



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

May 1, 1991

Martin A. Smith, Ph.D., Manager
Environmental Permitting Programs
Florida Power & Light Company
P.O. Box 078768
West Palm Beach, Florida 33407-0768

Dear Dr. Smith:

Re: Air Construction Permit Amendment
Volusia County, AC 64-180842, PSD-FL-150
Sanford Plant Unit #4, Orimulsion Fuel Test Burn

In order to allow FP&L to either operate Unit #5 while firing Unit #4 with Orimulsion up to the previously permitted opacity of 60%, or to not operate Unit #5 if Unit #4 is firing Orimulsion up to the amended permitted opacity of 80%, upon EPA's approval of a State Implementation Plan (SIP) revision, the referenced permit is hereby amended with the following changes. Until the SIP is formally revised, the Department shall consider these amendments as an interpretation of Department policy:

FROM: SPECIFIC CONDITION 3.d) Visible Emissions from effective date of this amendment until May 31, 1991, or until 90 full-capacity equivalent burn days have elapsed since January 9, 1991, whichever occurs first: Steady-state - 80% opacity; Excess emissions, not to exceed 3 hours per 24-hour period, for soot-blowing, startup, shutdown and load changes - 100% opacity; Excess emissions, not to exceed 2 hours per 24-hour period, for malfunction - 100% opacity. If the unit operates for at least 10 hours in any 24 hour period, the 2 hours (per 24-hour period) of excess emissions of 100% opacity previously allowed for malfunction may be used for malfunction and/or soot-blowing.

TO: SPECIFIC CONDITION 3.d) When Unit #5 is off-line, Visible Emissions from effective date of this amendment until May 31, 1991, or until 90 full-capacity equivalent burn days have elapsed since January 9, 1991, whichever occurs first: Steady-state - 80% opacity; Excess emissions, not to exceed 3 hours per 24-hour period, for soot-blowing, startup, shutdown and load changes - 100% opacity; Excess emissions, not to exceed 2 hours per 24-hour period, for malfunction - 100% opacity. If the unit operates for at least 10 hours in any 24 hour period, the 2 hours (per 24-hour period) of excess emissions of 100% opacity previously allowed for malfunction may be used for malfunction and/or soot-blowing.

- FROM: SPECIFIC CONDITION 3.c) Visible Emissions: Steady-state - 60% opacity; Excess emissions, not to exceed 3 hours per 24-hour period, for soot-blowing, startup, shutdown and load changes - 100% opacity; Excess emissions, not to exceed 2 hours per 24-hour period for malfunction - 100% opacity.
- TO: SPECIFIC CONDITION 3.c) Visible Emissions, when Unit 5 is in operation: Steady-state - 60% opacity; Excess emissions, not to exceed 3 hours per 24-hour period, for soot-blowing, startup, shutdown and load changes - 100% opacity; Excess emissions, not to exceed 2 hours per 24-hour period for malfunction - 100% opacity.
- FROM: SPECIFIC CONDITION 2. Permitted Fuels: Unit 4 shall be fired with Orimulsion Fuel, No. 6. Residual Oil, No. 2 Fuel Oil, or Natural Gas only. By separate permit amendments, the Department has temporarily restricted Units 3 and 5 to be fired only with Natural Gas and/or Fuel Oil with a sulfur content limit equivalent to 1.1 lb SO₂/MMBtu, and, until May 31, 1991 has restricted Unit 5 from operating at all, during such times as Orimulsion is combusted in Unit 4.
- TO: SPECIFIC CONDITION 2. Permitted Fuels: Unit 4 shall be fired with Orimulsion Fuel, No. 6. Residual Oil, No. 2 Fuel Oil, or Natural Gas only. By separate permit amendments, the Department has temporarily restricted Units 3 and 5 to be fired only with Natural Gas and/or Fuel Oil with a sulfur content limit equivalent to 1.1 lb SO₂/MMBtu.

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, Florida 32399-2400, within 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.

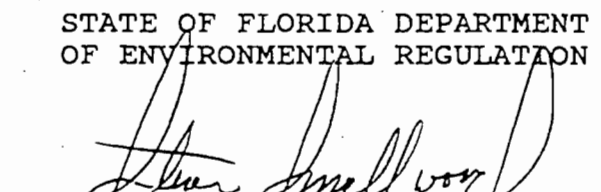
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard 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 the 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 Tallahassee, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


for Carol M. Browner, Secretary

c: Chuck Collins, P.E., CD

FP&L Co. AC 64-180842
May 1, 1991

Page 4 of 4

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed before the close of business on 5-1-91 to the listed persons.

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.

[Signature] 5-1-91
Clerk Date



May 26, 1993

Mr. A. Alexander, Director of District Management
State of Florida
Department of Environmental Regulation
Central Florida District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

RECEIVED
JUN 01 1993
Division of Air
Resources Management

**RE: Sanford Power Plant - Units 3, 4, and 5
Air Operating Permit Conditions
DER Permit No. AO-64-217887**

Dear Mr. Alexander:

On March 15, 1993, Florida Power & Light Company (FPL) received the referenced air operating permit for Units 3, 4, and 5 of our Sanford Plant. On March 29, 1993, an extension of time to petition for hearing request was submitted to the Department and approved. This extends the time to petition for hearing on the renewal permit until May 28, 1993.

Enclosed please find FPL's comments regarding some of the Specific Permit Conditions of the recently-issued renewal permit. For your convenience, I have listed each condition by number and page, and have provided FPL's position for each. I will follow up with members of the air permitting staff in a few days to address any questions.

If you have any questions concerning this matter, please contact me at (407) 625-7637.

Sincerely,

A handwritten signature in dark ink that reads "Philip A. Bucci".

Philip A. Bucci
Environmental Specialist
Florida Power & Light Company

PAB:jm

Enclosure: (1)

cc: Mr. Charles Collins - Florida DER Central District
Mr. C. H. Fancy - Florida DER Tallahassee
Mr. Alan Zahm - Florida DER Central District

051893.psn

Air Operating Permit Issues and Responses
Sanford Power Plant Units 3, 4, and 5

Permit Cover Letter

Issue - It should be noted that the mailing address for FPL's Environmental Affairs Department has changed since submittal of the Units 3, 4 and 5 permit renewal application. Furthermore, Mr. C. D. Henderson is no longer assigned responsibility within FPL for air permitting program activities.

FPL Position - The new mailing address for FPL Environmental Affairs Department is:

11770 U. S. Highway One
P.O. Box 088801 (JEN/GB)
North Palm Beach, Florida 33408-8801

Furthermore, Ms. Elsa Bishop, Acting Supervisor, Air Permitting Section, now has responsibility for FPL's air permitting program.

Page 1 of 10 - Permit Cover Page

Issue - In the first paragraph, line 2, "Rule(s) 17-2" should be changed to "Rule(s) Chapter 17".

FPL Position - The changes to the permit cover page noted above should be made by DER.

Page 6 of 10 - Specific Condition 4, Footnote (4)

Issue - The permit states that annual testing shall be conducted at yearly intervals from the dates:
a) Unit 3 - December 9, 1992
b) Unit 4 - August 6, 1992
c) Unit 5 - May 6, 1992

FPL Position - Rule 17-297.340(1)(d) states that testing is required during each federal fiscal year (October 1 - September 30) unless specified by rule, order, or permit. FPL can find no benefit in decreasing operational flexibility by deviating from the rule. It should be noted that the schedule for compliance testing needs to be more flexible to accommodate unit outages, unanticipated mechanical failure, and economic dispatch concerns. FPL recommends compliance testing be conducted anytime within a given federal fiscal year and at least three months between the last test and the test for the following fiscal year.

Page 6 of 10 - Specific Condition 4, Footnote (6) and Specific Condition 9

Issue - Condition 4, Footnote (6) states "... If an opacity CEM is utilized it shall be operated in accordance with 40 CFR 60.13 including but not limited to calibration, operation, and reporting requirements."

- Condition 9 States "A continuous opacity monitoring system shall be calibrated, operated and maintained in accordance with Rule 17-297.500(1), F.A.C. This source is not exempted by Rule 17-297.500(1)(a)1.a., F.A.C. because a particulate emission control device is utilized (multicyclones)."

FPL Position - Sanford Units 3, 4 and 5 are not required to have opacity CEM under Rule 17-297.500(1)(a)1.a., F.A.C., because Units 3, 4 and 5 complies with the applicable visible emissions standard without the use of "emission control equipment." The mechanical dust collectors (multicyclones) control emissions of particulate matter greater than a 5-10 micron size diameter where particles less than that size attenuate light and have an impact on plume opacity. FPL conducted a study of continuous opacity monitor requirements in late 1984 and submitted the findings to the Department in January, 1985. The fact that current air operating permits have no COMS requirements indicates the Department agrees with the findings. Moreover, Method 9, rather than the continuous opacity monitor is the official method for determining compliance with the visible emissions limit for Units 3, 4 and 5. In addition, Units 3, 4 and 5 are classified as existing sources based on the date of construction. Hence, 40 CFR 60.13 requirements are not applicable since they apply only to sources subject to the New Source Performance Standards (NSPS).

Page 6 of 10 - Specific Condition 5(b)

Issue - The permit states "Testing may be conducted while firing No. 6 residual fuel oil at less than 90 percent of the maximum permitted rate, however, if so, subsequent source operation is limited to the average No. 6 residual fuel oil firing rate during the test."

FPL Position - The language of this condition is overly restrictive and inconsistent with historical Department policy. The Department has historically required that compliance testing be conducted while the units are operating at between 90 to 100 percent of the maximum allowable heat input rate. If the unit is tested at less than 90 percent of the maximum allowable heat input rate, then the unit should be limited to 110 percent of the average unit heat input rate during the test.

The language requested by FPL in the proposed permit specific conditions attached to the air operation permit renewal application is the same as contained in the current permit for Units 3, 4 and 5 and in other FPL permits, including several as issued recently by other DER Districts. It is important to note that FPL needs to have the highest possible unit heat input rate to ensure maximum flexibility in meeting the daily system demand.

This permit specific condition should read as follows to maintain consistency with accepted DER policy.

"Compliance testing for particulate matter and visible emissions should be conducted with the source firing No. 6 fuel oil and operating within 10 percent of its maximum allowable heat input rate. Testing may be conducted with the source operating at less than 90 percent of the maximum allowable heat input rate; however, if so, subsequent source operation is limited to up to 110 percent of the average heat input rate during the test. Once the unit is so limited, then operation at higher heat input rates is allowed for a cumulative total of no more than 15 days for purposes of additional compliance testing to regain rated capacity in the permit, with prior notification to the Department."

Page 6 of 10 - Specific Condition 5(b)

Issue - The phrase "non-soot blowing" should be changed to "Steady-State."

FPL Position - FPL requests that DER make the change in permit language noted above to be consistent with other sections of the permit.

Page 6 of 10 Specific Condition 5(b)

Issue - DER is requiring that compliance testing be conducted while injecting MgO at the maximum requested rate in the application.

FPL Position - It should be noted that MgO injection (liming) is part of the boiler cleaning process and is performed to inhibit boiler tube corrosion. FPL typically soot blows the boiler tubes then coats the boiler tubes with lime at night when unit load is less than 50 percent. FPL then soot blows the boiler the next day when the boiler temperatures are highest.

FPL believes that soot blowing, as conducted during compliance tests, represent the worst-case operation from a particulate matter emissions standpoint since both boiler tube debris and excess lime are blown off by the IKs. FPL is currently required to conduct compliance testing during soot blowing and has demonstrated compliance on that basis. Hence, it is not necessary to conduct compliance testing while injecting MgO and FPL requests that this requirement be deleted from the permit.

It should be noted that FPL is seriously considering the use of magnesium hydroxide ($Mg(OH)_2$) fuel additive to replace MgO injection as a liming technique which is not expected to produce additional particulate matter emissions beyond what is produced by the use of MgO injection. Should FPL decide to use an $Mg(OH)_2$ fuel additive, liming activities will no longer be conducted at the Sanford Units 3, 4 and 5 and no special testing for liming should be required.

Page 6 of 10 - Specific Condition 5(b)

Issue - The permit states "...shall have at least eight hours of fuel oil burning or normal soot blowing hours without soot blowing immediately before the test as the soot blowing rule is a 24 hour rule."

FPL Position - FPL requests the DER clarify this statement since it is not clear what the Department's intentions are. However, if the DER's intent is to prevent FPL from performing soot blowing operations within eight hours of a compliance test, the Department would be requiring FPL to depart from normal unit operating procedures in which case the test results would not be representative of normal operating conditions. Furthermore, Chapter 17, F.A.C. does not contain any rules which restrict the hours of soot blowing within a given 24-hour period. The Chapter 17 rules only limit the allowable excess emissions for soot blowing and load changing within a given 24-hour period. It should be noted that this condition has not been a requirement for air operating permit approval by any other Department District Offices. FPL requests the Department delete this statement from the permit.

Page 7 of 10 - Specific Condition 5(b)

Issue - The permit states "...compliance tests shall be conducted concurrently. Operating at conditions during testing which do not reflect normal operating conditions may invalidate a test."

FPL Position - Units 3, 4 and 5 are only required to test for particulate matter. It is unclear what "concurrent" testing is to take place. The reference to concurrent compliance testing should be deleted. The phrase "normal operating conditions" should be deleted and replaced with the phrase "representative operating conditions".

Page 7 of 10 - Specific Condition 5(d)

Issue - The permit states "...The test report shall provide the actual heat input rate and MgO injection rate... and a calculation of the sulfur dioxide emission rate in pounds per MMBtu heat input and pounds per hour."

FPL Position - In response to Specific Condition 5(b), FPL justified compliance testing during the injection of MgO is unnecessary and needs to be deleted from the permit. Hence, the requirement to provide the MgO injection rate in the report should be deleted. The requirement to provide calculations of sulfur dioxide (SO₂) emission rates should be deleted since DER has specified monthly composited fuel oil sampling and analysis to determine compliance with the SO₂ emission limitation.

Page 8 of 10 - Specific Condition 7(b)

Issue - The permit states "... In case of excess emissions resulting from malfunctions, a full written report on the malfunctions shall also be submitted in a quarterly report."

FPL Position - The rule citation is incorrect and should be changed from "Rule 17-210.700(b)" to "Rule 17-210.700(6)". FPL will only submit quarterly excess emission reports that address monitored exceedances of the opacity levels allowed under Department rules and permit conditions, but without inclusion of authorized excess emissions.

FPL recommends the following language for this permit condition: "In addition to the requirements of General Condition (8) of this permit, a written quarterly report shall be submitted to the Department's Central District Office of all opacity exceedances of emissions limitations specified in Rules 17-210.700 and 17-296.405(1), F.A.C. The report shall state the cause, period of non-compliance, steps taken for corrective action, and steps taken to prevent recurrence. The Department shall also be notified when there are no exceedances for a quarter. All relevant records shall be maintained on file by the permittee for no less than two years and made available to the Department upon request."

Page 8 of 10 - Specific Condition 8(a)

Issue - The permit states that the level of total halogens shall not exceed 1,000 ppm and PCB shall not be detectable.

FPL Position - FPL requests DER change the total halogen allowable level from 1,000 ppm to 4,000 ppm. FPL understands that used oil containing more than 1,000 ppm. total halogens is presumed by DER and EPA to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR 261, Subpart D. FPL understands it may rebut this presumption by demonstrating through the use of DER approved analytical methods that the used oil does not constitute hazardous waste.

FPL requests the Department reconsider the requirement to analyze used oil for PCBs, since PCBs are not a listed parameter for determining on-specification used oil under 40 CFR 266, Subpart E.

Page 8 of 10 - Specific Condition 8(d)

Issue - The permit states that "Monthly reports of the quantities of used oil burned and the results from the sample analyses performed shall be submitted to this office."

FPL Position - FPL requests that the requirements for monthly reporting be deleted from this permit condition. FPL recommends the following language for this permit condition: "Quarterly reports containing

monthly summaries of the quantities of used oil burned and the sampling and analysis results shall be submitted to the Department's Central District Office. Used oil burned in one month within a calendar quarter triggers the quarterly reporting requirement."

Page 9 of 10 - Specific Condition 10

Issue - The Department's rule on objectionable odors is unconstitutionally vague and should be deleted.

FPL Position - FPL requests DER delete this permit condition.

Page 9 of 10 - Specific Condition 11

Issue - The permit states "If Florida Power and Light chooses to dispose of spent boiler cleaning chemicals by injecting them into this source while operating, then Florida Power and Light shall demonstrate to the Department that such disposal does not result in an increase in the actual rate of particulate matter emissions. The demonstration shall be conducted pursuant to the requirements of 40 CFR 60.14(2) and 40 CFR 60 Appendix C. At least three valid test runs must be conducted before disposal of spent boiler cleaning chemicals at the maximum disposal rate. All operating parameters which affect emissions must be held constant to the maximum feasible degree for all test runs."

FPL Position - FPL opposes the need to conduct particulate matter emissions compliance testing during the evaporation of Citro-Solv boiler cleaning solutions. FPL has historically addressed such evaporation in the air operating permit renewal applications and DER has approved those applications, specifically including Sanford Units 3, 4, and 5. Therefore, FPL as part of a normal maintenance schedule have previously evaporated Citro-Solv boiler cleaning solutions in the Sanford Units as described in previously approved permit applications. Hence, FPL believes this is an approved routine maintenance activity. FPL has performed particulate matter emissions testing at the Port Everglades Plant during the evaporation of Citro-Solv boiler cleaning solution and has concluded that at an injection rate of 50 gallons per minute, no increase in particulate matter emissions is expected.

FPL recommends the following language for this permit condition: "If the permittee chooses to evaporate Citro-Solv boiler cleaning solution by injection into this source while operating, the injection rate of such solution shall be limited to 50 gallons per minute."

Page 9 of 10 - Specific Condition 12

Issue - DER has failed to use the specific language verbatim from Rule 17-210.300, F.A.C. in this permit.

FPL Position - FPL requests the Department delete the last two sentences of this permit condition and incorporate the specific language verbatim from Rule 17-210.300, F.A.C. into this permit condition.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3318 MAQUIRE BOULEVARD
SUITE 222
ORLANDO, FLORIDA 32803-2787



RECEIVED
JUN 11 1989
DER-BAQM
BOB MARTINEZ
DALE TWACKMANN
ALEX. ALEXANDER
CIVIL ENGINEER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1989 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Sanford Power Plant, Unit No. 3
2. Permit Number: AO-64-131230
3. Source Address: C/O M. A. Smith, Mgr. Environmental Permitting & Programs
Florida Power & Light Company
P.O. BOX 078768
West Palm Beach, Florida 33407
4. Description of Source: Fossil Fuel Steam Generator
Operation is relatively continuous, except for malfunction, overhauls and/or low demand.
Maximum operation is during summer cooling and winter heating.

II ACTUAL OPERATING HOURS: _____ hrs/day _____ days/wk _____ wks/yr 2384 hrs/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

| Raw Material | Input Process Weight | tons/yr |
|--------------|----------------------|---------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

IV PRODUCT OUTPUT (Specify applicable units)

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1.3 %S).

| | | | | |
|-------------|--|--------------------|-----------------------|--------------------------|
| <u>1860</u> | <u>10⁶ cubic feet</u> | <u>Natural Gas</u> | <u>10³</u> | <u>Kerosene</u> |
| <u>1740</u> | <u>10³ gallons</u> | <u>No. 6 Oil</u> | <u>1.241</u> %S | <u>tone Coal</u> |
| <u>1.2</u> | <u>10³ gallons</u> | <u>Propane</u> | | <u>tone Carbonaceous</u> |
| | <u>10⁶ Black Liqueur Solids</u> | | | <u>tone Refuse</u> |

Other (Specify type and units) _____

VI EMISSION RATE(S) (tone/yr)


| | | | | | |
|--------------|----------------------------------|--|------------------------|------------------|-----------------------------|
| <u>18.1</u> | <u>Particulates</u> | <u>173.</u> | <u>Sulfur Dioxide</u> | <u>N/A</u> | <u>Total Reduced Sulfur</u> |
| <u>570.</u> | <u>Nitrogen Oxide</u> | <u>41.6</u> | <u>Carbon Monoxide</u> | <u>N/A</u> | <u>Fluoride</u> |
| <u>0.553</u> | <u>Hydrocarbon (Methane VOC)</u> | <u>Other (Specify type and units):</u> | | <u>1.96 T/yr</u> | <u>Non-Methane VOC</u> |

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Emission rate = Actual Fuel Usage x Conversion to specified units x AP-42 Emission Factor. AP-42 factors were derived from Volume I, 4th Edition, September 1985: Tables 1.3-1, 1.4-1, 3.1-2, and EPA contractor Pacific Environmental Services. Emissions from relatively small amounts of propane and distillate fuel oil were calculated as if these fuels were an equal volume (barrels) of No. 6 residual fuel oil. Computer calculation precludes interim detail between input and final output.

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.


 SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE

M. A. Smith, Manager,
Environmental Permitting & Programs
 TYPED NAME AND TITLE

2/2/98
 DATE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
1318 MAGUIRE BOULEVARD
SUITE 333
ORLANDO, FLORIDA 32803-3787



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1989 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Sanford Power Plant, Unit No. 4
2. Permit Number: A0-64-132055
3. Source Address: C/O M. A. Smith, Mgr. Environmental Permitting & Programs
Florida Power & Light Company
P.O. BOX 078768
West Palm Beach, Florida 33407
4. Description of Source: Fossil Fuel Steam Generator
Operation is relatively continuous, except for malfunction, overhauls and/or low demand.
Maximum operation is during summer cooling and winter heating.

II ACTUAL OPERATING HOURS: _____ hrs/day _____ days/wk _____ wks/yr 1336 hrs/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

| Raw Material | Input Process Weight |
|--------------|----------------------|
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |

IV PRODUCT OUTPUT (Specify applicable units)

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

| | | | | | |
|--------------|-----------------------|------------------------|-----------------|-----------------------|-------------------|
| <u>0</u> | <u>10⁶</u> | cubic feet Natural Gas | | <u>10³</u> | Kerosene |
| <u>10</u> | <u>10³</u> | gallons No. 2 Oil, | <u>0.5 max.</u> | %S | |
| <u>18376</u> | <u>10³</u> | gallons No. 6 Oil, | <u>1.348</u> | %S | tons Coal |
| <u>0.5</u> | <u>10³</u> | gallons Propane | | | tons Carbonaceous |
| | <u>10⁶</u> | Black Liquor Solids | | | tons Refuse |

Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)


| | | | | | |
|-------------|------------------------------|--------------------------------|-----------------|-------------|----------------------|
| <u>151.</u> | Particulates | <u>1970.</u> | Sulfur Dioxide | <u>N/A</u> | Total Reduced Sulfur |
| <u>616.</u> | Nitrogen Oxide | <u>45.9</u> | Carbon Monoxide | <u>N/A</u> | Fluoride |
| <u>2.57</u> | Hydrocarbon (Methane VOC) | Other (Specify type and units) | | <u>6.98</u> | T/yr Non-Methane VOC |

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Emission rate = Actual Fuel Usage x Conversion to specified units x AP-42 Emission Factor. AP-42 factors were derived from Volume I, 4th Edition, September 1985; Tables 1.3-1, 1.4-1, 3.1-2, and EPA contractor Pacific Environmental Services. Emissions from relatively small amounts of propane and distillate fuel oil were calculated as if these fuels were an equal volume (barrels) of No. 6 residual fuel oil. Computer calculation precludes interim detail between input and final output.

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.



SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

2/28/90

DATE

M. A. Smith, Manager,
Environmental Permitting & Programs
TYPED NAME AND TITLE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3787



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ALEX ALEXANDER
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1989 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Sanford Power Plant, Unit No. 5
2. Permit Number: A0-64-132060
3. Source Address: C/O M. A. Smith, Mgr. Environmental Permitting & Programs
Florida Power & Light Company
P.O. BOX 078768
West Palm Beach, Florida 33407
4. Description of Source: Fossil Fuel Steam Generator
Operation is relatively continuous, except for malfunction, overhauls and/or low demand.
Maximum operation is during summer cooling and winter heating.

II ACTUAL OPERATING HOURS: _____ hrs/day _____ days/wk _____ wks/yr 3474 hrs/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

| Raw Material | Input Process Weight |
|--------------|----------------------|
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |
| _____ | _____ tons/yr |

IV PRODUCT OUTPUT (Specify applicable units)

PSN-5

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

| | | | |
|-----------------|--|--------------------|-----------------------------------|
| <u>0</u> | <u>10⁶</u> cubic feet Natural Gas | <u>0.5</u> max. %S | <u>10³</u> Kerosene |
| <u>6</u> | <u>10³</u> gallons No. 2 Oil, | | |
| <u>50150</u> | <u>10³</u> gallons No. 6 Oil, | <u>1.339</u> %S | <u> </u> tons Coal |
| <u>0.7</u> | <u>10³</u> gallons Propane | | <u> </u> tons Carbonaceous |
| <u> </u> | <u>10⁶</u> Black Liquor Solids | | <u> </u> tons Refuse |

Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

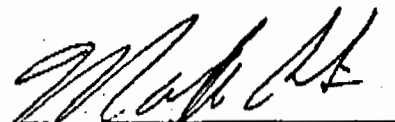
| | | | | | |
|--------------|------------------------------|--------------------------------|-----------------|-------------|----------------------|
| <u>411.</u> | Particulates | <u>5350.</u> | Sulfur Dioxide | <u>N/A</u> | Total Reduced Sulfur |
| <u>1680.</u> | Nitrogen Oxide | <u>125.</u> | Carbon Monoxide | <u>N/A</u> | Fluoride |
| <u>7.02</u> | Hydrocarbon (Methane VOC) | Other (Specify type and units) | | <u>19.1</u> | T/yr Non-Methane VOC |

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Emission rate = Actual Fuel Usage x Conversion to specified units x AP-42 Emission Factor. AP-42 factors were derived from Volume I, 4th Edition, September 1985: Tables 1.3-1, 1.4-1, 3.1-2, and EPA contractor Pacific Environmental Services. Emissions from relatively small amounts of propane and distillate fuel oil were calculated as if these fuels were an equal volume (barrels) of No. 6 residual fuel oil. Computer calculation precludes interim detail between input and final output.

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.



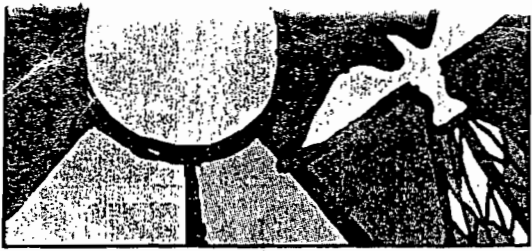
 SIGNATURE OF OWNER OR
 AUTHORIZED REPRESENTATIVE

M. A. Smith, Manager,
 Environmental Permitting & Programs

 TYPED NAME AND TITLE

2/28/90

 DATE



Local & state

D

1/19/91

FPL ordered to cut down heavy smoking

By Mary Shanklin

OF THE SENTINEL STAFF

SANFORD — A test fuel never before used in the United States is creating too much smoke at the Florida Power & Light Co.'s plant on Lake Monroe.

The Florida Department of Environmental Regulation discovered on Friday that the power company this week violated a temporary permit to burn a new fuel, known as Orimulsion.

The temporary permit allowed the power

plant near DeBary on the north side of Lake Monroe to emit a thicker-than-usual smoke for test purposes. The power company this week went beyond the relaxed standards.

Smoke violations occurred on Monday and Thursday. FPL also was cited for improper monitoring and for allowing too much soot to blow, said Chuck Collins, deputy air program administrator with the DER in Orlando.

Collins said the state will now send the power company a warning and meet with company officials to resolve the problem.

DER has had numerous complaints from residents concerned about the pollutants, he said.

FPL spokesman Ray Golden said the utility will work with the state to correct any problems at the DeBary plant, called Sanford Unit No. 4.

In January, the state loosened its air quality standards at the DeBary plant so that FPL could see how Orimulsion works and what kind of pollution control equipment it requires.

The test, which could take 120 days over a period of 18 months, allows the

plant to emit more smoke and 56 percent more sulfur dioxide than usual.

Orimulsion is a mixture of water and an oil-like compound found in the Orinoco River basin in Venezuela. Before its debut in the United States, Orimulsion was tested at Canadian and British power plants. The fuel costs \$11 a barrel, while sweet crude oil has ranged from \$21 to \$32 in the last week.

The beauty of Orimulsion is that it stores, transports and burns like oil but is priced like coal, said FPL's Golden.

FPL became the first U.S. utility to use

the fuel for various reasons, Golden said.

"We've pretty much been on the forefront of alternative fuels," Golden said.

In addition, Golden said, the DeBary plant is equipped for alternative fuels and operators there know how to use them. Also, FPL has a working relationship with the Venezuelan government, Golden said.

While the Orimulsion unit at DeBary is emitting more particles and smoke than normal, two other units there are burning cleaner fuels so the overall effect is the same amount of emissions as usual, Golden said.

Partner did the shooting but robber gets 25 years

By Debbie Salamone

OF THE SENTINEL STAFF

SANFORD — An Australian tourist learned Friday that his trip to the United States will end with a lengthy stay in state prison.

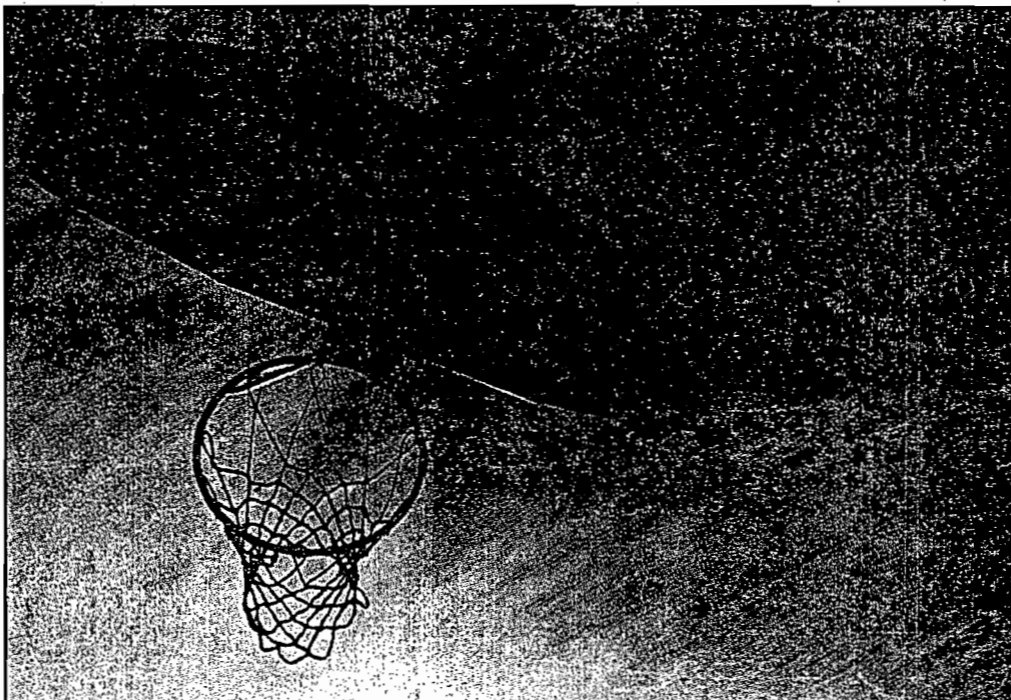
Although Graham Dobson never fired a shot, a judge sentenced him to 25 years behind bars for trying to kill a Seminole County deputy sheriff and robbing a bank in



In November, a jury found Dobson guilty of attempted first-degree murder of a law enforcement officer, attempted armed robbery and four counts of robbery.

Minutes before the shootout, Dobson and his friend, Robin Cary, robbed SunBank on Wekiva Springs Road near Longwood. Cary died in the shootout.

Dobson, who was vacationing in Daytona Beach when he decided to rob the bank, told Seminole Circuit Judge C. Vernon Mize Jr. he could not understand why he should be severely punished when he did not shoot. Florida law called for Dobson to serve a minimum of 25 years in prison for the attempted murder charge.



Heads roll at jail in wake of bank robber's escape

By Robert Perez

OF THE SENTINEL STAFF

SANFORD — Seminole County Sheriff Don Eslinger fired one jail guard and ordered suspensions for three other guards and a lieutenant Friday as a result of a Jan. 7 jailbreak.

David Gilbert, on duty the night Curtis Dean Horne escaped, lost his job for failing to make four head counts and persuading another guard to change his count when Horne's absence finally was detected.

Gilbert and other guards had several opportunities to detect the escape and failed, the report said. Another prisoner finally told a jail sergeant that Horne was missing.



RECEIVED

JAN 25 1991

DER-BAQM

BY FEDERAL EXPRESS

January 24, 1991

Mr. Alex Alexander
Department of Environmental Regulation
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Re: Sanford Plant, Unit No. 4
Orimulsion Test Burn
Emissions Compliance Testing

Dear Mr. Alexander:

As I informed Pius Sanabani of your staff today, please be advised that the emissions compliance tests which were scheduled to start on January 28, 1991, at the above-captioned unit have been postponed until further notice, pending further communications with the Department relevant to this project. As soon as the tests are rescheduled, I will notify you.

If you have any questions, please call me at (407) 697-6926.

Sincerely,

A handwritten signature in cursive script that reads "Elsa A. Bishop".

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

cc: C. Collins
C. Fancy
C. Phillips
P. Sanabani