



FPL

June 16, 2004

Trina L. Vielhauer, Chief
Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

JUN 17 2004

BUREAU OF AIR REGULATION

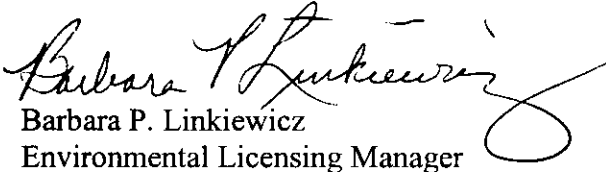
RE: FPL Turkey Point Fossil Plant
DEP File No. 0250003-006-AC (PSD-FL-338)
1150 MW Combined Cycle Unit No. 5

Dear Ms. Vielhauer:

The Public Notice was published in the Thursday, June 10th edition of the Miami Herald. This is a newspaper of general circulation in the area affected, pursuant to Chapter 50, Florida Statutes. The enclosed proof of publication, (i.e., newspaper affidavit) is being provided to the Department's Bureau of Air Regulation office within seven (7) days of publication.

If you have any questions regarding this matter, please feel free to contact me at (561) 691-7518.

Thank you,


Barbara P. Linkiewicz
Environmental Licensing Manager

BPL/sap

Enclosures: Miami Herald affidavit

cc: HGS – Peter Cunningham

FPL – Ed Nunez

FPL – John Gnecco

A. Yimiro

D. Nelson

J. Jittle SED

T. Wong, DEEM

B. Worley, EPA

C. Bursack, PPS

The Miami Herald

www.herald.com
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PUBLISHED DAILY
MIAMI-DADE-FLORIDA

STATE OF FLORIDA
COUNTY OF MIAMI-DADE

Before the undersigned authority personally
appeared:

JEANNETTE MARTINEZ

who on oath says that he/she is

CUSTODIAN OF RECORDS

of The Miami Herald, a daily newspaper published at
Miami in Miami-Dade County, Florida; that the
attached copy of advertisement was published in said
newspaper in the issues of:

June 10, 2004

Affiant further says that the said The Miami Herald
is a newspaper published at Miami, in the said
Miami-Dade County, Florida and that the said
newspaper has heretofore been continuously published
in said Miami-Dade County, Florida each day and has
been entered as second class mail matter at the post
office in Miami, in said Miami-Dade County, Florida,
for a period of one year next preceding the first
publication of the attached copy of advertisement;
and affiant further says that he has neither paid nor
promised any person, firm or corporation any discount,
rebate, commission or refund for the purpose of
securing this advertisement for publication in the said
newspapers(s).

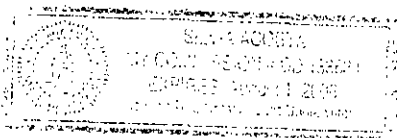
Sworn to and subscribed before me this
_ 15th day of _ June 2004

My Commission

Expires: August 1, 2006

Silvia Acosta

Notary



PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0250003-006-AC (PSD-FL-338)

FPL Turkey Point Fossil Plant, New Combined Cycle Unit 5
Miami-Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit under the requirements for the Quality to the Florida Power & Light Company. The permit is one of several authorizations needed to construct a nominal 1,150 MW existing Turkey Point Fossil Plant east of Homestead and Florida City, and adjacent to Biscayne Bay in Miami-Dade County. A determination (RACT) was required pursuant to Rule 62-212.400(6), Florida Administrative Code (FAC) for emissions of carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), sulfuric acid mist (SAM), and volatile organic compounds (VOC). The applicant's corporate address is Florida Power and Light Company, 33408.

The applicant proposes to construct a new electrical power generating unit (Unit 5). The primary components are: four combustion; fired heat recovery steam generators (HRSGs); a single steam-electrical generator; a 22-cell mechanical draft cooling tower; four exhaust storage tanks; and other associated support equipment.

Unit 5 will be permitted to operate continuously while firing inherently clean natural gas. Ultra low sulfur (0.0015 percent sulfur) distillate fuel oil will be permitted to be used as backup fuel for 500 hours per year per combustion turbine. Steam injection and firing of natural gas in the duct burners located within the HRSGs (supplemental firing) will be allowed for limited periods.

A selective catalytic reduction (SCR) system with ammonia injection will be used in conjunction with Dry Low-NO_x combustion (gas emissions). The proposed NO_x emission limit of 2.0 parts per million by volume, dry corrected to 15 percent oxygen (ppmv) @15% O₂, most protective standard for any project authorized to date in the Southeastern United States. Sufficient catalyst will be used to meet the proposed NO_x limit while firing ultra low sulfur fuel oil is 8 ppmv @15% O₂. The proposed CO emission limits of 4.1 and 8.0 ppm; respectively represent the lowest values guaranteed to-date without requiring oxidation catalyst. Typical CO emissions will actually be less than these values.

Emissions of CO, PM₁₀, SAM, SO₂, and VOC will be minimized by the efficient, high-temperature combustion of inherently clean natural gas. The proposed project will be continuously monitored to demonstrate compliance with the conditions of the permit. The complete set of proposed emission limits for Unit 5 is available at the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32309. For more information, contact the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32309.

The applicant's estimate of maximum potential annual emissions from Unit 5 are summarized in the following table:

Pollutant	Maximum Tons Per Year	PSD Significant Emission Rate Tons Per Year
CO	464	100
Pb	0.025	0.6
NO _x	312	40
PM ₁₀	420-229	25/15
SO ₂	193	40
SAM	19	7
VOC	68	40

According to the applicant, maximum predicted air quality impacts due to emissions from the proposed new project are less than those predicted for the Class I Everglades National Park (i.e. PSD Class II Areas). Therefore, multi-source modeling was not required for ambient air quality impacts in the Class I Everglades National Park (ENP) are less than the applicable significant impact levels except for the impacts. Therefore multi-source increment modeling was required for the 3-hour and 24-hour SO₂ and 24-hour PM₁₀ impacts; maximum predicted 3-hour and 24-hour SO₂ and 24-hour PM₁₀ increment consumption by the new project and by all project in the area.

Averaging Time	PM ₁₀ Increment Consumed in ug/m ³ and % at ENP		SO ₂ Increment Consumed in ug/m ³ and % at ENP
	By Project	All Sources	
24-hour	0.5 (10% of Allowable)	2.1 (42% of Allowable)	0.4 (8% of Allowable)
3-hour	No Analysis Required	No Analysis Required	2 (8% of Allowable)

Based on the required analyses, the Department has reasonable assurance that the proposed project will not cause or significantly contribute to a violation of the PSD program. A small impact on air quality related values (visibility) was projected to occur approximately 2 days in a year, instead of natural gas, and the ambient temperature is 35 degrees F. Because fuel oil will be used less than 10 percent of the time on the South Florida coastline, the coincidence of the factors that promote visibility impact is minimal. The probability of such an occurrence is very low.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in writing within 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue PSD Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32309. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed by the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. This PSD permitting action is subject to the Plant Siting Act (Sections 403.501-519, F.S.). If a petition for an administrative hearing on the Department's intent to issue the permit shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this process.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding under the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel, Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of its employees or agents shall be filed within 30 (thirty) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.04(1) shall be filed within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. The Department will schedule a hearing on the petition for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition with the Department within the time specified above does not constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.559 and 120.57 F.S., or to file a lawsuit. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with the Florida Rules of Civil Procedure.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) the name of the petitioner; (b) the name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner is affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) if there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the facts supporting the petitioner's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require the Department to take the action requested; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and that the petitioner does not dispute the material facts upon which the Department's action is based. Persons whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding under the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel, Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of its employees or agents shall be filed within 30 (thirty) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.04(1) shall be filed within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. The Department will schedule a hearing on the petition for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition with the Department within the time specified above does not constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.559 and 120.57 F.S., or to file a lawsuit. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with the Florida Rules of Civil Procedure.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday.

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32399-2400
Telephone: 904/438-1111

Department of Environmental Protection
Southeast District Office
400 North Congress Avenue
West Palm Beach, FL 33416-5125
Telephone: 561/681-2500

ISHED DAILY
II-DADE-FLORIDA

E OF FLORIDA
ITY OF MIAMI-DADE

the undersigned authority personally
ad:

EANNETTE MARTINEZ

oath says that he/she is

USTODIAN OF RECORDS

Miami Herald, a daily newspaper published at
in Miami-Dade County, Florida; that the
d copy of advertisement was published in said
per in the issues of:

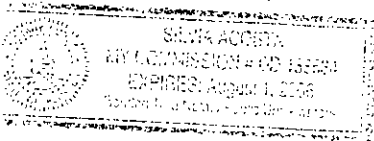
June 10, 2004

further says that the said The Miami Herald
spaper published at Miami, in the said
Dade County, Florida and that the said
er has heretofore been continuously published
Miami-Dade County, Florida each day and has
ered as second class mail matter at the post
Miami, in said Miami-Dade County, Florida,
iod of one year next preceding the first
on of the attached copy of advertisement:
nt further says that he has neither paid nor
d any person, firm or corporation any discount,
ommission or refund for the purpose of
this advertisement for publication in the said
ers(s).

Signature of Eannette Martinez
and subscribed before me this
day of June 2004

mission
August 1, 2006

Silvia Acosta
Signature of Silvia Acosta
Notary



PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0250003-006-AC (PSD-FL-333)

FPL Turkey Point Fossil Plant, New Combined Cycle Unit 5
Miami-Dade County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit under the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality to the Florida Power & Light Company. The permit is one of several authorizations needed to construct a nominal 1,150 MW combined cycle natural gas-fired unit at the existing Turkey Point Fossil Plant east of Homestead and Florida City, and adjacent to Biscayne Bay in Miami-Dade County. A determination of Best Available Control Technology (BACT) was required pursuant to Rule 62-212.400(6), Florida Administrative Code (FAC) for emissions of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), sulfuric acid mist (SAM), and volatile organic compounds (VOC). The applicant's corporate address is Florida Power & Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.

The applicant proposes to construct a new electrical power generating unit (Unit 5). The primary components are: four combustion turbine-electrical generators; four supplementary-fired heat recovery steam generators (HRSGs), a single steam-electrical generator; a 22-cell mechanical draft cooling tower; four exhaust stacks; a 4.3 million gallon diesel fuel storage tank; and other associated support equipment.

Unit 5 will be permitted to operate continuously while firing inherently clean natural gas. Ultra low sulfur (0.0015 percent sulfur) distillate fuel oil will be available in Southeast Florida by the time the project starts up. Its use will be allowed as backup fuel for 500 hours per year per combustion turbine. Steam injection into the combustion turbines (power augmentation) and firing of natural gas in the duct burners located within the HRSGs (supplemental firing) will be allowed for limited periods of time to meet peak power demand.

A selective catalytic reduction (SCR) system with ammonia injection will be used in conjunction with Dry Low-NOx combustion (gas firing) and wet injection (oil firing) to control NOx emissions. The proposed NOx emission limit of 2.0 parts per million by volume, dry corrected to 15 percent oxygen (ppmv @15% O2) of NOx while firing natural gas represents the most protective standard for any project authorized to date in the Southeastern United States. Sufficient catalyst will be used to minimize emissions of ammonia reagent. The proposed NOx limit while firing ultra low sulfur fuel oil is 8 ppmv @15% O2. The proposed CO emission limits of 4.1 and 8.0 ppmv @15% O2 while burning gas and oil, respectively represent the lowest values guaranteed to-date without requiring oxidation catalyst. Typical CO emissions will actually be 2 ppmv or less under most operational modes.

Emissions of CO, PM/PM10, SAM, SO2, and VOC will be minimized by the efficient, high-temperature combustion of inherently clean fuels. Emissions of CO and NOx will be continuously monitored to demonstrate compliance with the conditions of the permit. The complete set of proposed emission limits is available at the Department offices, the local Miami-Dade County DERM office and website addresses indicated below.

The applicant's estimate of maximum potential annual emissions from Unit 5 are summarized in the following table:

Pollutant	Maximum Tons Per Year	PSD Significant Emission Rate Tons Per Year	PSD Review Required?
CO	464	100	Yes
Pb	0.026	0.6	No
NOx	312	40	Yes
PM/PM10	420/229	25/15	Yes
SO2	193	40	Yes
SAM	19	7	Yes
VOC	68	40	Yes

According to the applicant, maximum predicted air quality impacts due to emissions from the proposed new project are less than the significant impact levels applicable to areas outside of the Everglades National Park (i.e. PSD Class II Areas). Therefore, multi-source modeling was not required for ambient air quality standards Class II increments. The predicted impacts in the Class I Everglades National Park (ENP) are less than the applicable significant impact levels except for the 3-hour and 24-hour SO2 and 24-hour PM10 impacts. Therefore multi-source increment modeling was required for the 3-hour and 24-hour SO2 and 24-hour PM10 impacts upon the ENP. The following table summarizes the maximum predicted 3-hour and 24-hour SO2 and 24-hour PM10 increment consumption by the new project and by all project in the general area since 1977.

Averaging Time	PM10 Increment Consumed in ug/m ³ and % at ENP		SO2 Increment Consumed in ug/m ³ and % at ENP	
	By Project	All Sources	By Project	All Sources
24-hour	0.5 (10% of Allowable)	2.1 (42% of Allowable)	0.4 (8% of Allowable)	4.1 (82% of Allowable)
3-hour	No Analysis Required	No Analysis Required	2 (8% of Allowable)	18 (72% of Allowable)

Based on the required analyses, the Department has reasonable assurance that the proposed project will not cause or significantly contribute to a violation of any ambient air quality standard or PSD increment. A small impact on air quality related values (visibility) was projected to occur approximately 2 days in three years if ultra low sulfur fuel oil is continuously fired, instead of natural gas, and the ambient temperature is 35 degrees F. Because fuel oil will be used less than 10 percent of the time and such low temperatures are atypical for the South Florida coastline the coincidence of the factors that promote visibility impact is minimal. The probability of such an occurrence is less than one every three years.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue PSD Permit. Written comments or requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 or the e-mail address provided below. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. This PSD permitting action is being coordinated with a certification under the Power Plant Siting Act (Sections 403.501-519, F.S.). If a petition for an administrative hearing on the Department's Intent to Issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.603(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.603(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding, and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at:

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32399-2400 Telephone: 850/488-0114 Fax: 850/922-6979	Department of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, FL 33416-5425 Telephone: 561/681-6600 Fax: 561/681-6790	Miami-Dade Department of Environmental Resource Management 33 SW 2nd Avenue, Suite 900 Miami, Florida 33130-1540 Telephone: 305/372-6925 Fax: 305/372-6954
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The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the authorized representative, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact A. A. Lirero or Debbie Nelson of the Bureau of Air Regulation at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information. Address e-mail comments to alirero@dep.state.fl.us. The application, key correspondence, draft permit and technical evaluation can be accessed at www.dep.state.fl.us/air/permitting/construction/turkeypoint.htm.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUL 8 2004

RECEIVED

JUL 14 2004

4APT-APB

Mr. A. A. Linero, P.E.
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for Florida Power & Light (FPL) Turkey Point, dated May 28, 2004. The draft PSD permit is for the proposed construction and operation of four combined cycle combustion turbines (CTs) with a total nominal generating capacity of 1,150 MW to be located near Homstead, FL. The combustion turbines proposed for the facility are General Electric (GE), frame 7FA units. The CTs will primarily combust pipeline quality natural gas with ultra low sulfur fuel oil (0.0015% S) combusted as backup fuel. As proposed, the CTs will be allowed to operate in the following manner: to fire natural gas up to 8,760 hours per year per CT, to fire fuel oil a maximum of 500 hours per year per CT, to operate in power augmentation mode up to 400 hours per year per CT, and to operate natural gas-fired duct burners up to a total of 5,702,400 MMBtu per year for all four CTs combined. Total emissions from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM/PM₁₀), and volatile organic compounds (VOC).

Based on our review of the preliminary determination, draft PSD permit, and FP&L's response to comments document, we have the following comments:

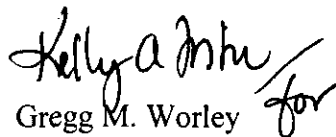
- Condition 9 of the draft PSD permit contains a table of CO emissions limits that are applicable to various operating modes of the four new CTs. The table contains two columns of emission limits. Compliance with the first column of emission limits shall be demonstrated by 3-run stack testing, while compliance with the second column of emission limits shall be demonstrated using a continuous emissions monitoring system (CEMS) with a 24-hour averaging time. It is our understanding from conversations with the Florida Department of Environmental Protection (FDEP) that the first column of CO emission limits represents the BACT emission limits (i.e., 4.1 ppm in normal mode, 7.6 ppm with duct burning, etc.) and the second column of CO emission limits contains higher limits that have been proposed to simplify the recordkeeping process (i.e., 8.0 ppm for all modes except power augmentation, etc.).

First, we would like to point out that the distinction between the two sets of emission limits described above is not clear in the current draft PSD permit. If the emission limits are left as they are, this relationship should be better described in the table itself or in a permitting note immediately **preceding** the table. Second, we agree with FDEP that initial compliance with the BACT limits can be determined using a stack test; however, continuous compliance with the BACT emission limits should be demonstrated by use of the CEMS. Condition 19 of the draft PSD permit declares that FDEP "reserves the right" to use data from the CEMS to determine compliance with the short-term CO emission limits. We believe that this condition is not definite enough to enforce the BACT emission limits using CEMS. Finally, if it is decided that the CEMS will be used to determine compliance with the BACT emission limits, we recommend that the final PSD permit require use of an averaging time shorter than 24 hours. Since there exist short-term CO national ambient air quality standards (NAAQS) with averaging times below 24 hours (i.e., 1-hour and 8-hour standards), we believe that the averaging times should be more consistent with the applicable NAAQS averaging times.

2. As we mentioned in our comment letter dated January 15, 2004, any operating limits which were used in the analyses on a per turbine basis should be included in the draft PSD permit on a per turbine basis. The draft PSD permit does contain per turbine limits on the amount of time the CTs can operate in power augmentation mode and while firing fuel oil. However, condition 8(e) of the draft PSD permit contains one aggregate limit (5,702,400 MMBtu) for all four CTs restricting the amount of duct firing that is allowed in a year. In order for the BACT analysis to remain valid, the final PSD permit should contain the appropriate duct firing limit on a per turbine basis (i.e., 1,425,600 MMBtu/year). Alternatively, if the applicant wishes to retain the aggregate limit, a revised BACT analysis should be performed (based on the worst case scenario of one CT operating the duct burners all year long) which demonstrates that the outcome of the BACT analysis would remain unchanged.

If you have any questions regarding these comments or need additional information, please contact Katy Forney at 404-562-9130.

Sincerely,



Gregg M. Worley
Chief
Air Permits Section



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

Air Resources Division

P.O. Box 25287

Denver, CO 80225

RECEIVED

JUL 07 2004

BUREAU OF AIR REGULATION

July 2, 2004

N3615 (2350)

A. A. Linero, P.E., Administrator
Department for Environmental Protection
New Source Review Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

We have reviewed the Florida Power & Light's (FP&L) Turkey Point Power Plant Prevention of Significant Deterioration (PSD) final draft permit and Florida Department for Environmental Protection's (FDEP) Technical Evaluation and Preliminary Determination (TEPD). FP&L proposes to construct a "4-on-1" combined cycle unit (Unit 5) consisting of four 170 MW gas turbine-electrical generators; four gas-fired heat recovery steam generators; and a single steam turbine with associated electric generator and a cooling tower. The proposed increase in emission levels identified in the TEPD are 312 tons per year (TYP) of nitrogen oxides (NO_x), 320 TPY of particulate matter, 224 TPY of particulate matter less than 10 microns in size (PM₁₀), 193 TPY of sulfur dioxide (SO₂), 68 TPY of volatile organic pollutants, and 19 TPY of sulfuric acid mist. The Turkey Point Power Plant is located 21 kilometers east of Everglades National Park (NP) and adjacent to Biscayne NP. Everglades NP is a Class I air quality area and Biscayne NP is a Class II air quality area, both areas are administered by the National Park Service (NPS).

As shown in the TEPD, FP&L will reduce their NO_x limit from 2.5 ppm (as proposed in their original PSD permit application) to 2.0 ppm when burning natural gas and from 10.0 ppm to 8.0 ppm when burning fuel oil. The TEPD also shows the estimated NO_x emissions will be reduced from 387 TPY (as originally identified in their PSD permit application) to 312 TPY. When fuel oil is used and limited to 500 hours for a 12 month period, results from the FP&L visibility modeling analysis (including the new NO_x limits and lower emissions), show impacts at Everglades NP will be limited to two days slightly over a 5% change in extinction during the three years modeled. There will be no visibility impacts over a 5% change in extinction at Everglades NP when the facility is burning natural gas. At the lower NO_x emission rates, we anticipate that visibility impacts at Biscayne NP will also be reduced. Therefore, we do not anticipate that emissions from the proposed Turkey Point Power Plant modifications will adversely

impact sensitive resources at Everglades NP or Biscayne NP. However, as discussed below, we are concerned that FP&L may not have adequately assessed potential impacts during the High Power Operating Mode. We have the following comments regarding Best Available Control Technology (BACT) for the facility, and the air quality modeling analysis.

BACT Analysis

FP&L proposes to construct and operate four General Electric (GE) 7FA combustion turbines and associated electric generators. FP&L proposes to use Selective Catalytic Reduction (SCR) with a limit of 2.0 ppm NO_x when burning natural gas, and 8.0 ppm NO_x when burning oil. These limits would be enforced over a 24-hour averaging period. While we commend FP&L for reducing its NO_x emission limits from those originally proposed, we believe FDEP should require a shorter averaging period for the NO_x emission limit.

BACT is defined as:

an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant...

It is important to note that BACT is an emission limit, and emission limits typically consist of a numerical limit in terms of mass of pollutant per unit time (e.g., lb/hr), unit volume (e.g. ppmvd) and/or per unit of heat input (e.g., lb/mmBtu). These emission limits are also typically specified over a prescribed averaging period; due to the inherent variability in emissions and the performance of the control technology, the longer the averaging period, the easier it is to meet a given limit.

Although it states in the TEPD top-down analysis that "The 'Top' emission limit is considered by the department to be 2.0 ppmvd @ 15% O₂ on a 1-hour average," FDEP goes on to set FP&L's proposed permit limit for natural gas combustion based upon a 24-hour average, with no explanation provided for the longer averaging period. Therefore, FDEP did not choose the "top" control technology, nor did it justify proposing a less stringent limit.

We believe that the 24-hour block averaging periods are much too long when compared to similar combustion turbines meeting the same outlet concentration limits for one-hour or three-hour averages. The effect of the much longer averaging periods is to reduce the stringency of the limits relative to other permits. For example, Clark County, Nevada, has determined that a 2.0 ppm limit (1-hr average) represents BACT for the Diamond Generating, Ivanpah Energy combustion turbine project. The Virginia Department of Environmental Protection has permitted an identical limit for the CPV Warren County

combustion turbine project. Turkey Point should show why it cannot meet a 2.0 ppm limit on a one-hour basis, as is required of other similar projects.

High Power Modes: Although FDEP acknowledges that the high power operating modes “can cause greater uncontrolled NO_x emissions,” the proposed permit explicitly exempts FP&L from any emission limits while operating in this mode. Not only does this fail to meet the requirements of New Source Review to establish appropriate limits on emissions during all operation, it could also render the single-source emissions modeling invalid if this “unlimited” emissions during high power mode was not modeled.

Air Quality Modeling Analysis

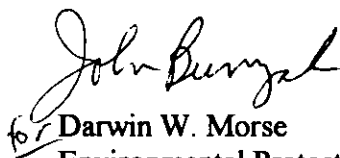
Cumulative Source Modeling: As referenced in our February 24, 2004, letter to FDEP regarding the emission inventories presented in the FP&L permit application, we reiterate that we would like to know how sources were selected for the inventory, and how emissions from those sources were determined.

Conclusions

In conclusion, we request that FDEP require a one-hour averaging period for the proposed NO_x emission limit of 2.0 ppm for natural gas and 8.0 ppm for fuel oil. We also ask that FDEP include an emission limit during the “High Power Modes” and demonstrate that those emissions will not violate applicable National Ambient Air Quality Standards and Class I increments, nor adversely impact Everglades NP. Finally, as stated in our February 24, 2004, letter, we ask that FP&L justify its cumulative increment analysis.

Thank you for involving us in the review of the PSD permit application for the Turkey Point Power Plant. Please do not hesitate to contact me at (303) 969-2817 if you have questions concerning our comments.

Sincerely,



for Darwin W. Morse
Environmental Protection Specialist
Policy, Planning and Permit Review Branch



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BUREAU OF AIR REGULATION

July 1, 2004

A.A. Linero
Program Administrator, South Permitting
Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, FL 32399-2400

Re: Florida Power & Light Company
Turkey Point Expansion Project
DEP File No. 0250003-0060AC (PSD-FL-338)

Dear Mr. Linero:

Thank you for taking time to meet with us on Tuesday June 22, 2004. I am writing to respectfully request that you consider the following clarifications to the draft Prevention of Significant Deterioration of Air Quality (PSD) permit issued on May 28, 2004 and public noticed on June 10, 2004. Please note that none of these proposed clarifications have any impact on the air modeling performed to evaluate potential impacts.

In Section III, page 7 of 17, we request the following clarification for operational flexibility:

8. Methods of Operation

b. *Authorized Fuels*: Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 2.0 grams of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire ultra low sulfur distillate fuel oil no more than 0.0015% sulfur by weight. ~~Each gas turbine shall fire no more than 500 hours of fuel oil during any consecutive 12 months. The four gas turbines shall fire no more than a cumulative total of 28,028,168 gallons of fuel oil during any calendar year.~~

In Section III, page 9 of 17, we request the following clarification to be consistent with the Table in Section IV, Appendix BD, page 1.

9. Emissions Standards

f. Each SCR system shall be designed and operated for ammonia slip limit of less no more than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTM-027.

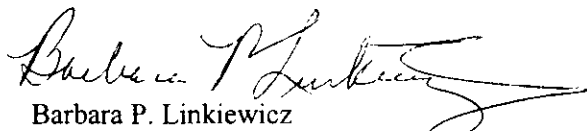
In Section III, pages 14-15 of 17, we request the clarifications below. Recognizing that quarterly reports contain all NSPS and State requirements, this clarification combines the quarterly and semiannual reports. The proposed language below also makes condition 27 consistent with condition 25a regarding the monitoring period.

~~27. Semiannual NSPS Excess Emissions Report. Quarterly Excess Emission Report: In accordance with 40 CFR 60.7(d), the permittee shall submit a report to the Compliance Authority summarizing any emissions in excess of the NSPS standards w~~ Within 30 days following the end of each calendar-quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of CO and NOX emissions in excess of the permit standards following the NSPS format provided in Appendix XS of this permit. For purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NOX emission standard identified in Appendix GG; and any ~~daily monitoring period~~ during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG. For purposes of reporting emissions in excess of NSPS Subpart Da, excess emissions from duct firing are defined as: NOX or PM emissions in excess of the NSPS standards except during periods of startup, shutdown, or malfunction; and SO2 emissions in excess of the NSPS standards except during startup or shutdown. ~~An example of the report is provided on Appendix XS.~~ Such information shall be summarized for all exceedances including startups, shutdowns, malfunctions, and major tuning sessions. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; and 40 CFR 60.7]

~~28. Quarterly Permit Excess Emissions Report~~ Semiannual NSPS Excess Emissions Report: Within 30 days following the end of each quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of CO and NOX emissions in excess of the permit standards. Such information shall be summarized for all exceedances including startups, shutdowns, malfunctions, and major tuning sessions. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter.[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; and 40 CFR 60.7] The submittal of the Quarterly Excess Emission Reports shall constitute compliance with the requirements of 40 CFR 60.7(d) for the submittal of Semiannual Excess Emissions Report.

We appreciate your consideration of these proposed clarifications. If you have any questions or require additional information, please contact me at (561) 691-7518.

Sincerely,


Barbara P. Linkiewicz
Environmental Licensing Manager

cc: Stephen Palmer, DEP Siting Coordination Office
Ken Kosky, Golder Associates