52, Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

 4/4/91
Clerk Date

QZ
AA/azj

Copies furnished to:
Elsa A. Bishop
Clair Fancy
Bill Green, Esq.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed before the close of business on April 5, 1991 to the listed persons, by Theresa Boulton.



Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

RECEIVED

AUG 07 1991

COMPLETENESS SUMMARY AIR POLLUTION SOURCES

Division of Air Resources Management

SOURCE NAME: F P & L Sanford, Plant Unit #4

DATE RECEIVED: July 5, 1991

NAME: Martin A. Smith, Ph.D., Manager
Environmental Permitting and Programs

DATE REVIEWED: July 29, 1991

ADDRESS: Post Office Box 078768
West Palm Beach, Florida 33407

REVIEWED BY:
Alan D. Zahm, P.E.
(198944)

Your application for a permit to construct/operate this referenced project has been received, and reviewed for completeness. The following checked items are needed to complete your application.

- (X) Application fee of \$250. Make check payable to the Department of Environmental Regulation.
- (X) Other: (Any section of the application which is incomplete or lacks sufficient information to be evaluated).
 1. Provide the information, based on fuel analysis, which will demonstrate compliance with the sulfur dioxide limit and which should be lower than the last actual limit of 1.2 lb/MMBtu.
 2. Provide a description of the certification and calibration procedures for the CEM opacity monitor.
 3. Provide a copy of the air construction permit for this source, if one exists.
 4. What is the maximum ratio of orimulsion to natural gas for this amendment?
 5. Provide test results on the maximum orimulsion ratio which will show an emission lower than with the existing operation of Unit #4:

BASED ON V.E.
TESTS SUBMITTED
BY FP&L, NOT
CEM DATA

Opacity	
Steady State	<4%
Soot Blowing	<8%
SO ₂	<1.2 lb/MMBtu
particulate	<0.06 lb/MMBtu

The company had made a previous statement that orimulsion emissions will be lower than existing operation.

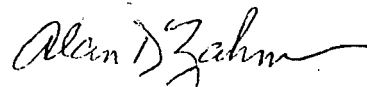
Completeness Summary
F P & L Sanford, Plant Unit #4
Martin A. Smith, Ph.D.
Page Two

6. Provide an air toxic analysis of the compounds presented in Tables A-1 and A-2 which will demonstrate compliance with the No Threat Level standards set by the department. The department's 'Screen' Model showed concerns with the emissions of nickel and vanadium.
7. A review of the May 28, 1991 information indicates an opacity of 28% while the application states that it is 18%. Please comment as to which is correct.
8. The Department requires the applicant to publish a "Notice of Application" for this type of project (October 31, 1990 memo from Dale Twachtmann). The "Notice of Application" is enclosed and is for use in a newspaper of general circulation in the county in which the activity is located. Proof of Publication will need to be returned to this office before the review of this project can continue.

Pursuant to Section 120.60(2) Florida Statutes, the department may deny an application if the applicant, after receiving timely notice fails to correct errors, omissions or supply additional information within a reasonable period of time.

If there are any questions, please call me at 407/894-7555 or write to the above address.

Sincerely,



Alan D. Zahm, P.E.
Supervisor, Permitting
Air Resources Management

1 August '91
Date

AZ/t

cc: Ken Kosky
Cindy Phillips ✓

State of Florida
Department of Environmental Regulation
Notice of Application

The Department announces receipt of an application for permit change from Florida Power and Light Company to allow the firing of a mixture of natural gas and orimulsion fuel in Unit No. 4. This proposed project will be located at the Sanford Power Plant at Lake Monroe, off Highway 17-92, northwest of Sanford in Volusia County, Florida.

This application is being processed and 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 Department of Environmental Regulation, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. Any comments or objections should be filed in writing with the Department at this address. Comments or objections should be submitted as soon as possible to insure that there is adequate time for them to be considered in the Department's decision on the application.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

12-14-87

CENTRAL FLORIDA DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

Permittee:
Florida Power & Light Co.
P. O. Box 1400
Juno Beach, Fl. 33408

Attention: T. R. Fair, Manager,
Env. Permitting and Programs

I. D. Number:
Permit/Certification
Number: AO64-132055
Date of Issue:
Expiration Date: 10/17/92
County: Volusia
Latitude/Longitude:
28°50'31"N/81°19'32"W
UTM: 17-468.3 KmE
UTM: 3190.3 KmN
Project: Sanford Power Plant,
Unit No. 4

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2. 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:

The permittee can operate Fossil Fuel Steam Generator Unit No. 4 equipped with a 400 foot exhaust stack and Multicyclones to control Particulate Matter (PM) emissions. The unit has a maximum heat input rate of 4,050 MMBTU/hour and is fired with Residual Oil, Used Oil, or Natural Gas and No. 2 Fuel Oil may be used during preheating.

This source is located at the Florida Power and Light Company, Sanford Power Plant at Lake Monroe, off Highway 17-92, Northwest of Sanford, Volusia County, Florida.

General Conditions are attached to be distributed to the permittee only.

PERMITTEE:

I.D. Number:
Permit/Certification Number:
Date of Issue:
Expiration Date:

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 therefor 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.
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

PERMITTEE:

I.D. Number:
Permit/Certification Number:
Date of Issue:
Expiration Date:

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

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:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () 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.
 - 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.

PERMITTEE:
Florida Power and Light Company

Attention: T. R. Fair, Manager
Env. Permitting and Programs

1. D. Number:
Permit/Certification Number:
A064-132055
Date of Issue:
Expiration Date: 10/5/92

SPECIFIC CONDITIONS:

(1) Heat Input Rate:

The permitted heat input rate for this source is 4,050 MMBTU/hr.

(2) Permitted Fuels:

This source shall be fired with No. 6 Residual Oil, No. 2 Fuel Oil, Used Oil or Natural Gas only.

(3) Source Emission Limiting Standards and Compliance Testing Requirements:

POLLUTANT	EMISSION 1 LIMITING STDS.	TESTING FREQUENCY 2			TEST 3 METHOD
		ANNUAL	QUARTERLY	OTHER	
Particulate Matter					
- Steady State	0.1 lb/MMBtu	.	✓	-----	EPA Method 5 or 17*
- Sootblowing	0.3 lb/MMBtu; Max. 3 hrs.	✓	-----	-----	EPA Method 5 or 17*
Sulfur Dioxide	2.75 lb/MMBtu	-----	-----	✓	Monthly Fuel Analysis
Visible Emissions					
- Steady State	20% Opacity 40% Opacity	✓	-----	-----	DER Method 9
- Sootblowing	60% Opacity; for up to 3 hrs in 24 hrs, with up to 4 6-min. periods of up to 100% if unit has an operational opacity CEM	✓	-----	-----	DER Method 9
- Load Changing	60% Opacity; for up to 3 hrs in 24 hrs, with up to 4 6 - min. periods of up to 100% if unit has an operational opacity CEM	-----	-----	-----	-----
					*EPA Method 17 may be used only if the stack temperature is less than 375° F.

1. - FAC 17-2.600(5) and FAC 17-2.250(3)
2. - FAC 17-2.700(2)
3. - FAC 17-2.700(1)(d)

* The source may elect to test particulates (steady-state) quarterly and to test visible emissions annually with a 40% opacity limit, or to test particulates (steady-state) and visible emissions annually with a 20% opacity limit. Currently, the source has elected to test particulates quarterly and visible emissions annually with a 40% opacity limit.

PERMITTEE:
Florida Power and Light Company
Attention: T. R. Fair, Manager,
Env. Permitting and Programs

I. D. Number:
Permit/Certification Number:
A064-132055
Date of Issue:
Expiration Date: 10/5/92

SPECIFIC CONDITIONS:

(4) Compliance Testing Related Requirements:

(a) Notification - FAC 17-2.700(2)(a)5

Notification of scheduled test dates shall be given to the Department at least 15 days prior to testing unless otherwise agreed to by the Department.

(b) Conditions

Testing of emissions should be conducted using No. 6 fuel oil and with the source operating within 10% of its rated capacity. Testing may be conducted at less than 90% of rated capacity; however, if so, subsequent source operation is limited to up to 110% of the test load. Once the unit is so limited, then operation at higher capacities is allowed for a cumulative total of no more than fifteen days for purposes of additional compliance testing to regain rated capacity in permit, with prior notification to the Department.

(c) Stack Sampling Facility - FAC 17-2.700(4):

The stack sampling facility must comply with Rule 17-2.700(4), FAC.

(d) Report Submittal - FAC 17-2.700(7)

A copy of the test results shall be submitted to the Department District Office within 45 days after the last test-run is completed.

(5) Annual Operations Report - FAC 17-4.14:

On or before March 1 of each calendar year, a completed DER Form 17-1.202(6), Annual Operations Report Form for Air Emissions Sources shall be submitted to the Department.

(6) Excess Emissions - FAC 17-2.250(1), (2) and (3):

Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

Excess emissions resulting from malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

PERMITTEE:
Florida Power and Light Company
Attention: T. R. Fair, Manager
Env. Permitting and Programs

I. D. Number:
Permit/Certificate Number:
A064-132055
Date of Issue:
Expiration Date: 10/5/92

SPECIFIC CONDITIONS:

(7) Used Oil Handling:

Burning of Non-PCB used oil generated only from FPL operations shall comply with 40 CFR 266 Part E and shall be permitted under the following conditions:

- (a) Each batch of used oil to be burned shall be sampled and analyzed for: Arsenic, Chromium, Cadmium, total Halogens, PCB* and Lead using EPA/DER or ASTM approved methods. Split samples of the used oil shall be retained for three (3) months after analysis for further testing if necessary.
- (b) Results of used oil sampling and analysis performed pursuant to Specific Condition 7 (a) shall be retained by permittee for at least three (3) years and made available for inspection by DER upon request.
- (c) An estimate of the total quantity of used oil burned during the applicable calendar year shall be included in the Annual Operation Report (AOR) for Air Emissions Sources.
- (d) Hazardous waste shall not be burned in this source without prior approval from the Department.

(8) Multiple Cyclones Inspection:

The department should be notified at least once a year to conduct an inspection of the multiple cyclones. The time chosen is to be at the convenience of Florida Power and Light Company.

(9) Local Requirements:

This permit does not preclude compliance with any applicable local permitting requirements and regulations.

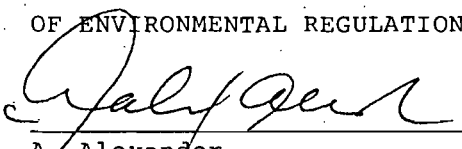
(10) Permit Renewal - FAC 17-4.09:

An operation permit renewal application must be submitted at least 60 days prior to the expiration date of this permit.

* The requirement to analyze for PCB content will be reconsidered by the Department upon written request by the permittee.

ISSUED 12-16-87

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

cm 
A. Alexander
District Manager
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803
(305) 894-7555

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WILLIAM D. PRESTON
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RICHARD W. MOORE
DIANA M. PARKER
LAURA BOYD PEARCE
MICHAEL P. PETROVICH
DAVID L. POWELL
DOUGLAS S. ROBERTS
CECELIA C. SMITH
SAM J. SMITH
CHERYL G. STUART

September 5, 1990

OF COUNSEL
W. ROBERT FOXES

Ms. Cindy Phillips
Bureau of Air Regulation
Department of Environmental Regulation
2600 Blair Stone Road, Third Floor
Tallahassee, FL 32399-2400

Re: Orimulsion Test Burn
FPL Sanford Unit No. 4

Dear Cindy:

This letter is to confirm our understanding of the discussions at our meeting on Wednesday, August 29, 1990, concerning the Environmental Protection Agency's (EPA's) draft comment letter (faxed to Elsa Bishop on August 28, 1990), relating to the "prehearing submittal for the proposed SIP revision."

EPA Comment:

1. The SIP revision and Specific Condition 3 of the draft permit must explicitly state that the relaxed emission limits for SO₂ and opacity only apply during the firing of Orimulsion. The relaxed limit for particulate matter was approved in 1980 (see 45 FR 13455, February 29, 1980) and is still in effect (see 48 FR 33866, July 26, 1983). The relaxed limits were approved due to the shortage of low-sulfur oil which existed at that time. Since this shortage no longer exists, the Region feels that the State of Florida should consider revocation of the variance and a return to the SIP limits for this unit once the test burn period has expired.

FPL Response:

1.a. Florida Power & Light Company (FPL) and the Department of Environmental Regulation (DER) agree with EPA that the relaxed SO₂ and opacity limits apply only during the burning of Orimulsion.

Ms. Cindy Phillips
September 5, 1990
Page 2

1.b. Although we understand EPA's desire to "clean up" the relaxed SIP limits for particulate matter that were connected with the 1980 DER multiple-source variance, a revision to Florida's SIP cannot be made in the current proceedings, whose public notices and scope are limited to Sanford Unit No. 4. The relaxed particulate matter limit for Sanford Unit No. 4 must be dealt with by DER in a completely separate SIP revision.

EPA Comment:

2. The SIP revision must reflect the SO₂ emission limitation of 1.1 lb SO₂/mmBTU for Units 3 and 5 during the firing of Orimulsion as the ambient air modeling assumed this limit as the maximum for SO₂ emissions from those units. In addition, the draft construction permit in Specific Condition 2 states that Units 3 and 5 can only be fired with natural gas or fuel oil with one percent sulfur content (by weight) which is equivalent to 1.1 lb SO₂/mmBTU.

FPL Response:

2. DER proposes to modify Specific Condition No. 2 of the air operating permits for Units 3 and 5, to provide that:

Unit Nos. 3 and 5 may burn "Natural Gas, No. 2 Fuel Oil and/or No. 6 Fuel Oil with a maximum equivalent sulfur content (by weight) of one percent (1%) only," during the test burn of Orimulsion (unless the burning of Orimulsion ceases for more than 7 days).

EPA Comment:

3. Specific Condition 3 of the draft permit should include a NO_x emission limit of 0.7 lb NO_x (as NO₂)/mmBTU in order to report the frequency of excess emissions as required by Specific Condition 7(e)vi. This recommended NO_x emission limit was utilized by FPL in the document entitled "Description of Orimulsion Test Burn at FPL Sanford Unit 4." A CO emission limit of 0.03 lb CO/mmBTU should also be considered for the same reasons as the NO_x limit.

Ms. Cindy Phillips
September 5, 1990
Page 3

FPL Response:

3. FPL does not concur with the suggestion of EPA that NO_x and CO emission limits should be imposed during the test, because of the absence of specific data on such emissions. BACT does not apply to the proposal, and DER rules do not require such limits. FPL agrees to continuously monitor NO_x and CO as suggested by EPA.

EPA Comment:

4. If the emission limits recommended in comment 3 above are not incorporated into the final permit, then a requirement to report all hourly averages of NO_x and CO CEM data should be incorporated into Specific Condition 7(e) of the draft permit.

FPL Response:

4. Rather than require FPL to submit all hourly averages of NO_x and CO CEM, FPL recommends that it record and retain hourly averages of emissions monitoring data, and submit monthly reports of such.

EPA Comment:

5. Specific Condition 4 of the draft permit requires that CEMs for the various pollutants be operating at the start-up of the Orimulsion fuel test burn and remain so throughout the test burn period. It should also require the calibration and maintenance of the CEMs. These CEMs should be required to be evaluated by the respective Performance Specification Test of 40 C.F.R. Part 60, Appendix B.

FPL Response:

5. DER and EPA have suggested, and FPL concurs, that a specific condition should be added requiring compliance with 40 C.F.R. Part 60, Appendix B, for CEM evaluations.

EPA Comment:

6. A requirement for fuel sampling and analysis of the fuel oil to be burned in Units 3 and 5 should be specified in Specific Condition 4 and the procedures in Method 19 of 40 C.F.R. Part 60, Appendix A should be followed.

FPL Response:

6. FPL requested, and DER agreed, that FPL be allowed to use Method 19 or an equivalent approved method.

EPA Comment:

7. Specific Condition 5 should state that the average of three test runs will be used to determine compliance.

FPL Response:

7. FPL and DER concur.

EPA Comment:

8. In Specific Condition 6, tests for CO by Method 10 should be specified. If CO and NO_x limits are established (see Comment 3), then the recommended CO test and NO_x test requirements should be part of Specific Condition 5.

FPL Response:

8. DER agreed with FPL that no CO compliance tests would be required, and, again, that no CO or NO_x limits would be established in the permit. (See also, response to Comment 3.)

EPA Comment:

9. Instead of utilizing both Method 101 and the EMTIC metals test procedures for trace elements and metals (Specific Condition 6(d)), a single test procedure, the Multiple Metals Train developed for RCRA could be utilized.

FPL Response:

9. The suggestion by EPA was as agreed between FPL's consultant, Entropy Environmentalists, Inc., and Cindy Phillips of DER.

EPA Comment:

10. In specific Condition 7(e)(vi), a time period for averaging CEM data to report exceedances should be specified. Exceedances for opacity should be any 6 minute average above the opacity limit and for SO₂, any hourly average above the SO₂ limit.

Ms. Cindy Phillips
September 5, 1990
Page 5

FPL Response:

10. FPL and DER concur.

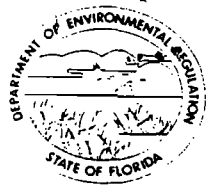
Sincerely,



William H. Green

WHG/bjh

cc: Bruce P. Miller, Chief
Air Programs Branch, EPA



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: Dale Twachtmann
FROM: Steve Smallwood *Stan*
DATE: October 3, 1990
SUBJ: Order Authorizing Research and Testing
Florida Power & Light Sanford Plant Unit #4 Boiler

Attached for your review and signature, is the Order authorizing research and testing of Orimulsion fuel at Florida Power and Light Company's Sanford Power Plant Unit No. 4 Boiler. The Order has been reviewed and approved by Dan Thompson.

Once signed, this Order will be sent to EPA as a proposed SIP revision. Though it is proposed to issue the PSD construction permit to FP&L now, so that they may begin constructing the test and research equipment, FP&L shall not fire Orimulsion fuel until the SIP is revised to temporarily relax their current air emission limitations.

SS/CP/t *ctt*
cc: D. Thompson, OGC



Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767
Lawton Chiles, Governor Carol M. Browner, Secretary

RECEIVED

COMPLETENESS SUMMARY AIR POLLUTION SOURCES

AUG 07 1991

SOURCE NAME: F P & L Sanford, Plant Unit #4

DATE RECEIVED: July 5, 1991

NAME: Martin A. Smith, Ph.D., Manager
Environmental Permitting and
Programs

DATE REVIEWED: July 29, 1991

ADDRESS: Post Office Box 078768
West Palm Beach, Florida 33407

REVIEWED BY:
Alan D. Zahm, P.E.
(198944)

Your application for a permit to construct/operate this referenced project has been received, and reviewed for completeness. The following checked items are needed to complete your application.

- (X) Application fee of \$250. Make check payable to the Department of Environmental Regulation.
- (X) Other: (Any section of the application which is incomplete or lacks sufficient information to be evaluated).
 1. Provide the information, based on fuel analysis, which will demonstrate compliance with the sulfur dioxide limit and which should be lower than the last actual limit of 1.2 lb/MMBtu.
 2. Provide a description of the certification and calibration procedures for the CEM opacity monitor.
 3. Provide a copy of the air construction permit for this source, if one exists.
 4. What is the maximum ratio of orimulsion to natural gas for this amendment?
 5. Provide test results on the maximum orimulsion ratio which will show an emission lower than with the existing operation of Unit #4:

Based on V.E. tests by FAL, not CEM data

Opacity	
Steady State	<4%
Soot Blowing	<8%
SO ₂	<1.2 lb/MMBtu
particulate	<0.06 lb/MMBtu

amendment request for co-firing
35%
60%
1.6
0.10 (0.3 soot blow)

The company had made a previous statement that orimulsion emissions will be lower than existing operation.

Completeness Summary
F P & L Sanford, Plant Unit #4
Martin A. Smith, Ph.D.
Page Two

*I sent John Glenn a memo
(a copy of the test
results) on June 4th
asking him if he
had any
or concerns.
I have received no
comments.*

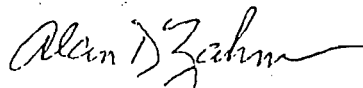
6. Provide an air toxic analysis of the compounds presented in Tables A-1 and A-2 which will demonstrate compliance with the No Threat Level standards set by the department. The department's 'Screen' Model showed concerns with the emissions of nickel and vanadium. *run by John Turner in Orlando*

7. A review of the May 28, 1991 information indicates an opacity of 28% while the application states that it is 18%. Please comment as to which is correct.
8. The Department requires the applicant to publish a "Notice of Application" for this type of project (October 31, 1990 memo from Dale Twachtmann). The "Notice of Application" is enclosed and is for use in a newspaper of general circulation in the county in which the activity is located. Proof of Publication will need to be returned to this office before the review of this project can continue.

Pursuant to Section 120.60(2) Florida Statutes, the department may deny an application if the applicant, after receiving timely notice fails to correct errors, omissions or supply additional information within a reasonable period of time.

If there are any questions, please call me at 407/894-7555 or write to the above address.

Sincerely,



Alan D. Zahn, P.E.
Supervisor, Permitting
Air Resources Management

1 August '91
Date

AZ/t

cc: Ken Kosky
Cindy Phillips ✓

)

State of Florida
Department of Environmental Regulation
Notice of Application

The Department announces receipt of an application for permit change from Florida Power and Light Company to allow the firing of a mixture of natural gas and orimulsion fuel in Unit No. 4. This proposed project will be located at the Sanford Power Plant at Lake Monroe, off Highway 17-92, northwest of Sanford in Volusia County, Florida.

This application is being processed and 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 Department of Environmental Regulation, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. Any comments or objections should be filed in writing with the Department at this address. Comments or objections should be submitted as soon as possible to insure that there is adequate time for them to be considered in the Department's decision on the application.