



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW.  
ATLANTA, GEORGIA 30303-8909

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BUREAU OF  
AIR REGULATION

4APT-ARB

C.H. Fancy, Chief  
Bureau of Air Regulation  
Division of Air Resources Management  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399

SUBJ: Proposed Title V Permits for Florida Power & Light

Dear Mr. Fancy:

This is in response to your letter dated March 10, 1998, regarding proposed changes to seven Florida Power & Light (FP&L) proposed title V permits. These proposed permits were the subject of the U.S. Environmental Protection Agency's (EPA) December 11, 1997, objection. EPA Region 4 has completed its review of the Florida Department of Environmental Protection's (FDEP) proposed changes to the FP&L permits (and the associated Statements of Basis). Based on our review, we have one remaining comment which is outlined below.

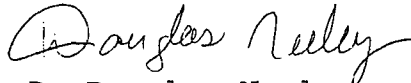
On Page 4, Statement of Basis revision for the Manatee, Martin, Port Everglades, Riviera, and Turkey Point Permits, in order to avoid misinterpretation, we recommend that the State revise the paragraph as follows:

"These units are subject to a steady-state PM emission limit of 0.1 lb/mmBtu, which is effectively equivalent to ~~0.149 lb/mmBtu because of rounding,~~ and 0.3 lb/mmBtu for soot blowing which is equivalent to ~~0.349 lb/mmBtu.~~" FPL has presented historical PM test results which show that the steady-state and soot blowing average results are less than half the applicable effective standards 0.075 lb/mmBtu. The Department has determined that sources with steady-state emissions less than half of the effective standard 0.075 lb/mmBtu shall test annually. . . .

FDEP has adequately addressed all the issues outlined in EPA's December 11, 1997, objection letter and considers the objection to be resolved. Therefore, once all the proposed changes are incorporated into the seven FP&L permits, the State may proceed with permit issuance.

We commend you and your staff for facilitating the resolution of these issues with Florida Power & Light. If you have any further questions regarding this matter, please contact Carla Pierce, Chief, Operating Source Section at (404) 562-9099.

Sincerely,



R. Douglas Neeley  
Chief  
Air, Radiation &  
Technology Branch

cc: Florida Power & Light



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Howard L. Rhodes, Director  
Air Resources Management Division  
Florida Department of Environmental Protection  
Mail Station 5500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

DEC 12 1997  
BUREAU OF AIR  
RESOURCES MANAGEMENT

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SUBJ: EPA's Review of Proposed Title V Permits  
for Florida Power & Light

DEC 12 1997

BUREAU OF  
AIR REGULATION

Dear Mr. Rhodes:

The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the following proposed title V operating permits for Florida Power & Light (FP&L): Manatee Plant, Putnam Plant, Lauderdale Plant, Martin Plant, Port Everglades Plant, Riviera Plant, and Turkey Point Plant, which were consecutively posted on DEP's web site from October 31, 1997, to November 17, 1997. Based on the Environmental Protection Agency's (EPA's) review of these proposed permits and the supporting information for each plant, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of all seven permits on the basis that the permits do not fully meet the periodic monitoring requirements of § 70.6(a)(3)(i). In addition, EPA objects to some of the proposed permits because they contain deviations from applicable requirements and some of the permits do not ensure practical enforceability of certain permit terms.

As you know, 40 C.F.R. § 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permits be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and the enclosures to it provide a statement of EPA's reasons for its objection. Enclosures 1 through 7 contain a detailed

explanation of the objection issues specific to each permit and the changes necessary to make each permit consistent with the requirements of 40 C.F.R. Part 70. In some cases, the enclosure also contains general comments with regard to the individual permit.

With regard to the objection issue relating to periodic monitoring, EPA would like to emphasize that a permit that does not contain adequate periodic monitoring, does not meet the requirements of 40 C.F.R. Part 70. Florida rule 62-213.440(1)(b)1.b. states that each Part 70 permit shall specify the following requirements with respect to monitoring:

"Where the applicable requirement does not specify a method for periodic testing or instrumental or noninstrumental monitoring, periodic monitoring sufficient to yield reliable data and demonstrate compliance with the permit. Such monitoring requirements shall assure use of recordkeeping terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement."

The cited State regulation is based on 40 C.F.R. § 70.6(a)(3)(i)(B), which requires each Part 70 permit to contain the following requirements with respect to monitoring: "Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit...."

Part 70's periodic monitoring requirements implement, in part, Section 504(a) of the Act, which requires that Part 70 permits contain "conditions as are necessary to assure compliance with applicable requirements of [the] Act, including the requirements of the applicable implementation plan" and Section 504(c), which requires "monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." In addition, Section 114 of the Act requires "enhanced monitoring" for major stationary sources. The EPA's recently-issued compliance assurance monitoring (CAM) rule indicates that Part 70 periodic monitoring satisfies enhanced monitoring under the Act for emissions units not subject to Part 64's CAM requirements. See 62 Fed. Reg. 54900, 54904 (Oct. 22, 1997).

In determining whether a permit application has appropriate periodic monitoring to assure compliance with all permit terms and conditions and all applicable requirements, a permitting authority must first determine whether an applicable requirement

already requires periodic testing or instrumental or noninstrumental monitoring. See 40 C.F.R. § 70.6(a)(3)(i)(B); 62-213.440(1)(b)1.b, F.A.C. Whether an underlying applicable requirement contains periodic monitoring or testing must be judged according to the criteria defining and governing periodic monitoring: namely, whether it is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. In order for each permit to include monitoring that is sufficient to assure compliance with all applicable requirements, an applicant or permitting authority may have to enhance or supplement monitoring or testing in an existing applicable requirement through periodic monitoring that yields reliable and representative compliance data.<sup>1</sup> Alternatively, the underlying applicable requirement may already contain monitoring or testing sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit, in which case the periodic monitoring requirement is satisfied and no additional monitoring is necessary.

We understand DEP's view of periodic monitoring to be that "additional monitoring requirements are to be imposed only when the applicable requirement does not specify or require any monitoring." [Letter from C.H. Fancy, Chief, Bureau of Air Regulation, Florida DEP to R. Douglas Neeley, Chief, Air and Radiation Technology Branch, Air, Pesticides and Toxics Management Division, U.S. EPA Region 4, (Nov. 6, 1997) (emphasis in original).] DEP has asserted that "[t]he 'adequacy' of such monitoring is not addressed nor defined in either Part 70 or Chapter 62-213, F.A.C." Id. We do not agree. As discussed above, periodic monitoring under Part 70 — which is identical in material respects to Florida's regulations — is defined by the criteria that govern the adequacy of periodic monitoring, whether that monitoring is contained in an applicable requirement or supplements an applicable requirement. All monitoring must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit.

One of our concerns is that DEP's view of periodic monitoring means that monitoring in an existing applicable requirement — no matter how infrequent and no matter how inadequate to the task of compliance assurance — may never be enhanced in order to assure compliance with an applicable

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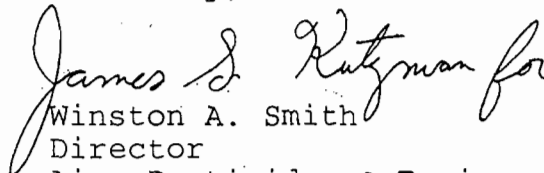
<sup>1</sup> See, e.g., 62 Fed. Reg. at 54904 ("Part 70 currently requires all title V operating permits to include monitoring to assure compliance with the permit. This includes all existing monitoring requirements as well as additional monitoring (generally referred to as 'periodic monitoring') if current requirements fail to specify appropriate monitoring. ... [E]xisting monitoring when supplemented as necessary by periodic monitoring is sufficiently enhanced for emissions units not subject to part 64.")

requirement of the Clean Air Act. We do not believe that this gives the meaning due "enhanced monitoring" under Section 114 of the Act. If existing monitoring is inadequate to assure compliance and we accept DEP's view that the adequacy of such monitoring may not be addressed through supplemental periodic monitoring, then Title V permits would not meet the statutory and regulatory requirement to contain monitoring that is adequate to assure compliance with all applicable requirements. An applicable requirement which contains any monitoring that recurs on some cyclical basis - which presumably could be once every year, five years, ten years or more - does not mean such monitoring is "periodic" for purposes of Title V and the Clean Air Act.

Where EPA determines that permits do not contain periodic monitoring that will assure compliance with a permit's terms and conditions, EPA may object to those proposed permits and require that any final issued permits be reopened to address any deficiencies. EPA Region 4 will work with DEP to determine whether any of the State's final issued permits must be reopened to address issues relative to periodic monitoring.

We regret that we were unable to resolve these issues with your office prior to the expiration of the 45-day review period. However, we are fully confident that Florida DEP will act to respond to these concerns in a timely manner. If you have any questions or wish to discuss this further, please contact Mr. Douglas Neeley, Chief, Air & Radiation Technology Branch or Ms. Carla Pierce, Chief, Operating Source Section at (404) 562-9105. Should your staff need additional information they may contact Ms. Yolanda Adams, Title V Technical Expert at (404) 562-9116, Mr. David McNeal, Monitoring Expert, at (404) 562-9102, or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,

  
Winston A. Smith  
Director  
Air, Pesticides & Toxics  
Management Division

Enclosures

cc: Mr. Adalberto Alfonso  
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Mr. John M. Lindsay  
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Enclosure 1

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Manatee Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standard. The Manatee permit only requires an annual one hour Method 9 visible emissions reading. This does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. Since continuous opacity monitors (COMs) have been installed on the units in question, these monitors should be used to ensure compliance with the opacity standard. Requiring that the opacity monitors be used for conducting periodic monitoring imposes little or no additional burden on FP&L.
- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Manatee permit requires an annual emission test to verify compliance with the applicable three-hour particulate emission standard. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard for units 001 and 002. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard. We suggest the following approaches to periodic monitoring:
  - a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
  - b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
  - c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable three-hour particulate matter standard.



In addition, the Manatee permit contains a provision regarding operating conditions during the annual testing for particulate matter and visible emissions which states 'that the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting the maximum quantity of additives approved by the Department.' Information provided to EPA indicates that these additives are used to control both particulate matter and nitrogen oxide emissions and that the amount of additive is dependent upon the ash content of the fuel. No provision exists within the permit which requires the unit to continue operating under the same conditions which existed during the test. Condition A.27 should be modified to reflect that 'the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting additives consistent with normal operating practices approved by the Department.'

- (3) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(f) 1.a., requires all emissions units to install continuous monitoring systems for monitoring opacity. The only exemption appears to be for units that do not use emission control equipment. Since emissions from units 001 and 002 are controlled with multiple cyclones, it appears that Florida regulations would require the use of COMs to determine compliance with the opacity standard. This applicable requirement must be included in the permit, or clarification must be provided in the statement of basis as to why this requirement does not apply.
- (4) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(a) requires fossil fuel steam generators to comply with a 20 percent opacity standard, with the exception that sources electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The Manatee permit requires compliance with a 40 percent opacity standard; however, it only requires an annual compliance test for particulate matter emissions. We understand that this variance from the SIP's quarterly testing requirement was granted by a State Order. However, this variance was never submitted by the State of Florida as a SIP revision, and therefore, was never approved into the SIP. Therefore, the Manatee permit must ensure compliance with the requirements of the SIP as stated in rule 62-296.405(1)(a).
- (5) Practical Enforceability - Florida rule 62-296.405(1)(c)1.g. does not contain an averaging time that can serve as an enforceable component to determine compliance with the applicable SO<sub>2</sub> standard for units 001 and 002. In instances where the SIP regulations do not indicate an averaging time

for the standard, the permit must include one to determine compliance with the applicable requirement. Even though the source has installed and certified CEMs, we understand that they have opted to demonstrate compliance with the SO<sub>2</sub> limit via fuel sampling and analysis, as allowed by Florida rule 62-296.405(1)(e)3. Florida rule 62-296.405(1)(e)3. does not specify a sampling frequency, thereby giving DEP the flexibility to specify a frequency that would ensure compliance with the standard.

Florida rule 62-296.405(1)(f)1.b. states that "Those emission units not having an operating flue gas desulfurization device may monitor sulfur dioxide emissions by fuel sampling and analysis according to methods approved by EPA." The fuel sampling approach stated in the proposed permit would allow for a determination of compliance on a monthly basis only. As stated in Rule 62-213.440(1)(b)1.b., "...monitoring requirements shall assure use of recordkeeping terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement;" The fuel sampling analysis method stated in the proposed permit is not adequate to demonstrate compliance with the applicable SO<sub>2</sub> standard which we understand to be in place to ensure compliance with the National Ambient Air Quality Standards (NAAQS). As indicated in DEP's response to comments memorandum dated October 23, 1997, DEP has determined that the averaging period for this standard should be 3 hours. Accordingly, the best course of action would be to use the CEMs data to derive 3 hour averages. Properly conducted fuel sampling may be an adequate substitute for the Manatee plant since it is permitted to burn only oil and gas. However, EPA realizes that conducting fuel analysis based on a 3 hour average would be too burdensome for the source. Given the relative consistency of the oil and gas fuel sources, 24 hour averaging of the fuel data may be sufficiently representative of the source's compliance with the 3 hour emission limit. Therefore, EPA is willing to accept a 24 hour averaging time for the fuel sampling analysis to ensure compliance with the applicable standard. The Region has accepted a 24 hour averaging time, which is still protective of the NAAQS, in other title V permits where the averaging time is not specified in the regulations. Please, refer to the Turkey Point Plant permit, condition A.19., for an example of an acceptable sampling protocol.

Based on the above information, DEP must revise the Manatee permit to either require that the fuel analysis be conducted on a daily basis, rather than a monthly basis, or require the use of the CEMs to determine compliance with this standard. Requiring that the CEMs be used for conducting

periodic monitoring imposes little or no additional burden on FP&L. Please, refer to the Riviera and Turkey Point permits. Even though use of CEMs are not the compliance method pursuant to the SIP, the State has required the use of the CEMs to ensure compliance with the same SIP SO<sub>2</sub> standard in those permits.

- (6) Exemptions from Permitting: Appendix E-1- It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213.420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.
- (7) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in condition A.1. of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit.
- (8) Periodic Monitoring - Condition A.8 allows particulate matter emissions up to an average of 0.3 lbs. per million BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. In addition, Condition A.6 allows visible emissions up to 60 percent opacity during soot blowing and load changes. A load change is defined to occur when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

In addition to the above objections, our review has identified the following concern regarding the Manatee permit:

1. Section II, Facility-Wide Conditions

Condition 7. should be identified as "Not Federally Enforceable."

Enclosure 2

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Putnam Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Exemptions from Permitting: Appendix E-1 - It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213. 420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213. 420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.
- (2) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in conditions A.1. and B.1. of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit.

In addition to the above objections, our review has identified the following concerns regarding the Putnam permit:

1. Subsection D - Permit condition D.4. needs to be renumbered. It seems that several portions of the boilerplate language that were not applicable were deleted without renumbering/editing the contents of the condition.
2. The NSPS Common Conditions (Section E) should contain language similar to Conditions A.1 and B.1 of Section II of the Martin Plant permit, i.e., "For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee." In addition, similar language should be added either to Condition A.1 or to a new Condition, which puts the reader on notice that the 40 CFR 60 term "owner and operator," means "permittee" in

this permit. In addition, the phrase "[t]o the extent allowed by law" in the Note above Condition E.1 should be deleted. It is ambiguous and not repeated in any of the other permits in this context.

Enclosure 3

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Lauderdale Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standards. For the four combined-cycle turbines with heat recovery steam generators, condition A.10. specifies that visible emissions shall not exceed 10% opacity while burning natural gas, or 20% opacity while burning distillate oil. Condition A.19 specifies a requirement for annual opacity tests to be performed on each combustion turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. For the two banks of 12 combustion turbines, condition B.6. specifies a 20 percent opacity limit, and condition B.14. specifies that a visible emissions compliance test shall be conducted on each combustion turbine that operates more than 400 hours in a federal fiscal year. The permit specifies that at least one combustion turbine shall be tested per year, and at least one compliance test shall be conducted on all 24 combustion turbines every five years. This does not constitute adequate periodic monitoring to ensure compliance with the opacity standards when burning fuel oil.

We recommend that the source be required to conduct visible emissions readings on a daily basis for the combined-cycle turbines and for the banks of combustion turbines, when these units burn fuel oil. The State may propose alternative monitoring so long as it yields reliable data that ensure compliance with the opacity standard.

- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. Condition A.7 of the permit specifies a PM/PM10 emission limitation of 14.7 lb/hr for each combined-cycle combustion turbine fired with natural gas, and an emission limitation of 58 lb/hr for each combustion turbine fired with oil. Annual testing of PM using Method 5 or 17 is required in condition A.19 of the permit for combustion turbines with fuels used for more than 400 hours in the preceding 12-month period. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard, it must

provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard.

- (3) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in conditions A.3, and B.1 of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit. As an example, please refer to condition B.25, which ensures compliance with condition B.2, the heat input limitation for each bank of gas turbines.
- (4) Practical Enforceability - Condition A.13 limits the sulfur content of light distillate oil fired in the turbines to a maximum of 0.3 weight percent and to a 12-month average value of no more than 0.2 weight percent. In order to constitute a practically enforceable requirement, this condition must be revised to clearly specify the procedures for calculating the sulfur content of the oil on a 12-month rolling average basis. This clarification is necessary because the current permit language could be interpreted to mean that the 12-month average sulfur content is calculated either as of the average of the daily sulfur analyses or as a weighted average based upon the sulfur content of the oil and amount burned on a daily basis. Of these two approaches, the only one that we consider acceptable is to calculate the average sulfur content on a mass-weighted basis. The basis for this position is that if Florida Power and Light is allowed to merely average the daily sulfur content of the oil, the company could burn large quantities of higher sulfur oil on a few days and achieve compliance by burning smaller quantities of lower sulfur content on a large number of days. Since this method of complying would circumvent the of the permit's intent to limit the annual average sulfur content of the oil combusted, the permit must be revised to eliminate the ambiguity about the calculation approach that will used to verify compliance with the annual average sulfur content limit.
- (5) Exemptions from Permitting: Appendix E-1 - It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213. 420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on



November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.

In addition to the above objections, our review has identified the following concerns regarding the Lauderdale permit:

1. VOC Emission Limit - Page 4, Facility-wide Conditions for Volatile Organic Compounds (VOCs): The permit specifies a limit for total VOC emissions from all emissions units at this facility (excluding the combined-cycle units) of 99.92 tons per year. The basis for this limit needs to be explained.

It is not clear how the throughput, record keeping, and reporting requirements for the fuel storage tanks (Section III.C., p. 24 & 25) and for solvent usage (Section III.D., p. 26) will ensure compliance with the total VOC emission limit of 99.92 tons per year. The permit (Conditions C.2. and D.2.) should specify that VOC emissions will be calculated at least monthly, rather than on an annual basis. Of note is that the models for estimating air emissions from organic liquid storage tanks are contained in Chapter 7 of AP-42, not in Section 4-3. The permit (Conditions C.3. and D.3.) should also require the actual throughput for each tank and the quantities of solvents used to be recorded on a monthly basis.

2. Fuel Monitoring Schedule - Permit Condition A.12 refers to a customized fuel monitoring schedule approved by EPA. We recommend that this schedule be included in this permit condition, rather than referencing it.
3. Permit Condition Language - Condition 9 in Section II does not appear to be complete. It seems as though the language, "No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions." should be added as the first sentence in the paragraph.
4. Permit Terms - EPA recommends that the monitoring and operations section of the permit contain language, such as "For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60

shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee." In addition, EPA recommends that similar language be added either to Condition A.1 or to a new condition, which puts the reader on notice that the 40 CFR 60 term "owner and operator," means "permittee" in this permit.

Enclosure 4

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Martin Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Martin permit requires an annual emission test to verify compliance with the applicable particulate emission standard. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard for Units 1 and 2. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard. We suggest the following approaches to periodic monitoring:

- a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
- b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
- c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable particulate matter standard.

In addition, the permit application states that magnesium hydroxide and related compounds may be injected into each boiler. Information provided to EPA indicates that these injected compounds (additives) are used to control both particulate matter and nitrogen oxide emissions and that the amount of additive is dependent upon the ash content of the fuel. No provision exists within the permit which addresses the approval and use of additives. The units should be required to operate during compliance tests at an injection rate consistent with normal operations.

- (2) Practical Enforceability - Condition B.28 limits the sulfur

content of light distillate oil fired in the turbines to a maximum of 0.5 weight percent and to a 12-month average value of no more than 0.3 weight percent. In order to constitute a practically enforceable requirement, this condition must be revised to clearly specify the procedures for calculating the sulfur content of the oil on a 12-month rolling average basis. This clarification is necessary because the current permit language could be interpreted to mean that the 12-month average sulfur content is calculated either as of the average of the daily sulfur analyses or as a weighted average based upon the sulfur content of the oil and amount burned on a daily basis. Of these two approaches, the only one that we consider acceptable is to calculate the average sulfur content on a mass-weighted basis. The basis for this position is that if Florida Power and Light is allowed to merely average the daily sulfur content of the oil, the company could burn large quantities of higher sulfur oil on a few days and achieve compliance by burning smaller quantities of lower sulfur content on a large number of days. Since this method of complying would circumvent the of the permit's intent to limit the annual average sulfur content of the oil combusted, the permit must be revised to eliminate the ambiguity about the calculation approach that will used to verify compliance with the annual average sulfur content limit.

- (3) Deviation from Applicable Requirement - Conditions A.7, B.9 and C.6 incorrectly cite the New Source Performance Standard (NSPS) (40 CFR 60.11(a)) to read as follows:

"Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard."  
(emphasis added)

This appears to be an oversight since the most recent version of the NSPS dated 2/24/97 was revised to remove the word "only" to clarify that credible evidence may be used in ascertaining and supporting enforcement actions. See 62 Fed. Reg. 8314, 8328 (Feb. 24, 1997).

The following language that should be substituted from the most recent revision to 40 CFR 60.11(a) is:

"Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard."

- (4) Periodic Monitoring - Condition A.6 allows particulate matter emissions up to an average of 0.3 lbs. per million

BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

- (5) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in conditions A.2, and B.3 of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit.
- (6) Exemptions from Permitting: Appendix E-1- It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213.420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 4 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.

Enclosure 5

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power and Light, Port Everglades Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standard. The Port Everglades permit only requires an annual one hour Method 9 visible emissions reading. This does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. Since continuous opacity monitors (COMs) have been installed on units 1 through 4, these monitors should be used to ensure compliance with the opacity standard for these units. Requiring that the opacity monitors be used for conducting periodic monitoring imposes little or no additional burden on FP&L. Please note that while the permit indicates that units 1 through 4 have operational continuous opacity monitors, the "Permit Summary Tables" indicate that there are no "CMS."

The Region is concerned about the lack of periodic monitoring provisions for opacity for the 12 simple cycle turbines (unit #5) in the proposed Port Everglades permit. We question whether an annual visible emissions test alone will provide enough data for certifying compliance with the applicable opacity limit for an entire year, and we question how FP&L will be able to certify compliance with opacity limits, in good faith, in the absence of data to back up the certification. We recommend that the source be required to conduct visible emissions readings on a daily basis when these units burn fuel oil. The State may propose alternative monitoring so long as it yields reliable data that ensure compliance with the opacity standard.

- (2) Periodic Monitoring - Conditions A.15 and B.15 of the proposed permit for Port Everglades Plant indicate that the source is required to maintain hourly fuel records of the amount of fuel fired, the ratio of fuel oil to natural gas if co-fired, the heating value, and sulfur content of each fuel fired. Conditions A.15 and B.15 also describe the methodology by which the sulfur content and heating value of the fuel will be determined. The analysis of the monthly composite of fuel is not adequate to ensure compliance with the applicable SO<sub>2</sub> standard which is based on a three-hour rolling average (see Conditions A.11, B.11). Since the fuel records required in Condition A.15 need to be "of sufficient detail" to identify the testing requirements of Condition A.14 (Operating Conditions During Testing - PM and

VE), and A.11 (sulfur dioxide monitoring operations to demonstrate compliance with the sulfur dioxide limit based on a 3-hour rolling average), a fuel record and sampling protocol similar to the one required in Condition A.19 of the proposed Title V permit for the Florida Power & Light, Turkey Point Fossil Plant, should be required in the proposed permit for the Port Everglades Plant. Condition A.19 of the Turkey Point proposed permit requires the source to take hourly fuel samples and analyze the daily composite on a daily basis.

- (3) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Port Everglades Plant permit requires an annual emission test to verify compliance (Conditions A.4, A.10, B.4, B.10) with the applicable three-hour particulate emission standard. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard for Units 1 through 4. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard. We suggest the following approaches to periodic monitoring:

- a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
- b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
- c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable three-hour particulate matter standard.

In addition, the permitting notes under Section III, Subsection A and Subsection B of the proposed permit for Port Everglades indicate that units 1 through 4 may inject additives such as magnesium hydroxide and related compounds into each boiler. Information provided to EPA indicates that these injected additives are used to control particulate matter and nitrogen oxide emissions and that the amount of additive is dependent upon the ash content of the fuel. The proposed permit does not, however, address the approval and

use of these additives. These units should be required to operate during compliance tests using an injection rate consistent with normal operations. This could be corrected by adding to the particulate compliance language: "that the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting approved additives consistent with normal operating practices approved by the department."

- (4) Practical Enforceability - A note under Conditions A.14 and B.14 in the proposed permit for Port Everglades, references an "informal agreement" between the facility and Broward County to limit the visible emissions to less than 20% opacity. This condition does not appear to be enforceable and should be removed from the permit. If the source is actually required to maintain opacity below 20% rather than the 40% standard indicated in Condition A.4 and B.4 then an enforceable condition needs to be included in the permit that indicates the correct opacity standard (see comment (5) below).
- (5) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(a) requires fossil fuel steam generators to comply with a 20 percent opacity standard, with the exception that sources electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The Port Everglades permit requires compliance with a 40 percent opacity standard; however, it only requires an annual compliance test for particulate matter emissions. We understand that this variance from the SIP's quarterly testing requirement requirements was granted by a State Order. However, this variance was never submitted by the State of Florida as a SIP revision, and therefore, was never approved into the SIP. Therefore, the Port Everglades permit must ensure compliance with the requirements of the SIP as stated in rule 62-296.405(1)(a).
- (6) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(f) 1.a, requires all emissions units to install continuous monitoring systems for monitoring opacity. The only exemption appears to be for units that do not use emission control equipment. Since emissions from these units (units 1 through 4) are controlled with multiple cyclones, it appears that Florida regulations would require the use of COMs to determine compliance with the opacity standard. This applicable requirement must be included in the permit, or clarification must be provided as to why this requirement does not apply.
- (7) Periodic Monitoring - Conditions A.7 and B.7 allow



particulate matter emissions up to an average of 0.3 lbs. per million BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. In addition, Condition A.5 allows visible emissions up to 60 percent opacity during soot blowing and load changes. A load change is defined to occur when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

- (8) Exemptions from Permitting: Appendix E-1- It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213.420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.

In addition to the above objections, our review has identified the following concern regarding the Port Everglades permit:

1. Conditions A.11 and A.13 indicate that the permittee shall demonstrate compliance with the sulfur dioxide limit using CEMs. Condition A.13 also appears to offer the source the opportunity to use EPA test methods 6, 6A, 6B, 6C for demonstrating compliance with the applicable SO<sub>2</sub> standard. If the source is required to use CEMs as a method of demonstrating compliance, it is unclear why Condition A.13 indicates alternative test methods. The Region recommends that the language in A.13, which allows the above test methods for measuring sulfur dioxide emissions, be removed from Condition A.13 in order to avoid confusion.

Condition A.13 also allows the source to obtain an alternate procedure under the provisions of Rule 62-297.620, F.A.C.. Rule 62-297.620 (Exceptions and Approval of Alternate Procedures and Requirements) does not allow the source to obtain an alternative to continuous monitoring requirements. Therefore, it appears that the language in Condition A.13

which suggests that the source has the option of obtaining an alternative procedure to CEMs for demonstrating compliance with the SO<sub>2</sub> limit should be removed to avoid confusion. Please, refer to the Turkey Point permit which contains requirements for CEMs in conditions A.9 and A.13, but does not include the confusing language mentioned above.

Enclosure 6

U.S. EPA Region 4 Objections  
Proposed Part 70 Operating Permit  
Florida Power & Light, Riviera Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standard. The Riviera permit only requires an annual one hour Method 9 visible emissions reading. This does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. Since continuous opacity monitors (COMs) have been installed on the units in question, these monitors should be used to ensure compliance with the opacity standard. Requiring that the opacity monitors be used for conducting periodic monitoring imposes little or no additional burden on FP&L.
- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Riviera permit requires an annual emission test to verify compliance with the applicable three-hour particulate emission standard. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard for Units 1 and 2. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard. We suggest the following approaches to periodic monitoring:
  - a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
  - b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
  - c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable three-hour particulate matter standard.

In addition, the Riviera permit states that magnesium oxide, magnesium hydroxide and related compounds may be injected into each boiler. Information provided to EPA indicates that these injected compounds (additives) are used to control both particulate matter and nitrogen oxide emissions and that the amount of additive is dependent upon the ash content of the fuel. No provision exists within the permit which addresses the approval and use of additives. The units should be required to operate during compliance tests at an injection rate consistent with normal operations. This could be corrected by adding to the particulate compliance language: "the tests shall be conducted under both sootblowing and non-sootblowing conditions, and shall be conducted while injecting approved additives consistent with normal operating practices approved by the Department."

- (3) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(f) 1.a, requires all emissions units to install continuous monitoring systems for monitoring opacity. The only exemption appears to be for units that do not use emission control equipment. Since emissions from these units are controlled with multiple cyclones, it appears that Florida regulations would require the use of COMs to determine compliance with the opacity standard. This applicable requirement must be included in the permit, or clarification must be provided in the statement of basis as to why this requirement does not apply.
- (4) Deviation from Applicable Requirement - Florida rule 62-296.405(1)(a) requires fossil fuel steam generators to comply with a 20 percent opacity standard, with the exception that sources electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The Riviera permit requires compliance with a 40 percent opacity standard; however, it only requires an annual compliance test for particulate matter emissions. We understand that this variance from the SIP's quarterly testing requirement was granted by a State Order. However, this variance was never submitted by the State of Florida as a SIP revision, and therefore, was never approved into the SIP. Therefore, the Manatee permit must ensure compliance with the requirements of the SIP as stated in rule 62-296.405(1)(a).
- (5) Deviation from Applicable Requirement - Condition A.9 states that 'The sulfur dioxide emission limitation shall apply at all times including startup, shutdown, and load change, but shall not apply during malfunction provided best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized and does not exceed two hours in any 24-hour period.' These units do not have sulfur dioxide controls. Please provide a definition

of what constitutes a malfunction as used in this permit condition for the Riviera Plant. The SIP rules (62-296.405(1)(c) and 62-296.405(1)(c)) do not provide for a relaxation of the SIP limit during a malfunction. This condition should be revised to be consistent with the applicable regulations.

- (6) Exemptions from Permitting: Appendix E-1- It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213.420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.
- (7) Periodic Monitoring - Condition A.8 allows particulate matter emissions up to an average of 0.3 lbs. per million BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. In addition, Condition A.6 allows visible emissions up to 60 percent opacity during soot blowing and load changes. A load change is defined to occur when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

In addition to the above objections, our review has identified the following concerns regarding the Riviera permit:

1. Section II, Facility-Wide Conditions.

Condition 7 should be identified as "Not Federally Enforceable."

2. Conditions A.15 and A.23 indicate that the permittee shall demonstrate compliance with the sulfur dioxide limit using CEMs. Condition A.23 also appears to offer the source the opportunity to use EPA test methods 6, 6A, 6B, 6C for demonstrating compliance with the applicable SO<sub>2</sub> standard. If the source is required to use CEMs as a method of

demonstrating compliance, it is unclear why Condition A.23 indicates alternative test methods. The Region recommends that the language in A.23, which allows the above test methods for measuring sulfur dioxide emissions, be removed from Condition A.23 in order to avoid confusion.

Condition A.23 also allows the source to obtain an alternate procedure under the provisions of Rule 62-297.620, F.A.C.. Rule 62-297.620 (Exceptions and Approval of Alternate Procedures and Requirements) does not allow the source to obtain an alternative to continuous monitoring requirements. Therefore, it appears that the language in Condition A.23 which suggests that the source has the option of obtaining an alternative procedure to CEMs for demonstrating compliance with the SO<sub>2</sub> limit should be removed to avoid confusion. Please, refer to the Turkey Point permit which contains requirements for CEMs in conditions A.9 and A.13, but does not include the confusing language mentioned above.

Enclosure 7

U.S. EPA Region 4 Objection  
Proposed Part 70 Operating Permit  
Florida Power & Light, Turkey Point Plant

EPA objects to the issuance of this permit due to the following reasons:

- (1) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable opacity standard. The Turkey Point permit only requires an annual one hour Method 9 visible emissions reading. This does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. Since continuous opacity monitors (COMs) have been installed on the units in question, these monitors should be used to ensure compliance with the opacity standard. Requiring that the opacity monitors be used for conducting periodic monitoring imposes little or no additional burden on FP&L.
- (2) Periodic Monitoring - The permit does not require sufficient periodic monitoring to ensure compliance with the applicable particulate matter standard. The Turkey Point permit requires an annual emission test to verify compliance with the applicable three-hour particulate emission standard. It has not been demonstrated that an annual emission test alone will constitute the basis for a credible certification of compliance with the particulate emission standard for Units 1 and 2. If the State believes that no additional monitoring is warranted to ensure compliance with the particulate standard it must provide a technical demonstration in the statement of basis identifying the rationale for basing the compliance certification only on data from a short-term annual test. Otherwise, the permit must be revised to identify additional monitoring that will be conducted in order to ensure compliance with the particulate matter standard. We suggest the following approaches to periodic monitoring:
  - a) Correlate COM data to PM standard - this approach would not require additional monitoring equipment to be installed.
  - b) Correlate injection rate of specific compounds to ash content of the fuel and emission rate. Recordkeeping would consist of ash content and corresponding injection rate.
  - c) Other monitoring approach demonstrated by the permittee to be a valid method for assuring compliance with the applicable three-hour

particulate matter standard.

- (3) Exemptions from Permitting: Appendix E-1- It is our understanding that the changes to F.A.C. rules 62-213.300, and 62-213.420-440 addressed in a preliminary draft dated June 2, 1997, were officially adopted by the State on November 13, 1997. Therefore, the State needs to revise the permit, specifically Section II, item 6 and Appendix E-1, to delete the term "exempted from permitting" and replace it with the language contained in rules 62-213.300, and 62-213.420-440. Additionally, as agreed in previous conversations between Regional staff and the State, the State needs to remove the reference to F.A.C. rule 62-4, since it is not related to activities that may be considered "insignificant" under the title V program.
- (4) Deviation from Applicable Requirement -Florida rule 62-296.405(1)(a) requires fossil fuel steam generators to comply with a 20 percent opacity standard, with the exception that sources electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The Turkey Point permit requires compliance with a 40 percent opacity standard; however, it only requires an annual compliance test for particulate matter emissions. We understand that this variance from the SIP's quarterly testing requirement was granted by a State Order. However, this variance was never submitted by the State of Florida as a SIP revision, and therefore, was never approved into the SIP. Therefore, the Turkey Point permit must ensure compliance with the requirements of the SIP as stated in rule 62-296.405(1)(a).
- (5) Periodic Monitoring - It is unclear how the permittee will show compliance with the heat input limitations in conditions A.1, and B.1 of the permit. The permit must require that the facility maintain fuel usage records to demonstrate compliance with the applicable heat input limit. Since this recordkeeping will be used to determine compliance with an hourly heat input rate limitation, the permit should contain an hourly fuel usage recordkeeping requirement in order to ensure that the facility remains in compliance with the hourly heat input limit.
- (6) Periodic Monitoring - Condition A.8 allows particulate matter emissions up to an average of 0.3 lbs. per million BTU heat input during a 3-hour period in any 24-hour period for soot blowing and load change. In addition, Condition A.6 allows visible emissions up to 60 percent opacity during soot blowing and load changes. A load change is defined to



occur when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. There does not, however, appear to be any conditions that require the source to record the time, date, and duration of these events. The permit must require that the facility keep records of these events to ensure compliance with this requirement.

In addition to the above objections, our review has identified the following concerns regarding the Turkey Point permit:

1. Section III, condition A.3 allows the use of magnesium hydroxide fuel additives. However, in the permit application, FP&L stated their "right to use other additives if they are suitable." If the State's intent is to limit the use of additives to only magnesium hydroxide, it should clearly establish that in the permit. However, the State may want to address the use of other additives via alternative operating scenarios, or another type of procedure.
2. Section II, Facility-Wide Conditions.

Condition 7 should be identified as "Not Federally Enforceable."

Condition 8, as written does not appear to be complete. It seems as though the language, "No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions." should be added as the first sentence in the paragraph.

3. Condition B.6 states that Unit-003 is subject to a NO<sub>x</sub> standard such that "emissions shall not exceed 4.75 lb per million Btu heat input. These limits shall apply at all times except during periods of startup, shutdown, or malfunction as provided by Rule 62-210.700, F.A.C." Condition B.8 requires infrequent testing, on the order of "Annual emission testing shall be conducted during each federal fiscal year (October 1 - September 30). In addition, testing is waived entirely during years in which units operate less than 400 hours." Because this requirement

entails infrequent sampling, we recommend that information justifying this frequency be added to the statement of basis. Such justification could include a demonstration that the unit is unlikely to exceed this limit.

## Appendix H-1, Permit History/ID Number Changes

Florida Power & Light  
Turkey Point

[DRAFT/PROPOSED/FINAL]Permit No.: 0250003-001-AV  
Facility ID No.: 0250003

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### Permit History (for tracking purposes):

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u>	<u>Revised Date(s)</u>
-001	404 MW Steam Generating Unit #1	AO13-238939	12/23/93	12/01/98		
-002	404 MW Steam Generating Unit #2	AO13-238932	01/07/94	12/01/98		

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### (if applicable) ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 50DAD130003

To: **Facility ID No.:** 0250003

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Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southeast District  
P.O. Box 15425  
West Palm Beach, Florida 33416

Virginia B. Wetherell  
Secretary

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

FILE

FEB 3 1994

Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801

Dade County  
AP - Florida Power & Light Company  
Turkey Point No. 1

Dear Ms. Bishop:

Re: Modification of Conditions, Permit Number AO 13-238939

We are in receipt of your request for a modification of the above permit. The permit is changed as follows:

1. FROM: Page 1 of 8 - Unit Description

"OPERATE: An air pollution source consisting of a 404MW Steam Generating Unit..."

TO: "OPERATE: An air pollution source consisting of a 400MW Class (440MW gross capacity) Steam Generating Unit..."

2. FROM: Page 4 of 8 - Specific Condition 3 - SO2 Limiting Standard

"Sulfur Dioxide 2.75 lb./MMBtu"

TO: "Sulfur Dioxide 1.1 lb./MMBtu" In compliance with Dade County Code sec. 24-17.

3. FROM: Page 5 of 8 - Specific Condition - Footnote (7)

" F.A.C. 176-210.700(3)"

TO: "F.A.C. 17-210.700(3)"

Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801  
Page 2

Permit No. AO 13-238939

4. FROM: Page 6 of 8 - Specific Condition 6(c)

"F.A.C. 17-0210.700(3)"

TO: "F.A.C. 17-210.700(3)"

5. FROM: Page 7 of 8 - Specific Condition 7(d)

"Monthly reports of the quantities of used oil burned and the sample analysis..."

TO: "On a quarterly basis, for each quarter during which used oil is burned, FPL shall submit reports of the monthly quantities of used oil burned and the sample analysis..."

This letter must be attached to the original permit and becomes part of that permit.

This letter constitutes final agency action unless a person substantially affected by this action requests an administrative hearing pursuant to Section 120.57, Florida Statutes. The petition must be filed within fourteen (14) days from receipt of this letter. The petition must comply with the requirements of Florida Administrative Code Rule 28-5.201 and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Protection at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions which are not filed in accordance with the above provisions will not be accepted by the Department if a formal proceeding pursuant to Section 120.57(1) is requested, at such formal hearing all parties shall have an opportunity to respond to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal proceeding is requested, the agency will, in accordance with its rules of procedure, give 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. The hearing process is designed to formulate agency action. Accordingly, the Department's final action as a result of a hearing may be different from the position taken by it in this stage. Therefore any person who may wish to contest the Department's ultimate permitting decision must petition for hearing within the fourteen day period described above. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801  
Page 3

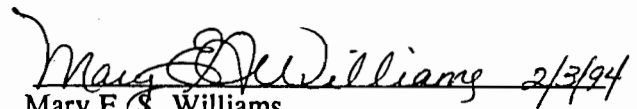
Permit No. AO 13-238939

This modification 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 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 modification will not be effective until further Order of the Department.

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

MESW/sb/ms

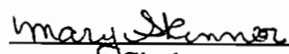
STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Mary E. S. Williams  
Director of District Management  
F.D.E.P., Southeast District  
P.O. Box 15425  
West Palm Beach, FL 33416  
407/433-2650

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF MODIFICATION OF PERMIT and all copies were mailed before the close of business on FEB 7 1994 to the listed persons.

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

  
Clerk FEB 3 1994  
Date

cc: Dade County Environmental Resources Management



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southeast District  
P.O. Box 15425  
West Palm Beach, Florida 33416

Virginia B. Wetherell  
Secretary

**PERMITTEE:**

Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03-01 RA  
PERMIT/CERTIFICATION NUMBER: AO 13-238939\*  
DATE OF ISSUE: DEC 23 1993  
EXPIRATION DATE: December 1, 1998  
COUNTY: Dade  
LATITUDE/LONGITUDE: 25°26'09"N/80°19'52"W  
UTM: Zone 17; 567.2 Km. E; 2813.2 Km. N  
PROJECT: Florida Power and Light Company  
Turkey Point Power Plant, Unit No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-296 and 297, and in conformance with all existing regulations of the Florida Department of Environmental Protection. 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:

**OPERATE:** An air pollution source consisting of a 404 MW Steam Generating Unit 1 that burns a variable combination of natural gas, used oil fuel from FP & L operation and, No. 6 fuel oil; maximum heat input is 4,025 MBTU/hr. on natural gas. It discharges its pollutants through a stack 400 feet above ground level. The unit is equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in the stack.

**IN ACCORDANCE WITH:** Application for Renewal of Permit to Operate Air Pollution Sources received October 4, 1993; Application for Renewal of Permit to Operate Air Pollution Sources received September 30, 1988; letters dated May 7, 1984 and September 8, 1983, and Application to Operate Air Pollution Sources dated August 28, 1978. (none are attached)

**LOCATED AT:** Palm Drive 9.5 miles east of Florida City, Dade County, Florida.

**TO SERVE:** An electric service utility (SIC # 4911).

**SUBJECT TO:** General Conditions 1-14 and Specific Conditions 1-9.

\*This permit is a renewal of AO 13-155469 issued March 13, 1989, which was a renewal of AO 13-72634 issued December 9, 1983, and a modification of AO 13-155469 issued December 22, 1988.

## GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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 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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under the conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) Sample or monitor 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 the permit, the permittee shall immediately notify and provide the Department with the following information:
  - (a) A description of and cause of noncompliance; and



GENERAL CONDITIONS:

- (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. 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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.
- (b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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.

14. 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 the 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:  
 Ms. Elsa A. Bishop, Manager  
 Air Permitting and Programs  
 Florida Power and Light Company  
 North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03  
 PERMIT/CERTIFICATION NUMBER: AO 13-238939  
 DATE OF ISSUE: DEC 23 1993  
 EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

1. **Heat Input Rate:**

The permitted heat input rates for this source are 3,850 MMBtu/hr. on fuel oil and 4,025 MMBtu/hr. on natural gas.

2. **Permitted Fuels:**

This source shall be fired with a variable combination of No. 6 residual fuel oil, No. 2 fuel oil, natural gas, propane and on-specification used oil from FPL operations.

3. **Source Emission Limiting Standards and Compliance Testing Requirements:**

Pollutant	Emissions <sup>1</sup> Limiting Stds.	Testing Frequency <sup>2</sup>			Test <sup>3</sup> Method
		Annual	Quarterly	Other	
<b>Particulate Matter:</b>					
Steady State	0.1 lb/MMBtu	X	-	-	EPA <sup>5</sup> Method 5 or 17
Sootblowing	0.3 lb./MMBtu; Max. 3 hrs.	X	-	-	EPA <sup>5</sup> Method 5 or 17
Sulfur Dioxide	2.75 lb./MMBtu / /	X	-	-	Monthly Fuel Analysis <sup>8</sup>
<b>Visible Emissions:</b>					
Steady State <sup>4</sup>	40% Opacity	X	-	-	DEP <sup>6</sup> Method 9
Sootblowing <sup>7</sup>	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	X	-	-	DEP <sup>6</sup> 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 opacity CEM	-	-	-	-

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03  
PERMIT/CERTIFICATION NUMBER: AO 13-238939  
DATE OF ISSUE: DEC 23 1993  
EXPIRATION DATE: December 1, 1998

#### SPECIFIC CONDITIONS:

##### Footnotes:

- (1) F.A.C. 17-210.700(3) and F.A.C. 17-296.405(1)
- (2) F.A.C. 17-297.340
- (3) F.A.C. 17-297.330
- (4) This source has been authorized by Order of the Department's Secretary dated April 24, 1984, to test particulate matter emissions and visible emissions annually with a 40% opacity limit.
- (5) EPA Method 17 may be used only if the stack gas exit temperature is less than 375°F.
- (6) Actual transmissometer data during steady state and sootblowing particulate matter emissions testing is acceptable in lieu of DEP Method 9 testing.
- (7) F.A.C. 17-210.700(3) allows up to 3 hours in a 24-hour period of excess emissions during sootblowing and load changing operations.
- (8) Stack testing for SO<sub>2</sub> is required if equivalent sulphur content exceeds 2.5%.

#### 4. Compliance Testing Related Requirements:

##### (a) Notification - F.A.C. 17-297.340(1)(i)

Notification of scheduled test dates shall be given to the Department Southeast District Office and the Dade County Environmental Resources Management at least 15 days prior to testing unless otherwise agreed to by the Department.

##### (b) Conditions

Compliance testing of emissions should be conducted with the source firing No. 6 fuel oil or a combination of fuel oil and natural gas, and operating within 10 percent of its rated capacity. Testing may be conducted with the source operating at less than 90 percent of rated capacity; however, if so, subsequent source operation is limited to up to 110 percent of the average 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 the permit, with prior notification to the Department.

##### (c) Stack Sampling Facility - F.A.C. 17-297.345

The stack sampling facility must comply with Rule 17-0297, F.A.C.

##### (d) Report Submittal - F.A.C. 17-297.570(2)

A copy of the test results shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management within 45 days after the last test run is completed.

#### 5. Annual Operations Report (AOR):

On or before March 1 of each calendar year, a completed DEP Form 17-210.900(4), Annual Operations Report Form for Air Emissions Sources shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management.

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03  
PERMIT/CERTIFICATION NUMBER: AO 13-238939  
DATE OF ISSUE: DEC 23 1993  
EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

6. Excess Emissions

(a) Events - F.A.C. 17-210.700

Excess emissions resulting from start-up, shut-down or malfunction 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.

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction are prohibited.

(b) Notification - F.A.C. 17-4.130:

In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Department's Southeast District Office and the Dade County Environmental Resources Management. Notification shall be conducted in accordance with General Conditions (8) of this permit.

(c) Report Submittal:

In addition to the requirements of General Condition No. 8. of the permit, a written quarterly report shall be submitted to the Department's Southeast District Office and the Dade County Environmental Resources Management of all opacity exceedances of emission limitations specified in F.A.C. 17-0210.700(3) and 17-296.405. The report shall state the cause, period of noncompliance, steps taken for corrective action, and steps taken to prevent recurrence. If compliance cannot be determined due to opacity monitor malfunction or for any other reason, the report shall state the cause, duration and action taken. The Department shall also be notified which there are no exceedances for a quarter. All recorded data shall be maintained on file by the permittee for no less than two years and made available to the Department upon request.

7. Used Oil Handling:

Burning of used oil shall be permitted under the following conditions:

- (a) The used oil fuel shall originate from FPL operations and shall meet the EPA specification levels under 40 CFR 266.40(e) and 40 CFR 279, Subpart B. Furthermore, the used oil shall be burned in accordance with the Department's Policy Memorandum of January 5, 1987.

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03  
PERMIT/CERTIFICATION NUMBER: AO 13-238939  
DATE OF ISSUE: DEC 23 1993  
EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

- (b) Each batch of used oil to be burned shall be sampled and analyzed for: arsenic, chromium, cadmium, total halogens, lead, and flash point using EPA/DEP or ASTM approved methods. Split samples of the used oil shall be retained for three (3) months and made available for further testing if necessary.
- (c) Results of used oil sampling and analysis performed pursuant to Specific Condition 7(b) shall be retained by the permittee for at least three (3) years and made available for inspection by the Department upon request.
- (d) Monthly reports of the quantities of used oil burned and the sample analyses performed pursuant to Specific Condition No. 7 (b) shall be submitted to the Department's Southeast District Office. Furthermore, those reported quantities of burned used oil and the associated sample analyses shall be included in the Annual Operation Report (AOR) for Air Emissions Sources.

**8. Permit Renewal - F.A.C. 17-4.09:**

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

**9. New Specific Conditions for NO<sub>x</sub> RACT**

- R-1. The boiler fuel firing rate shall not exceed 3,850 MMBtu/hr. during fuel oil firing or 4,025 MMBtu/hr. during gas firing. The boiler may be operated 8,760 hours per year.
- R-2. NO<sub>x</sub> emissions from the boiler stack shall not exceed the following limits based on a 30-day rolling average:

	<u>Natural Gas</u>	<u>Fuel Oil</u>
lbs./MMBtu	.40	.53
lbs./hr.	1,610	2,041

These limits shall be effective upon installation of NO<sub>x</sub> emission controls or no later than May 31, 1995, whichever first occurs, and shall apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C. Rule 17-210.700.

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/03  
PERMIT/CERTIFICATION NUMBER: AO 13-238939  
DATE OF ISSUE: DEC 23 1993  
EXPIRATION DATE: December 1, 1998

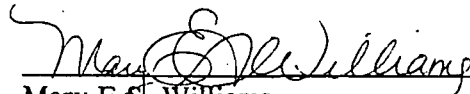
**SPECIFIC CONDITIONS:**

- R-3. As of January 1, 1995, a continuous monitoring system for NO<sub>x</sub> emissions shall be installed, calibrated, maintained and operated and the output recorded for determining the compliance with the NO<sub>x</sub> emission limits in Specific Condition R-2. Determination of compliance shall be in accordance with the testing, compliance, emission monitoring, reporting, recordkeeping, certification and quality assurance provisions of 40 CFR 60, Subpart Da and 40 CFR 60.46a, 60.48a, 60.49a and Appendices B and F of 40 CFR 60. This condition shall be amended as necessary to implement the provisions of 40 CFR 75 when the State implements Title IV, CAA, for sources subject to those requirements.

MESW/hah/ms

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
\_\_\_\_\_  
Mary E.S. Williams  
Director of District Management



# Florida Department of Environmental Regulation

Southeast District • 1900 S. Congress Ave., Suite A • West Palm Beach, Florida 33406 • 407-964-9668

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary  
Scott Benyon, Deputy Assistant Secretary

PERMITTEE:  
Mr. T. R. Fair, Manager  
Environmental Permitting & Programs  
Florida Power & Light  
P. O. Box 14000  
Juno Beach, FL 33408

I.D. NUMBER: 50/DAD/13/0003/01  
PERMIT/CERTIFICATION NUMBER: AO 13-155469\*  
DATE OF ISSUE: MAR. 13 1989  
EXPIRATION DATE: December 1, 1993  
COUNTY: Dade  
LATITUDE/LONGITUDE: 25°26'09"N/80°19'52"W  
UTM: Zone 17; 567.2 Km. E; 2813.2 Km. N  
PROJECT: Florida Power & Light Co.  
Turkey Point Unit No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-2, and in conformance with all existing regulations of the Florida Department of Environmental Regulation. 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:

OPERATE: An air pollution source consisting of a 404 MW Steam Generating Unit 1 burning a variable combination of natural gas, used oil fuel from FP & L operation and No. 6 fuel oil with a maximum heat input of 4025 MBTU/hr. on natural gas, discharging pollutants through a stack 400 feet above ground level. The unit is equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in the stack.

IN ACCORDANCE WITH: Application for Renewal of Permit to Operate Air Pollution Sources received September 30, 1988, letters dated May 7, 1984 and September 8, 1983 and Application to Operate Air Pollution Sources dated August 28, 1978 (none are attached).

LOCATED AT: Palm Drive 9.5 miles east of Florida City, Dade County, Florida.

TO SERVE: An electric service utility (SIC # 4911).

SUBJECT TO: General Conditions 1-17.(d) and Specific Conditions 1-7.

\* This permit is a renewal of AO 13-72634 issued December 9, 1983, and a modification of AO 13-155469 issued December 22, 1988.

PERMITTEE:  
 Mr. T. R. Fair, Manager  
 Environmental Permitting Programs  
 Florida Power & Light

I. D. NUMBER: 50/DAD/13/0003/01  
 PERMIT/CERTIFICATE NUMBER: AO-13-155469  
 DATE OF ISSUE: MAR. 3 1989  
 EXPIRATION DATE: December 1, 1993

**SPECIFIC CONDITIONS:**

**(1) Permitted Fuels:**

This source shall be fired with No. 6 Residual Oil, Natural Gas, No. 2 Fuel Oil, Propane Gas or On-specification Used Oil from FPL operations.

**(2) Source Emission Limiting Standards and Compliance Testing Requirements:**

POLLUTANT	EMISSION 1 LIMITING SYDS.	TESTING FREQUENCY 2			TEST 3 METHOD
		ANNUAL	QUARTERLY	OTHER	
<b>Particulate Matter</b>					
- Steady State	0.1 lb/MMBtu	X	----	----	EPA Method 5 or 17*
- Sootblowing	0.3 lb/MMBtu; Max. 3 hrs.	X	----	----	EPA Method 5 or 17*
Sulfur Dioxide	2.75 lb/MMBtu	----	----	X	Monthly Fuel Analysis**
<b>Visible Emissions</b>					
- Steady State	40% Opacity	X	----	----	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	X	----	----	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.

*not req'd as it's in 17-296.405(1)*

- 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) *+FR TO 17-291*

\*\* NOTE: Stack testing for SO<sub>2</sub> is required if the equivalent sulfur content exceeds 2.5%.

**(3) Compliance Testing Related Requirements:**

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

Notification of scheduled test dates shall be given to the Department Southeast District Office and the Dade County Environmental Resources Management at least 15 days prior to testing unless otherwise agreed to by the Department.



PERMITTEE:  
Mr. T. R. Fair, Manager  
Environmental Permitting & Programs  
Florida Power & Light

I.D. NUMBER: 50/DAD/06/0003/01  
PERMIT/CERTIFICATION NUMBER: AO 06-155469  
DATE OF ISSUE: MAR 13 1989  
EXPIRATION DATE: December 1, 1993

**SPECIFIC CONDITIONS:**

(b) Conditions

Testing of emissions should be conducted 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.

A particulate test to show compliance must be conducted within sixty (60) days if the monthly fuel analysis of the equivalent sulfur content of the fuel burned (fuel oil and/or natural gas combined) is increased by 0.5 percentage points or more from that used during the previous test.

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

A copy of the test results shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management within 45 days after the last test run is completed.

(4) Annual Operations Report - FAC 17-4.140:

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 Southeast District Office and the Dade County Environmental Resources Management, including formulas with input and output data.

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

Excess emissions resulting from start-up, shut-down or malfunction 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.

In addition to the requirements of General Condition 8 of this permit, a written quarterly report shall be submitted to the Department Southeast Florida District Office and the Dade County Environmental Resources Management of all opacity exceedances of emission limitations specified in Florida Administrative Code Rule 17-2.250(1) through (4) and 17-2.600(5)(b)1. The report shall state the cause, period of non compliance, and steps taken for corrective action and/or prevention of recurrence. If the opacity level cannot be determined due to an opacity monitor malfunction or for any other reason, the report shall state the cause, duration and action taken. All recorded data shall be maintained on file by the permittee for no less than two years and made available to the Department upon request.

(6) Used Oil Handling:

Burning of used oil meeting EPA specifications (40 CFR S266.40) and generated from FPL operations 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, 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.

PERMITTEE:  
Mr. T. R. Fair, Manager  
Environmental Permitting Programs  
Florida Power & Light

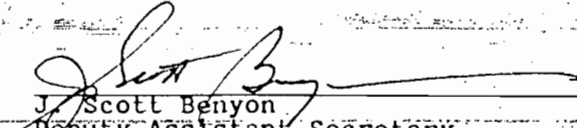
I.D. NUMBER: 50/DAD/13/0003/01  
PERMIT/CERTIFICATE NUMBER: AO 13-155469  
DATE OF ISSUE: MAR 13 1989  
EXPIRATION DATE: December 1, 1993

SPECIFIC CONDITIONS:

- (b) Results of used oil sampling and analysis performed pursuant to Specific Condition 6 (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. The permittee will submit with the AOR a summary of the range of values for each constituent analyzed pursuant to Specific Condition 6(a).
- (7) The permittee shall be aware of and operate under the attached "General Permit Conditions #1 through 17(d)". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

Issued this 13<sup>th</sup> day of March, 1989

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
J. Scott Benyon  
Deputy Assistant Secretary



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southeast District  
P.O. Box 15425  
West Palm Beach, Florida 33416

Virginia B. Wetherell  
Secretary

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

FILE

FEB 3 1994

Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801

Dade County  
AP - Florida Power & Light Company  
Turkey Point No. 2

Dear Ms. Bishop:

Re: Modification of Conditions, Permit Number AO 13-238932

We are in receipt of your request for a modification of the above permit. The permit is changed as follows:

1. FROM: Page 1 of 8 - Unit Description

"OPERATE: An air pollution source consisting of a 404MW Steam Generating Unit..."

TO: "OPERATE: An air pollution source consisting of a 400MW Class (440MW gross capacity) Steam Generating Unit..."

2. FROM: Page 4 of 8 - Specific Condition 3 - SO2 Limiting Standard

"Sulfur Dioxide 2.75 lb./MMBtu"

TO: "Sulfur Dioxide 1.1 lb./MMBtu" In compliance with Dade County Code sec. 24-17.

3. FROM: Page 7 of 8 - Specific Condition 7(d)

"Monthly reports of the quantities of used oil burned and the sample analysis..."

TO: "On a quarterly basis, for each quarter during which used oil is burned, FPL shall submit reports of the monthly quantities of used oil burned and the sample analysis..."

Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801  
Page 2

Permit No. AO 13-238932

This letter must be attached to the original permit and becomes part of that permit.

This letter constitutes final agency action unless a person substantially affected by this action requests an administrative hearing pursuant to Section 120.57, Florida Statutes. The petition must be filed within fourteen (14) days from receipt of this letter. The petition must comply with the requirements of Florida Administrative Code Rule 28-5.201 and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Protection at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions which are not filed in accordance with the above provisions will not be accepted by the Department if a formal proceeding pursuant to Section 120.57(1) is requested, at such formal hearing all parties shall have an opportunity to respond to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal proceeding is requested, the agency will, in accordance with its rules of procedure, give 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. The hearing process is designed to formulate agency action. Accordingly, the Department's final action as a result of a hearing may be different from the position taken by it in this stage. Therefore any person who may wish to contest the Department's ultimate permitting decision must petition for hearing within the fourteen day period described above. Failure to file a request for hearing within this time period shall constitute a waiver of any right such person may have to request a hearing under Section 120.57, Florida Statutes.

This modification 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 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 modification will not be effective until further Order of the Department.

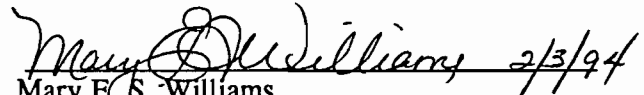
Ms. Elsa A. Bishop, Manager  
Air Permitting & Programs  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801  
Page 3

Permit No. AO 13-238932

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

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

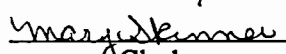
MESW/sb/ms

  
Mary E. S. Williams  
Director of District Management  
F.D.E.P., Southeast District  
P.O. Box 15425  
West Palm Beach, FL 33416  
407/433-2650

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF MODIFICATION OF PERMIT and all copies were mailed before the close of business on FEB 7 1994 to the listed persons.

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

  
Clerk                      FEB 3 1994  
Date

cc: Dade County Environmental Resources Management



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southeast District  
P.O. Box 15425  
West Palm Beach, Florida 33416

Virginia B. Wetherell  
Secretary

## FILE

### NOTICE OF PERMIT ISSUANCE

#### CERTIFIED MAIL

JAN 07 1994

In the Matter of an Application  
for Permit by:

Ms. Elsa A. Bishop, Manager /  
Air Permitting and Programs /  
Florida Power and Light Company /  
P.O. Box 088801 /  
North Palm Beach, Florida 33408-8801 /

DEP File No. AO 13-238932  
Dade County

Enclosed is Permit Number AO 13-238932 to operate an air pollution source issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit 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. 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.

Ms. Elsa A. Bishop, Manager  
 Air Permitting and Programs  
 Florida Power & Light Company  
 P.O. Box 088801  
 North Palm Beach, Florida 33408-8801  
 Page 2

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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt 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.

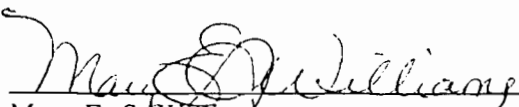
This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit 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, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida.

MESW/hah/ms

STATE OF FLORIDA DEPARTMENT  
 OF ENVIRONMENTAL PROTECTION

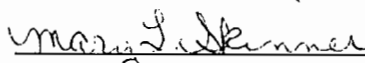
  
 Mary E. S. Williams  
 Director of District Management

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by the close of business on JAN 07 1994 to the listed persons.

Clerk Stamp

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

  
 O (Clerk) JAN 07 1994  
 (Date)

cc: Dade County Environmental Resources Management



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southeast District  
P.O. Box 15425  
West Palm Beach, Florida 33416

Virginia B. Wetherell  
Secretary

**PERMITTEE:**

Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DAD/13/0003/04  
PERMIT/CERTIFICATION NUMBER: AO 13-238932\*  
DATE OF ISSUE: JAN 07 1994  
EXPIRATION DATE: December 1, 1998  
COUNTY: Dade  
LATITUDE/LONGITUDE: 25°26'09"N/80°19'52"W  
UTM: Zone 17; 567.2 Km. E; 2813.2 Km. N  
PROJECT: Florida Power and Light Company  
Turkey Point Power Plant, Unit No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-296 and 297, and in conformance with all existing regulations of the Florida Department of Environmental Protection. 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:

**OPERATE:** An air pollution source consisting of a 404 MW Steam Generating Unit 2 that burns a variable combination of natural gas, used oil fuel from FP & L operation and, No. 6 fuel oil with a maximum heat input of 4,025 MBTU/hr. on natural gas, discharging its pollutants through a stack 400 feet above ground level. The unit is equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in the stack.

**IN ACCORDANCE WITH:** Application for Renewal of Permit to Operate Air Pollution Sources received October 4, 1993; Application for Renewal of Permit to Operate Air Pollution Sources received September 30, 1988; letters dated May 7, 1984 and September 8, 1983, and Application to Operate Air Pollution Sources dated August 28, 1978. (none are attached)

**LOCATED AT:** Palm Drive 9.5 miles east of Florida City, Dade County, Florida.

**TO SERVE:** An electric service utility (SIC # 4911).

**SUBJECT TO:** General Conditions 1-14 and Specific Conditions 1-9.

\*This permit is a renewal of AO 13-155471 issued March 13, 1989, which was a renewal of AO 13-72637 issued December 9, 1983, and a modification of AO 13-155471 issued December 22, 1988.



## GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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 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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under the conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) Sample or monitor 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 the permit, the permittee shall immediately notify and provide the Department with the following information:
  - (a) A description of and cause of noncompliance; and

GENERAL CONDITIONS:

- (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. 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 for 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.
- (b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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.

14. 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 the 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:

I.D. NUMBER: 50/DA 13/0003/04

Ms. Elsa A. Bishop, Manager

PERMIT/CERTIFICATION NUMBER: AO-13-238932

Air Permitting and Programs

DATE OF ISSUE: JAN 07 1994

Florida Power and Light Company

EXPIRATION DATE: December 1, 1998

North Palm Beach, Florida 33408-8801

**SPECIFIC CONDITIONS:**1. **Heat Input Rate:**

The permitted heat input rates for this source are 3,850 MMBtu/hr. on fuel oil and 4,025 MMBtu/hr. on natural gas.

2. **Permitted Fuels:**

This source shall be fired with a variable combination of No. 6 residual fuel oil, No. 2 fuel oil, natural gas, propane and on-specification used oil from FPL operations.

3. **Source Emission Limiting Standards and Compliance Testing Requirements:**

Pollutant	Emissions <sup>1</sup> Limiting Stds.	Testing Frequency <sup>2</sup>			Test <sup>3</sup> Method
		Annual	Quarterly	Other	
<b>Particulate Matter:</b>					
Steady State	0.1 lb/MMBtu	X	-	-	EPA <sup>5</sup> Method 5 or 17
Sootblowing	0.3 lb./MMBtu; Max. 3 hrs.	X	-	-	EPA <sup>5</sup> Method 5 or 17
Sulfur Dioxide	2.75 lb./MMBtu 1.1	-	-	X	Monthly Fuel Analysis <sup>8</sup>
<b>Visible Emissions:</b>					
Steady State <sup>4</sup>	40% Opacity	X	-	-	DEP <sup>6</sup> Method 9
Sootblowing <sup>7</sup>	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	X	-	-	DEP <sup>6</sup> Method 9
Load Changing <sup>7</sup>	60% Opacity; for up to 3 hrs. in 24 hrs., with up to 4 6-min. periods of up to 100% if unit has opacity CEM	-	-	-	-

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/DA 13/0003/04  
PERMIT/CERTIFICATION NUMBER: AO 13-238932  
DATE OF ISSUE: JAN 07 1994  
EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

3. (Continued)

**Footnotes:**

- (1) F.A.C. 17-210.700(3) and F.A.C. 17-296.405(1)
- (2) F.A.C. 17-297.340
- (3) F.A.C. 17-297.330
- (4) This source has been authorized by Order of the Department's Secretary dated April 24, 1984, to test particulate matter emissions and visible emissions annually with a 40% opacity limit.
- (5) EPA Method 17 may be used only if the stack gas exit temperature is less than 375°F.
- (6) Actual transmissometer data during steady state and sootblowing particulate matter emissions testing is acceptable in lieu of DEP Method 9 testing.
- (7) F.A.C. 17-210.700(3) allows up to 3 hours in a 24-hour period of excess emissions during sootblowing and load changing operations.
- (8) Stack testing for SO<sub>2</sub> is required if equivalent sulphur content exceeds 2.5%.

4. **Compliance Testing Related Requirements:**

- (a) Notification - F.A.C. 17-297.340(1)(i)

Notification of scheduled test dates shall be given to the Department Southeast District Office and the Dade County Environmental Resources Management at least 15 days prior to testing unless otherwise agreed to by the Department.

- (b) Conditions

Compliance testing of emissions should be conducted with the source firing No. 6 fuel oil or a combination of fuel oil and natural gas, and operating within 10 percent of its rated capacity. Testing may be conducted with the source operating at less than 90 percent of rated capacity; however, if so, subsequent source operation is limited to up to 110 percent of the average 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 the permit, with prior notification to the Department.

- (c) Stack Sampling Facility - F.A.C. 17-297.345

The stack sampling facility must comply with Rule 17-297, F.A.C.

- (d) Report Submittal - F.A.C. 17-297.570(2)

A copy of the test results shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management within 45 days after the last test run is completed.

5. **Annual Operations Report (AOR):**

On or before March 1 of each calendar year, a completed DEP Form 17-210.900(4), Annual Operations Report Form for Air Emissions Sources shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management.

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/D. 13/0003/04  
PERMIT/CERTIFICATION NUMBER: AO 13-238932  
DATE OF ISSUE: JAN 07 1994  
EXPIRATION DATE: December 1, 1998

## SPECIFIC CONDITIONS:

### 6. Excess Emissions

#### (a) Events - F.A.C. 17-210.700

Excess emissions resulting from start-up or shut-down 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 provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for longer duration.

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction are prohibited.

#### (b) Notification - F.A.C. 17-4.130:

In the event the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Department's Southeast District Office and the Dade County Environmental Resources Management. Notification shall be conducted in accordance with General Conditions (8) of this permit.

#### (c) Report Submittal:

In addition to the requirements of General Condition No. 8. of the permit, a written quarterly report shall be submitted to the Department's Southeast District Office and the Dade County Environmental Resources Management of all opacity exceedances of emission limitations specified in F.A.C. 17-210.700(3) and 17-296.405. The report shall state the cause, period of noncompliance, steps taken for corrective action, and steps taken to prevent recurrence. If compliance cannot be determined due to opacity monitor malfunction or for any other reason, the report shall state the cause, duration and action taken. The Department shall also be notified when there are no exceedances for a quarter. All recorded data shall be maintained on file by the permittee for no less than two years and made available to the Department upon request.

### 7. Used Oil Handling:

Burning of used oil shall be permitted under the following conditions:

- (a) The used oil fuel shall originate from FPL operations and shall meet the EPA specification levels under 40 CFR 266.40(e) and 40 CFR 279, Subpart B. Furthermore, the used oil shall be burned in accordance with the Department's Policy Memorandum of January 5, 1987.

**PERMITTEE:**

Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/D/ '13/0003/04

PERMIT/CERTIFICATION NUMBER: AO 13-238932

DATE OF ISSUE: JAN 07 1994

EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

7. (Continued)

- (b) Each batch of used oil to be burned shall be sampled and analyzed for: arsenic, chromium, cadmium, total halogens, lead, and flash point using EPA/DEP or ASTM approved methods. Split samples of the used oil shall be retained for three (3) months and made available for further testing if necessary.
- (c) Results of used oil sampling and analysis performed pursuant to Specific Condition 7(b) shall be retained by the permittee for at least three (3) years and made available for inspection by the Department upon request.
- (d) Monthly reports of the quantities of used oil burned and the sample analyses performed pursuant to Specific Condition No. 7 (b) shall be submitted to the Department's Southeast District Office. Furthermore, those reported quantities of burned used oil and the associated sample analyses shall be included in the Annual Operation Report (AOR) for Air Emissions Sources.

8. Permit Renewal - F.A.C. 17-4.09:

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

9. New Specific Conditions for NO<sub>x</sub>RACT

- R-1. The boiler fuel firing rate shall not exceed 3,850 MMBtu/hr. during fuel oil firing or 4,025 MMBtu/hr. during gas firing. The boiler may be operated 8,760 hours per year.
- R-2. NO<sub>x</sub> emissions from the boiler stack shall not exceed the following limits based on a 30-day rolling average:

	<u>Natural Gas</u>	<u>Fuel Oil</u>
lbs./MMBtu	.40	.53
lbs./hr.	1,610	2,041

These limits shall be effective upon installation of NO<sub>x</sub> emission controls or no later than May 31, 1995, whichever first occurs, and shall apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C. Rule 17-210.700.

PERMITTEE:  
Ms. Elsa A. Bishop, Manager  
Air Permitting and Programs  
Florida Power and Light Company  
North Palm Beach, Florida 33408-8801

I.D. NUMBER: 50/D. '13/0003/04  
PERMIT/CERTIFICATION NUMBER: AO 13-238932  
DATE OF ISSUE: JAN 07 1994  
EXPIRATION DATE: December 1, 1998

**SPECIFIC CONDITIONS:**

9. (Continued)

- R-3. As of January 1, 1995, a continuous monitoring system for NO<sub>x</sub> emissions shall be installed, calibrated, maintained and operated and the output recorded for determining compliance with the NO<sub>x</sub> emission limits in Specific Condition R-2. Determination of compliance shall be in accordance with the testing, compliance, emission monitoring, reporting, recordkeeping, certification and quality assurance provisions of 40 CFR 60, Subpart Da and 40 CFR 60.46a, 60.48a, 60.49a and Appendices B and F of 40 CFR 60. This condition shall be amended as necessary to implement the provisions of 40 CFR 75 when the State implements Title IV, CAA, for sources subject to those requirements.

MESW/hah/ms

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Mary E. Williams  
Director of District Management



# Florida Department of Environmental Regulation

Southeast District • 1900 S. Congress Ave., Suite A • West Palm Beach, Florida 33406 • 407-964-9668

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary  
Scott Benyon, Deputy Assistant Secretary

PERMITTEE:  
#r. T. R. Fair, Manager  
Environmental Permitting & Programs  
Florida Power & Light  
P. O. Box 14000  
Juno Beach, FL 33408

I.D. NUMBER: 50/DAD/13/0003/02  
PERMIT/CERTIFICATION NUMBER: AO 13-155471\*  
DATE OF ISSUE: DEC. 22 1988  
EXPIRATION DATE: December 1, 1993  
COUNTY: Dade  
LATITUDE/LONGITUDE: 25°26'09"N/80°19'52"W  
UTM: Zone 17; 567.2 Km. E; 2813.2 Km. N  
PROJECT: Florida Power & Light Co.  
Turkey Point Unit No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-2, and in conformance with all existing regulations of the Florida Department of Environmental Regulation. 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:

OPERATE: An air pollution source consisting of a 404 MW Steam Generating Unit 2 burning a variable combination of natural gas and No. 6 fuel oil with a maximum heat input of 3850 MBTU/hr. on No. 6 fuel oil, discharging pollutants through a stack 400 feet above ground level. The unit is equipped with low excess air burners and UOP Air Correction Division multiple cyclones with reinjection. Visible emissions are monitored by a transmissometer in the stack.

IN ACCORDANCE WITH: Application for Renewal of Permit to Operate Air Pollution Sources received September 30, 1988, letters dated May 7, 1984 and September 8, 1983 and Application to Operate Air Pollution Sources dated August 8, 1978. (none are attached).

LOCATED AT: Palm Drive 9.5 miles east of Florida City, Dade County, Florida.

TO SERVE: An electric service utility (SIC # 4911).

SUBJECT TO: General Conditions 1-15 and Specific Conditions 1-6.

\* This permit is a renewal of AO 13-72637 issued December 9, 1983.



PERMITTEE:  
 Mr. T. R. Fair, Manager  
 Environmental Permitting & Programs  
 Florida Power & Light

I.D. NUMBER: 50/DA 13/00/02  
 PERMIT/CERTIFICATION NUMBER: AO 13-1554/1  
 DATE OF ISSUE: DEC. 22 1988  
 EXPIRATION DATE: December 1, 1993

**SPECIFIC CONDITIONS:**

(1) Permitted Fuels:

These sources shall be fired with No. 6 Residual Oil, Natural Gas, No. 2 Fuel Oil, Propane Gas or On-specification Used Oil from FPL operations.

(2) 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	X	----	----	EPA Method 5 or 17*
- Sootblowing	0.3 lb/MMBtu; Max. 3 hrs.	X	----	----	EPA Method 5 or 17*
Sulfur Dioxide	2.75 lb/MMBtu	----	----	X	Monthly Fuel Analysis*
Visible Emissions					
- Steady State	40% Opacity	X	----	----	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	X	----	----	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)

\* NOTE: Stack testing for SO<sub>2</sub> is required if the equivalent sulfur content exceeds 2.5%.

(3) Compliance Testing Related Requirements:

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

Notification of scheduled test dates shall be given to the Department Southeast District Office and the Dade County Environmental Resources Management at least 15 days prior to testing unless otherwise agreed to by the Department.

PERMITTEE: Mr. T. R. Fair, Manager  
Environmental Permitting & Programs  
Florida Power & Light

I.D. NUMBER: 50/DAD/13/0003/02.  
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DATE OF ISSUE: DEC. 22 1988  
EXPIRATION DATE: December 1, 1993

**SPECIFIC CONDITIONS:**

(b) Conditions

Testing of emissions should be conducted 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 purposes of additional compliance testing to regain rated capacity in permit, with prior notification to the Department.

A particulate test to show compliance must be conducted within sixty (60) days of the monthly fuel analysis of the equivalent sulfur content of the fuel burned (fuel oil and/or natural gas combined) is increased by 0.5 percentage points or more from that used during the previous test.

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

A copy of the test results shall be submitted to the Department Southeast District Office and the Dade County Environmental Resources Management within 45 days after the last test run is completed.

(4) Annual Operations Report - FAC 17-4.140:

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 Southeast District Office and the Dade County Environmental Resources Management, including formulas with input and output data.

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

Excess emissions resulting from start-up, shut-down or malfunction 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.

In addition to the requirements of General Condition 8 of this permit, a written quarterly report shall be submitted to the Department Southeast Florida District Office and the Dade County Environmental Resources Management of all opacity exceedances of emission limitations specified in Florida Administrative Code Rule 17-2.250(1) through (4) and 17-2.600(5)(b)1. The report shall state the cause, period of non compliance, and steps taken for corrective action and/or prevention of recurrence. If the opacity level cannot be determined due to an opacity monitor malfunction or for any other reason, the report shall state the cause, duration and action taken. All recorded data shall be maintained on file by the permittee for no less than two years and made available to the Department upon request.

6. Used Oil Handling:

Burning of used oil meeting EPA specifications (40 CFR S266.40) and generated from FPL operations 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, 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.

PERMITTEE:  
Mr. T. R. Fair, Manager  
Environmental Permitting & Programs  
Florida Power & Light

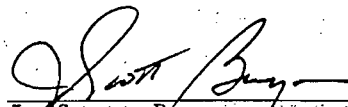
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**SPECIFIC CONDITIONS:**

- (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. The permittee will submit with the AOR a summary of the range of values for each constituent analyzed pursuant to Specific Condition 7(a).

Issued this 22<sup>nd</sup> day of December, 1988

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
J. Scott Benyon  
Deputy Assistant Secretary