Florida Power & Light Company, Environmental Services Dept., P.O. Box 14000, Juno Beach, FL 33408

FPL

March 28, 2000

Mr. Al Linero, P.E.
State of Florida
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: FPL Fort Myers Plant
Air Construction Permit #0710002-005AC
Excess Emissions During Steam Blows

Dear Mr. Linero:

Following are responses to the three questions posed in your correspondence of March 13, 2000:

1. *[Provide] the actual estimated total hours and the additional emissions (e.g. in tons) for each unit during the 90 day period of time requested for the steam blows.*

   Response: FPL anticipates that a total of 288 hours per combustion turbine (out of a possible 2,160 hours) will be required to perform all the necessary steam blows during startup of the HRSG's at Fort Myers. This is approximately equivalent to 49 tons of NOx per CT. I would like to reiterate that these values are estimates only, and that the actual times may vary from these numbers. As stated previously, these blows will be undertaken intermittently over an approximate 90-day period for each CT / HRSG combination. FPL will take all reasonable steps to minimize the extent and duration of excess emissions, in accordance with our normal operating practices and with the requirements of rule 62-210.700, F.A.C..

2. *As discussed with you by telephone on March 7, 2000, we need a reconciliation of your letter dated November 6, 1998 to Lee County with the present application.*

   In my letter to Lee County, I stated that the maximum operating duration of existing Units 1 and 2 during 2001 would be 5 and 2 months, respectively, and that the CT's would be operating in simple cycle mode during that year, for varying periods of time. As I stated on our telephone call, FPL's plans have changed somewhat, in that we now project the steam units to operate for a longer period of time that year; however, the basic conclusion regarding PSD applicability remains the same; i.e. PSD would not be applicable. I have attached a matrix demonstrating that for your reference. As you can see, all pollutant emissions decrease during 2001 with the exception of VOC emissions, which are projected to increase by 21 tons, which is less than the PSD applicability limit of 40 tons.

3. *As discussed with you and source testing staff on March 10, we need some test data to verify that emissions of VOC are likely to be greater than the permitted limit as a result of contribution of ambient VOC before we can consider allowing a correction. We also need to know the amount of bypass or cooling air that is not subjected to high enough temperature to destroy incoming VOC.*

   FPL does not currently possess test data that supports the premise that ambient VOC's would definitely cause us to be unable to meet our VOC limit. What we do have, however, is the GE Standard Field Testing Procedure for Emission Compliance (attached) which is part of the guarantee package for the 7FA combustion turbines. In that document, please note that in Section II.A. Emission Testing – General, GE states that "GE guarantees apply to the **net** increase of these pollutant emissions". Therefore, FPL would have no contractual recourse with GE, should ambient VOC concentrations cause FPL to exceed what even you have conceded is an extremely low VOC limit of 1.4 ppmvd.

   With respect to the amount of cooling air that bypasses the combustion zone, I have been told this is GE proprietary information. I would suggest you contact Joel Chalfin at GE [(518) 385 4698], whom I believe you know, for additional information regarding the bypass air and VOC issue.

   Based on our GE guarantee verbiage, I feel compelled to reiterate the request for a change in the permit language to allow for subtraction of ambient VOC levels. I would be willing to report both the "raw" and "ambient-subtracted" data, if that would make the Department more comfortable.

I am hopeful that the information provided is responsive to your questions. If you should have additional questions or wish to discuss this further, please don't hesitate to contact me at (561) 691-7058.

Very truly yours,

Rich Piper

Rich Piper
Repowering Licensing Manager
Florida Power & Light Company

CC: T. Heron, BAR
SD
EPA
NPS

Table 1a. Comparison of Representative Future Actual Emissions During 2001 versus Past Actual Emissions for Fort Myers Repowering Project

	Annual Capacity Factor	Particulate[a]	Nitrogen Oxides[b]	Sulfur Dioxides[b]	Carbon Monoxide[a]	Volatile Organic Compounds[c]
Representative Actual Annual Emissions						
Unit 1	100%	577	3,301	20,356	888	37
Unit 2	100%	929	14,489	48,180	2,628	87
Simple Cycle Operation	100%	267	1,845	137	1,267	82
Representative Future Actual Emissions During 2001						
Unit 1	28.00%	162	924	5,700	249	10
Unit 2	28.00%	260	4,057	13,490	736	24
Simple Cycle Operation[d]	39.58%	105	730	54	502	33
Total:		527	5,712	19,244	1,486	67
Past Actual Emissions		607	7,095	20,561	1,507	47
Net Emissions Change		-80	-1,383	-1,317	-21	21

Notes:

a - based on stack test data for Units 1 and 2 for PM and stack test data for similar units for CO.

b - based on CEM data for Units 1 and 2

c - based on AP-42 for Units 1 and 2

d - months of maximum potential operation for CTs; CT2A - 11 months, CT2B -11 months, CT2C - 10 months, CT2D - 9 months, CT2E - 8 months and CT2F - 8 months; 57 months/6 CTs = 9.5 months assume 50% capacity for 9.5 months for all 6 CTs; 9.5/12 x 50% = 39.58

Post-it® Fax Note 7671 | Date | # of pages ▶
To RICH PIPER | From JOEL CHAFFIN
Co./Dept. | Co.
Phone # | Phone #
Fax # 561-691-7070 | Fax #

GEK 28172F
Revised, March 1999

GE Power Systems
Gas Turbine

U.S. Standard Field Testing Procedure for Emission Compliance

I. TEST PHILOSOPHY

Testing to demonstrate emission guarantees and for adjustment of the NOx reduction system (if required) will be performed using procedures which are mutually agreed between GE and the Purchaser. GE engineers and/or technical advisors may be present at the tests for procedural direction. Test methods chosen are EPA methods which yield data on site immediately, wherever possible.

II. EMISSION TESTING

A. General

Emission testing identified herein shall be within [GE's] or [Customer's] scope of supply using procedures which are mutually agreed. Sampling for inlet concentrations may be required, at the sole discretion of GE, in order to demonstrate compliance with emission guarantees. GE guarantees apply to the net increase of these pollutant emissions.

B. Nitrogen Oxides Emissions

Before the official compliance testing is begun, the NOx reduction system will be adjusted to verify compliance with NOx emission limits. The gas turbine control system contains a pre-programmed schedule for either water or steam injection, this schedule may be adjusted to achieve an appropriate emission level approximately 5% to 10% below emission limits, and minimize the supply requirements. Once the proper injection schedule has been established, this schedule is maintained throughout the testing, and it is programmed into the control system.

The NOx emission testing and related oxygen testing will be in accordance with U.S. EPA Method 20 presented in the Code of Federal Regulations. Title 40, Part 60 (40CFR60 Appendix A and 40CFR60 Subpart GG - Standards of Performance for Stationary Gas Turbines), with the following modifications, limitations and additions:

1. The NOx instrument will be limited to a chemiluminescent type which meets 40CFR60 Appendix A, Method 7E.

2. The span of the NOx analyzer will be set for appropriate spread of the expected NOx readings, rather than the specified 300 ppm.

3. Oxygen will be sampled simultaneously with all NOx readings since Subpart GG of 40CFR60 requires corrections to 15% O_2. Method 3A from 40CFR60 Appendix A is used for the oxygen analysis.

4. Section 60.335(c)(1) of Subpart GG has been replaced by U.S. EPA Memorandum dated June 2, 1997 for GE gas turbines using either water or steam for NOx reduction. The EPA memorandum approves the GE injection control algorithm in lieu of the Subpart GG ISO correction equation.

5. Section 60.335(c)(1) is not applicable to gas turbines with dry low NOx combustors.

C. Carbon Monoxide Emissions (If Required)

Sampling is the same as for NOx normally with the same line feeding the different instruments. Method 10 per 40CFR60 Appendix A is used, but only the continuous sample method per Section 5.1 is acceptable to GE. A recorder is mandatory, not optional as per 5.3.9, with a span which gives an appropriate spread of the expected readings.

D. Unburned Hydrocarbon Emissions (If Required)

Sampling and analysis must be on a wet basis to avoid condensing out the higher hydrocarbons. Moisture determination by Method 4 (or Method 5) is necessary to convert results to dry basis. Method 25A per 40CFR60 Appendix A is used for unburned hydrocarbons. Results are presented as methane (CH_4). This method uses a flame ionization detector or analyzer.

E. Volatile Organic Emissions (If Required)

When volatile organic emissions (non-methane, non-ethane hydrocarbons) are required, Method 18 per Section 7.2 is used. This requires a gas chromatograph at the site. GE requires calibration of the measurement train at the sampling probe.

F. Sulfur Emissions (If Required)

Sulfur emissions will be determined by use of fuel flow data and fuel analysis for sulfur content.

G. Particulate Matter Emissions - Front-Half Filterable Solids Only (If Required)

Particulate matter emissions are determined by sampling, analysis and calculation in accordance with U.S. EPA Methods 5 and 5B with traversing per Methods 1 and 2, all from 40CFR60 Appendix A. The following modifications and limitations on choices within the methods apply:

1. Sampling probe internal surfaces must be made of chemically inert and non-catalytic material such as quartz.

2. The filter material shall be quartz.

3. Nozzle, probe and filter must be heated to 248°–273°F per Method 5, or at least 10°F higher than the dew point of sulfuric acid in the exhaust duct. Use of Method 5B requires nozzle, probe and filter to be heated to 320° to 345°F.

4. Probe wash shall be acetone per Method 5.

5. Sampling technique shall provide a fairly large exhaust gas sample, with an objective of 100 SCF.

6. Sulfates are excluded from the GE guarantees for particulates.

H. PM10 Emissions (If Required)

PM10 emissions are determined by sampling, analysis and calculation in accordance with U.S. EPA Methods 5 for front half filterable particulate matter and Method 202 for back half condensible particulate matter with traversing per Methods 1 and 2, all from 40CFR60, Appendix A except for Method 202. Method 202 is from 40CFR51, Appendix M. The following modifications and limitations within the methods apply:

1. Sampling probe internal surfaces must be made of chemically inert and non-catalytic material such as quartz.

2. The filter material shall be quartz.

3. Nozzle, probe and filter must be heated to 248° to 273°F per Method 5, or at least 10°F higher than the dew point of sulfuric acid in the exhaust duct.

4. Probe wash shall be acetone per Method 5.

5. Sampling technique shall provide a fairly large exhaust gas sample, with an objective of 100 SCF.

6. Impinger solution shall be extracted with ACS grade methylene chloride per Method 202.

J. Opacity (If Required)

Opacity shall be measured in accordance with EPA Method 9 from 40CFR60, Appendix A.

K. Ammonia Slip (If Required)

Required EPA methods for measuring ammonia slip have not been published. GE has established in the interim a preference for the determination of ammonia slip. The ammonia slip emissions will be determined by on-site sampling and analysis plus calculations in accordance with the on-site industry procedure of Indophenol Absorptiometrics. This procedure requires the use of reactant solutions and a photoelectric spectrophotometer at the plant site..

Sample collection procedures should include Item G(1)-(5) above (Particulate Matter Emissions - Front-Half Filterable Solids Only).

L. Certification of Calibration Gases

All gases used in certification of instruments or performance of emissions guarantee demonstrations shall be analyzed and certified in a manner and by a laboratory mutually agreeable to GE and Purchaser. Examples of acceptable certification are:

1. U.S. EPA Standard Methods

2. U.S. EPA Protocols

3. U.S. National Bureau of Standards Certification Procedures

M. Exhaust Gas Flow Determination

GE has established preferences for the determination of exhaust flow based on accuracy of the determination. GE prefers the following:

The primary exhaust flow determination shall be by the F-factor method per 40CFR60, Appendix A, Method 19 (as specified in Method 20 for gas turbine emissions). The F-factor constants from Table 19–1 shall be applied in all cases where possible per Paragraph 3.1.

Where available, the compressor inlet air flow signal shall also be used to compute exhaust flow. Exhaust flow on a dry basis is the turbine inlet air flow minus the water vapor plus the fuel flow minus the water formed from the combustion of hydrogen in the fuel. Gas turbine inlet air is measured using the compressor inlet air scroll as a flow element. The inlet scroll is calibrated during the factory tests of the gas turbine.

Flow measurements by Velocity Traverse, per 40CFR60, Appendix A, Methods 1 and 2, can result in errors of 25% or more in this application, and is not acceptable.

N. Fuel Bound Nitrogen Determination

Prior to emission testing, analyses for fuel bound nitrogen must be determined in accordance with ASTM D4629 which is based on a combustion/chemiluminescence method.

O. Reporting Preliminary Test Results

Vendor must use the attached spreadsheets as applicable for reporting preliminary test results prior to test site demobilization or make provisions to complete prior to site demobilization.

Summary Table for Reporting Preliminary Test Results Prior to Demobilization

Revise as necessary based on what is applicable to the testing project. Simple Cycle or Combined Cycle without duct firing.

Project Name _____

Site Location _____

Date				
Test Number	1	2	3	Average
Start and End Time of Test				
Test Condition				
TURBINE OPERATING CONDITIONS				
Compressor Discharge Pressure(psig) (CPD)				
Compressor Inlet Temperature(°F) (CTIM)				
Fuel Flow (lbs/sec) (FQG, FQLM1)				
Steam or Water Injection Flowrate (lbs/sec) (WQJ)				
Power Augmentation Steam (lbs/sec) (WQJA)				
Steam or Water Flow/Fuel Flow Ratio (WXJ)				
Generator Output (MW) (DWATT)				
Heat Input (million Btu/hr)				
Inlet Guide Vane Setting (CSGV)				
Mean Turbine Exhaust Temperature (°F) (TTXM)				
Specific Humidity lbs H2O/lb Dry Air (CMHUM)				
Barometric Pressure, in Hg (AFPAP)				
Stack Exhaust Temperature (°F)				
DLN Split Percent (FSRXSR)				
AMBIENT DATA				
Wet Bulb Temperature (°F)				
Dry Bulb Temperature (°F)				
Barometric Pressure, in Hg				
Specific Humidity lbs H2O/lb Dry Air				
FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
Fc factor (dscf/million Btu)				
EMISSION DATA				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
Moisture (% by volume)				
UHC ppmvw, ppmvd				
VOC ppmvw, ppmvd				
SO2 ppmvd @ 15% O2				
NOx lb/hr, lb/mm Btu				
CO lb/hr, lb/mm Btu				
SO2 lb/hr				
UHC lb/hr, lb/mm Btu				
VOC lb/hr, lb/mm Btu				
Fo				
Exhaust Flow, dscfm (by Fd factor)				
Exhaust Flow, dscfm (by Fc factor)				

Summary Table for Reporting Preliminary Test Results Prior to Demobilization

Revise as necessary based on what is applicable to the testing project.

Combined Cycle with duct firing.

Project Name _____

Site Location _____

Date				
Test Number	1	2	3	Average
Start and End Time of Test				
Test Condition				
TURBINE OPERATING CONDITIONS				
Compressor Discharge Pressure(psig) (CPD)				
Compressor Inlet Temperature(°F) (CTIM)				
Turbine Fuel Flow (lbs/sec) (FQG, FQLM1)				
Steam or Water Injection Flowrate (lbs/sec) (WQJ)				
Power Augmentation Steam (lbs/sec) (WQJA)				
Steam or Water Flow/Fuel Flow Ratio (WXJ)				
Generator Output (MW) (DWATT)				
Turbine Heat Input (million Btu/hr)				
Inlet Guide Vane Setting (CSGV)				
Mean Turbine Exhaust Temperature (°F) (TTXM)				
Specific Humidity lbs H2O/lb Dry Air (CMHUM)				
Barometric Pressure, in Hg (AFPAP)				
Stack Exhaust Temperature (°F)				
DLN Split Percent (FSRXSR)				
Duct Burner Fuel Flow				
Duct Burner Heat Input (million Btu/hr)				
AMBIENT DATA				
Wet Bulb Temperature (°F)				
Dry Bulb Temperature (°F)				
Barometric Pressure, in Hg				
Specific Humidity lbs H2O/lb Dry Air				
TURBINE FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
Fc factor (dscf/million Btu)				
DUCT BURNER FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
Fc factor (dscf/million Btu)				
JOINT FIRE CONCENTRATIONS				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
SO2 ppmvd @ 15% O2				
Fo				
TURBINE ONLY CONCENTRATIONS				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
JOINT FIRE EXHAUST FLOW & MASS EMISSION RATES				
HRSG Exhaust Flow, dscfm (by Fd factor)				
HRSG Exhaust Flow, dscfm (by Fc factor)				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				
TURBINE ONLY EXHAUST FLOW & MASS EMISSION RATES				
Transition Duct Exhaust Flow, dscfm (by Fd factor)				
Transition Duct Exhaust Flow, dscfm (by Fc factor)				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				
DUCT BURNER MASS EMISSION RATES				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				

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GE Power Systems

General Electric Company
One River Road, Schenectady, NY 12345
518 • 385 • 2211 TX: 145354

Summary Table for Reporting Preliminary Test Results Prior to Demobilization

Revise as necessary based on what is applicable to the testing project. Simple Cycle or Combined Cycle without duct firing.

Project Name _____

Site Location _____

Date				
Test Number	1	2	3	Average
Start and End Time of Test				
Test Condition				
TURBINE OPERATING CONDITIONS				
Compressor Discharge Pressure(psig) (CPD)				
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Specific Humidity lbs H2O/lb Dry Air (CMHUM)				
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AMBIENT DATA				
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Barometric Pressure, in Hg				
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FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
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EMISSION DATA				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
Moisture (% by volume)				
UHC ppmvw, ppmvd				
VOC ppmvw, ppmvd				
SO2 ppmvd @ 15% O2				
NOx lb/hr, lb/mm Btu				
CO lb/hr, lb/mm Btu				
SO2 lb/hr				
UHC lb/hr, lb/mm Btu				
VOC lb/hr, lb/mm Btu				
Fo				
Exhaust Flow, dscfm (by Fd factor)				
Exhaust Flow, dscfm (by Fc factor)				

Summary Table for Reporting Preliminary Test Results Prior to Demobilization
Revise as necessary based on what is applicable to the testing project.
Combined Cycle with duct firing.

Project Name _____
Site Location _____

Date				
Test Number	1	2	3	Average
Start and End Time of Test				
Test Condition				
TURBINE OPERATING CONDITIONS				
Compressor Discharge Pressure(psig) (CPD)				
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Turbine Fuel Flow (lbs/sec) (FQG, FQLM1)				
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DLN Split Percent (FSRXSR)				
Duct Burner Fuel Flow				
Duct Burner Heat Input (million Btu/hr)				
AMBIENT DATA				
Wet Bulb Temperature (°F)				
Dry Bulb Temperature (°F)				
Barometric Pressure, in Hg				
Specific Humidity lbs H2O/lb Dry Air				
TURBINE FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
Fc factor (dscf/million Btu)				
DUCT BURNER FUEL ANALYSIS				
Heating Value Btu/lb				
Fd factor (dscf/million Btu)				
Fc factor (dscf/million Btu)				
JOINT FIRE CONCENTRATIONS				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
SO2 ppmvd @ 15% O2				
Fo				
TURBINE ONLY CONCENTRATIONS				
NOx ppmvd				
NOx ppmvd @ 15% O2				
O2 % by volume, dry basis				
CO2 % by volume, dry basis				
CO ppmvd				
JOINT FIRE EXHAUST FLOW & MASS EMISSION RATES				
HRSG Exhaust Flow, dscfm (by Fd factor)				
HRSG Exhaust Flow, dscfm (by Fc factor)				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				
TURBINE ONLY EXHAUST FLOW & MASS EMISSION RATES				
Transition Duct Exhaust Flow, dscfm (by Fd factor)				
Transition Duct Exhaust Flow, dscfm (by Fc factor)				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				
DUCT BURNER MASS EMISSION RATES				
NOx (lb/hr, lb/mm Btu)				
CO (lb/hr, lb/mm Btu)				

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 13, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper, Licensing Manager
Environmental Services
Post Office Box 14000
~~Fort Myers~~, Florida 33408
Juno Beach

Re: DEP File No. 0710002-008-AC
FPL Fort Myers Plant Gas Repowering Project
Excess Emissions during Steam Blows

Dear Mr. Piper:

On February 14, 2000, the Department received your letter for a revision to the air construction permit for the repowering project to be located in Ft Myers, Lee County, Florida. This letter essentially requests the Department's authorization for the combustion turbines to emit NO_x in excess of the permit limit (at the NSPS level) during steam blows for a period of 90 days per turbine. This period will occur as part of the testing associated with conversion of the units from simple to combined cycle operation.

Based on the schedule submitted, it appears that FPL plans to operate the combustion turbines in simple cycle mode concurrently with continued operation of the existing steam boiler Units 1 & 2 for approximately 8 months. According to previous correspondence, we had understood that this period of time would be between 2 and 5 months. In order to complete the application please provide the following information:

- The actual estimated total hours and the additional emissions (e.g. in tons) for each unit during the 90 day period of time requested for the steam blows.
- As discussed with you by telephone on March 7, 2000, we need a reconciliation of your letter dated November 6, 1998 to Lee County with the present application.
- As discussed with you and source testing staff on March 10, we need some test data to verify that emissions of VOC are likely to be greater than the permitted limit as a result of contribution of ambient VOC before we can consider allowing a correction. We also need to know the amount of bypass or cooling air that is not subjected to high enough temperature to destroy incoming VOC.

We look forward to receiving the requested information soon so that processing is not delayed due to incompleteness on these issues. If you have any questions regarding this matter, please call or e-mail Teresa Heron at 850/921-9529 (teresa.heron@dep.state.fl.us) or A.A. Linero 850/921-9523 (alvaro.linero@dep.state.fl.us).

Sincerely

3/13

A. A. Linero, P.E. Administrator
New Source Review Section

CC: William Reichel, FP&L
John Bunyak, NPS
Gregg Worley, EPA
Phil Barbaccia, DEP SD

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

Is your RETURN ADDRESS completed on the reverse side?

3. Article Addressed to:
Mr. Richard Piper, Lic. Mgr.
Fla. Power & Light
PO Box 14000
Ft. Myers, Fl
33408

4a. Article Number
Z 031 391 880

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery MAR 20

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 031 391 880

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Richard Piper	
Street & Number FP&L	
Post Office, State, & ZIP Code Ft. Myers Plant	
Postage Juno Beach FL	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 071 0002-0CE-AC	3-13-00

PS Form **3800**, April 1995

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

AL - For the 4PM Conference call Pat

FAX TRANSMITTAL COVER SHEET

TO: Pat Kennedy

FAX#: 2-6979 PHONE#:

DATE: 3-1-2000 PAGES: X 3
(INCLUDING COVER SHEET)

MESSAGE: Sorry for the delay!

FROM: Bobbie Redmon

KIRBY B. GREEN, III
DEPUTY SECRETARY
PHONE #850-488-7131 FAX # 850-922-1432
SC 278-7131 SC292-1432

STATE OF MICHIGAN

2 pages

2 - 6979

JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

"Better Service for a Better Environment"

HOLLISTER BUILDING PO BOX 30473, LANSING MI 48909-7973

INTERNET www.deq.state.mi.us

RUSSELL J. HARDING, Director

February 25, 2000

Time Sensitive Telefax

TO:		**Telefax Number**
	Jim Warr, Alabama	334-279-3043 – Tim Owen
	Michele Brown, Alaska	907-465-5070
	Jacqueline Schafer, Arizona	602-207-2218
	Jane E. Norton, Colorado	303-691-7702
	David Struhs, Florida	850-488-7093
	Thomas Skinner, Illinois	217-782-9039 – Don Sutton
	Lori F. Kaplan, Indiana	317-233-6647
	James Bickford, Kentucky	502-564-3354
	John P. Cahill, New York	518-457-7744
	William Holman, North Carolina	919-715-3060
	Christopher Jones, Ohio	614-644-3184
	James Seif, Pennsylvania	717-705-4980
	R. Lewis Shaw, South Carolina	803-898-3942
	Robert Huston, Texas	512-239-5533
	Dennis Treacy, Virginia	804-698-4019 – John Daniel
	Michael C. Castle, West Virginia	304-759-0526
(7)	George E. Meyer, Wisconsin	608-266-6983

FROM: Russell J. Harding, Director

George Welch
Dianna Andrews
Don Welch
Penn
SC
Paul Richardson

SUBJECT: Conference Call on Clean Air Issues

I invite you to participate in a conference call on Thursday, March 2, 4:00 p.m. EST. The purpose of the call is to discuss whether you would be willing to participate in discussions with other states, and representatives of the utility industry, on ways to reform the federal air New Source Review (NSR) permitting program, including especially the federal Prevention of Significant Deterioration (PSD) program.

In my view, there is a crying need to simplify the entire air permitting process. It has developed into an exhaustive analysis just to determine whether a new facility, or modification of an existing facility, is subject to PSD, let alone determining what constitutes the Best Available Control Technology (BACT) that is required under PSD. While EPA has talked of reforming the NSR and PSD programs, these talks have been going on for over 10 years, with no meaningful reform having been accomplished. There are indications that any future proposal by EPA will not result in the needed simplification of the process.

It is also my view that the EPA has further complicated this issue by their enforcement initiatives against alleged violators of PSD, without coordinating these actions with the states. There has also been an increasing level of "second-guessing" of the permit decisions and BACT determinations that are being made by states that have been delegated the PSD program.

As a result, I am hoping that a smaller group of states and industry representatives may be able to meet over the next several months and develop an NSR reform proposal. It would be my hope that a proposal could be developed in time to be considered by the next EPA Administration and/or the next Congress. During the conference call on March 2, 2000, I would like to discuss whether you would be interested in this effort, and hopefully set a date and location for our first meeting.

The call-in number for the March 2, 2000, 4:00 p.m. EST conference call is 816-650-0754. The password is 789. Please confirm with my assistant, Mary Beth Thelen, at 517-373-7917, if you are able to join in on this call, or fax her your confirmation at 517-241-7401. Thank you for participating.

cc: Bryan Roosa, Governor's Washington Office
Dennis Drake, Michigan Department of Environmental Quality

Florida Power & Light Company, Environmental Services Dept., P.O. Box 14000, Juno Beach, FL 33408

FPL

RECEIVED
FEB 14 2000
BUREAU OF AIR REGULATION

February 7, 2000

Mr. Al Linero, P.E.
State of Florida
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: FPL Fort Myers Repowering Project
Revision to Air Construction Permit No. 0710002-004-AC

Dear Al: 0710002-008-AC

As you are aware, FPL has begun construction of it's repowering project at its Fort Myers Plant. I am writing regarding the possibility that excess emissions will occur during the steam blows necessary during startup of the combined cycle plant. While steam blows are a normal and essential part of the startup process for such facilities, unique aspects of the Fort Myers project configuration and schedule may require temporary relief from certain emission limits over finite periods of time. Following is some information about the steam blows, the regulatory framework, and a suggested course of action. We are also requesting several other unrelated minor changes to the permit language.

Fort Myers Combined cycle Startup

The Fort Myers combined cycle facility, once constructed, will be a unique configuration that does not exist anywhere else in the world, as far as FPL is aware. Six combustion turbine (CT)/ heat recovery steam generators (HRSG) will generate power and produce sufficient steam to drive two steam turbine-generators in series (see Figure 1). Effectively, eight electric generators will be tied together as one unit, when operating in combined-cycle mode.

The startup schedule for the repowered Fort Myers plant/units calls for initial operation in simple cycle mode (i.e. CTs only, with no heat recovery steam generators in service), beginning in November 2000, to provide additional reserve margin during the winter 2000-01 and summer 2001 peak demand periods. A shift to combined cycle operation will occur in April / May 2002. (see Figure 2).

The individual combustion turbine units will undergo the NSPS performance testing in early 2001, and be in commercial operation after that time. Later, beginning in August 2001, steam blows of the HRSG's and HRSG piping will begin.

Steam Blows

Steam is used to clean the piping system for each HRSG of dirt and debris which may have been deposited during or prior to construction. In order to generate the steam, the "blanking plate" which is used to block the CT exhaust gases from entering the HRSG

during simple cycle operation, will be removed, and the hot (~1,100 °F) CT exhaust gases will be allowed to enter the HRSG which will then produce steam. The steam will be directed through the piping system(s) to be cleaned, and then vented in a number of areas around the plant site. The locations of the steam vents will be dictated by the configuration of the particular piping systems being cleaned and available space.

As may be expected, the venting of this steam necessitates the production of significant quantities of makeup water to the system. FPL estimates that, at times, the quantity of water that will need to be provided to the HRSG(s) during steam blows will approach 800 gallons per minute. This challenges FPL's ability to make up water fast enough to keep up with the losses.

In order to minimize the amount of steam produced, the combustion turbine will be operated at reduced load (less than 50% load) during the blows. This will allow for the optimizing of steam blows, to ensure that the correct Cleaning Force Ratio (CFR) is achieved. This also will enable the blows to occur for longer periods of time without running out of makeup water.

Cleaning Force Ratio (CFR) is the ratio of steam blow conditions versus design operating conditions. The ratio combines aspects of pressure, temperature and flow of steam required to clean the inside of the steam systems prior to their operation. A CFR of greater than 1 is required (1 being equal to normal operating conditions). A CFR of 1.5 will be targeted, thus ensuring that all debris inside the piping systems is removed prior to the start of normal operation.

General Electric guarantees that emissions from its Frame 7FA combustion turbines will remain in compliance at loads above 50% (see Figure 3). Operating the combustion turbines during steam blows at reduced loads in combined cycle configuration will potentially result in emissions of NOx in excess of the BACT limit of 9 ppm established in Specific Conditions 18 and 19 of the permit.

From a regulatory perspective, the CT's in simple-cycle mode will have demonstrated compliance well within the usual 180-day window of time granted for initial startup and shakedown of the equipment. Therefore allowance for temporary excess emissions associated with the steam blows needs to be provided for in another fashion.

In most combined cycle startup schedules, the steam blows and associated excess emissions would be completed within the 180 days afforded for this activity; the activity would take place anyway, the timing of the activity is the unusual aspect of this project.

FPL believes we can manage the steam blows in such a fashion as to remain in compliance with NSPS Subpart GG limits for NOx emissions (i.e. 110 ppmvd or 753.7 lb. / hour corrected to 15% oxygen); however NOx emissions during the steam blows may be in excess of the BACT limit (9 ppm) for this facility.

The period during which the steam blows may occur is estimated to be up to 30 days (intermittently) per combustion turbine initially, followed by a period of up to 60 days of intermittent steam blows for the piping systems as they are tied together.

Regulatory Background

The NSPS rules [40 CFR 60.8(a)] require that the performance test (actually initial emissions compliance testing) be conducted within 180 days of initial startup, or within 60 days of achieving the maximum production rate, whichever comes first.

The intent of this rule, FPL believes, is to provide sufficient time to start up a new emissions source, "debug" it, and conduct the initial testing within a reasonable length of time.

Suggested Course of Action

While the steam blows are essentially a startup event for the CT's in combined cycle mode, the Fort Myers project configuration and schedule require that this activity occur after the initial 180-day startup window has elapsed. To accommodate this unique circumstance FPL requests that the Department exercise its discretion under FAC Rule 62-210.700(1) and (5) to authorize excess NOx emissions during these steam blows. This authorization could be accomplished by revision of the project's air construction permit, with appropriate constraints on the duration and magnitude of the excess emissions.

Accordingly, the following language is suggested:

24. Excess Emissions Requirements:

- Excess emissions resulting from startup, shutdown or malfunction of *the combustion turbines and heat recovery steam generators* shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emission occurrences shall in no case exceed two hours in any 24-hour period except during both "cold startup" to or shutdown s from combined cycle operation. During cold start-up to combined cycle operation, up to three hours of excess emissions are allowed. Cold start-up is defined as a startup to combined cycle operation following a complete shutdown lasting at least 48 hours.

- Excess emissions from the combustion turbines resulting from startup of *the steam turbines system* shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed 12 hours per cold startup of the steam turbine system.

  [Applicant Request (FPL estimates that, on average there will be approximately 12 startups to combined-cycle operation per year), G.E. Combined Cycle Startup Curves Data and Rules 62-210.700, 62-4.130 F.A.C.]

- **Emissions of NOx from the combustion turbines, in excess of the BACT limit established in Specific Condition 19, resulting from steam blow activities associated with bringing the heat recovery steam generators into operation shall be permitted provided that best operational practices are adhered to and that the Subpart GG NSPS limit of 75/110 ppm is not exceeded. The period during which such excess emissions are authorized shall not exceed a total of 90 days per combustion turbine. The applicant shall record for each CT unit the periods of startup for each operating mode. Excess emissions during the periods of startup shall be reported to the FDEP South District office within 30 days.**

[Applicant Request (FPL estimates that CT emissions will comply with the NSPS NOx limit following initial compliance testing, but that low load operation necessary for steam blow activities prior to initial combined cycle operation will result in NOx emissions above the BACT limit of 9 ppm; excess emissions of NOx resulting from steam blows may occur intermittently over a period of up to 30 days per CT initially, followed by a period of up to 60 days of intermittent steam blows for the piping systems), G.E. Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.]

27. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate at which each **unit configuration (i.e., simple cycle and combined cycle)** will be operated, but no later than 180 days following initial operation of ~~the~~ each unit **configuration**, and annually thereafter...

Additional requested changes

A couple of other relatively minor changes to the Air Construction permit are requested, as a result of further evaluation of the combined cycle facility.

First, Specific Condition 22 is requested to be amended as follows, in order to account for the presence of any background volatile organic compounds:

22. Volatile Organic Compounds (VOC) Emissions: The concentrations of VOC in the exhaust gas shall not exceed 1.4 ppmvd **(exclusive of background concentration)** as determined by EPA Method 18 or 25A. VOC emissions (at ISO conditions) shall not exceed 2.9 lb./hr per CT **(exclusive of background concentration)** to be demonstrated by initial stack test.

The Project and Location section on the placard page incorrectly describes "one 30 foot stack" for the fuel gas heaters. There will actually be six, 21-foot stacks. Also, FPL has elected to install direct-fired heaters, rather than a boiler for this purpose. Therefore, we suggest the following language change to the last sentence:

"The project also includes a cooling tower for once-through brackish water ~~and a small boiler or~~ **six direct-fired** heaters with ~~a 30-foot stack~~ **21-foot stacks** to heat the natural gas prior to use during simple cycle operation and cold start-ups".

The Emission Units section on page 2 of the permit describes emission unit 024 as "Natural Gas Boiler or Heater(s)". We request that the description be modified to "Six direct-fired heaters".

The final bullet under Specific Condition 19 requires that the NOx emission limit for the gas heaters / boiler to be demonstrated by stack test. FPL requests that an initial stack test should be sufficient to demonstrate compliance, and additionally that two of the heaters should be representative of the six. Therefore the following language is suggested:

"NOx emission limit from the **six** gas heaters ~~/ boiler~~ shall not exceed 0.10 lb. / mmBtu (at ISO conditions) to be demonstrated by **an initial** stack test **on two of the six heaters**."

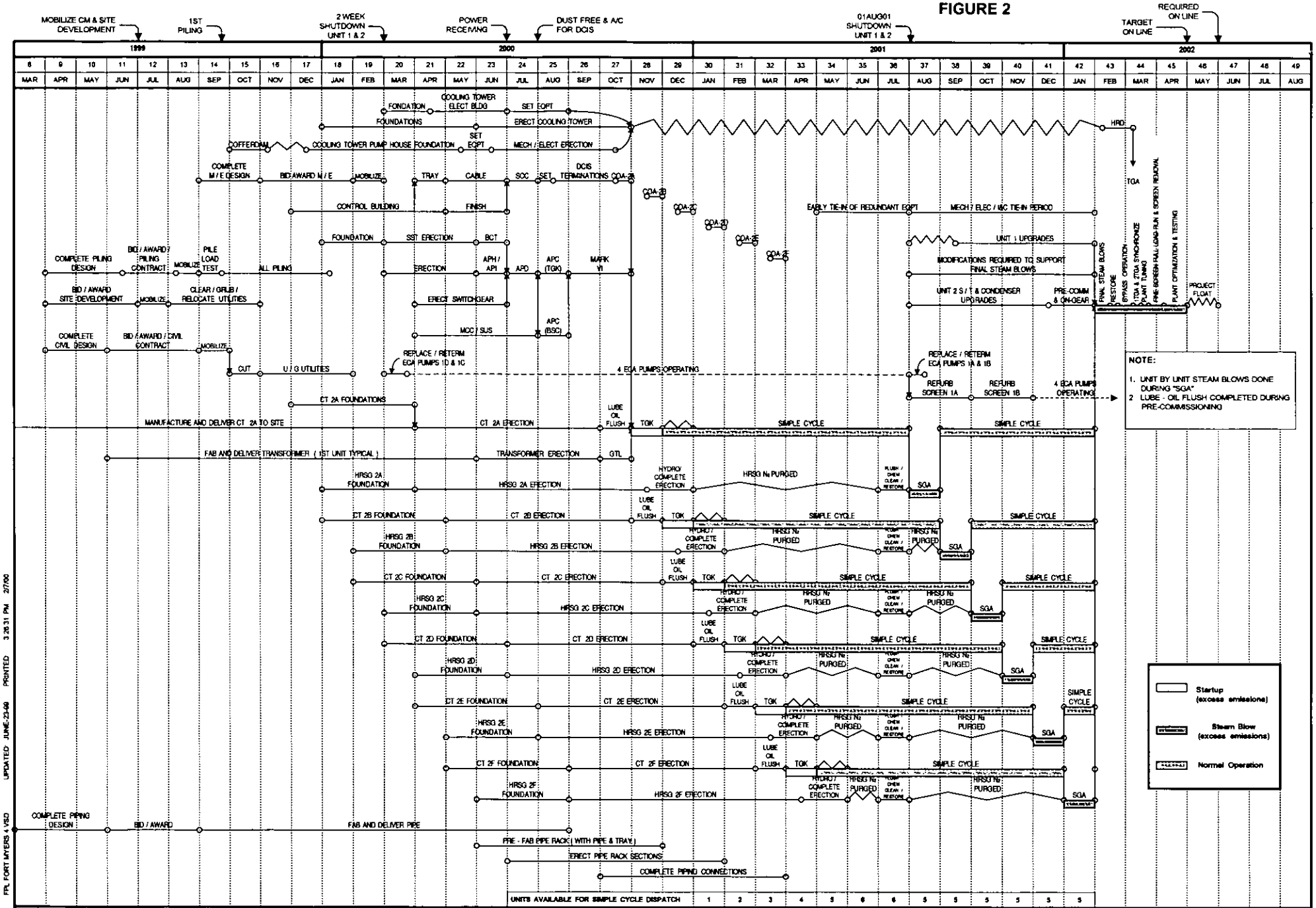
I would be pleased to answer any questions you may have. At your convenience, please feel free to contact me at (561) 691-7058 or via email at rich_piper@fpl.com.

Very truly yours,

Richard Piper
Licensing Manager
Florida Power & Light Company

cc: SD
M. Halpin, BAR
T. Heron, BAR

FIGURE 2



NO	DATE	REVISION / RECORD OF ISSUE	BY	CHK	APP	FLM
4	14-JUN-99	REVISED FOR EARLY S/C POWER	MJF	MG		
3	30-APR-99	UPDATED AUX POWRE LOGIC	MG	MAM		
2	30-SEP-98	UPDATED FROM 28SEP98	ATK	MAM		
1	23-SEP-98	UPDATD FOR FPL MEETING	MFJ	MG		

BLACK & VEATCH

ENGINEER M MCDERMOTT DRAWN M FITZGERALD

CHECKED DATE 22-APR-98

APC 440 V POWER
APD 4 KV
APH DC POWER
API ESSENTIAL SERVICE
BCT STATION SERVICE 480V
CDA DCS
ECA AUX COOLING WATER
TCS CLOSED CYCLE COOLING WATER (CT)
GTL GENERATOR TRANSFORMER
HNA DEMINERALIZED WATER
HRC CIRCULATING WATER
TCC HVAC - CONTROL BUILDING
1 TGA STEAM TURBINE - UNIT 1
2 TGA STEAM TURBINE - UNIT 2
TGK COMBUSTION TURBINE
WTD CYCLE MAKEUP TREATMENT

FLORIDA POWER & LIGHT
FORT MYERS PROJECT

6 ON 2 1500 MW CC REPOWERING

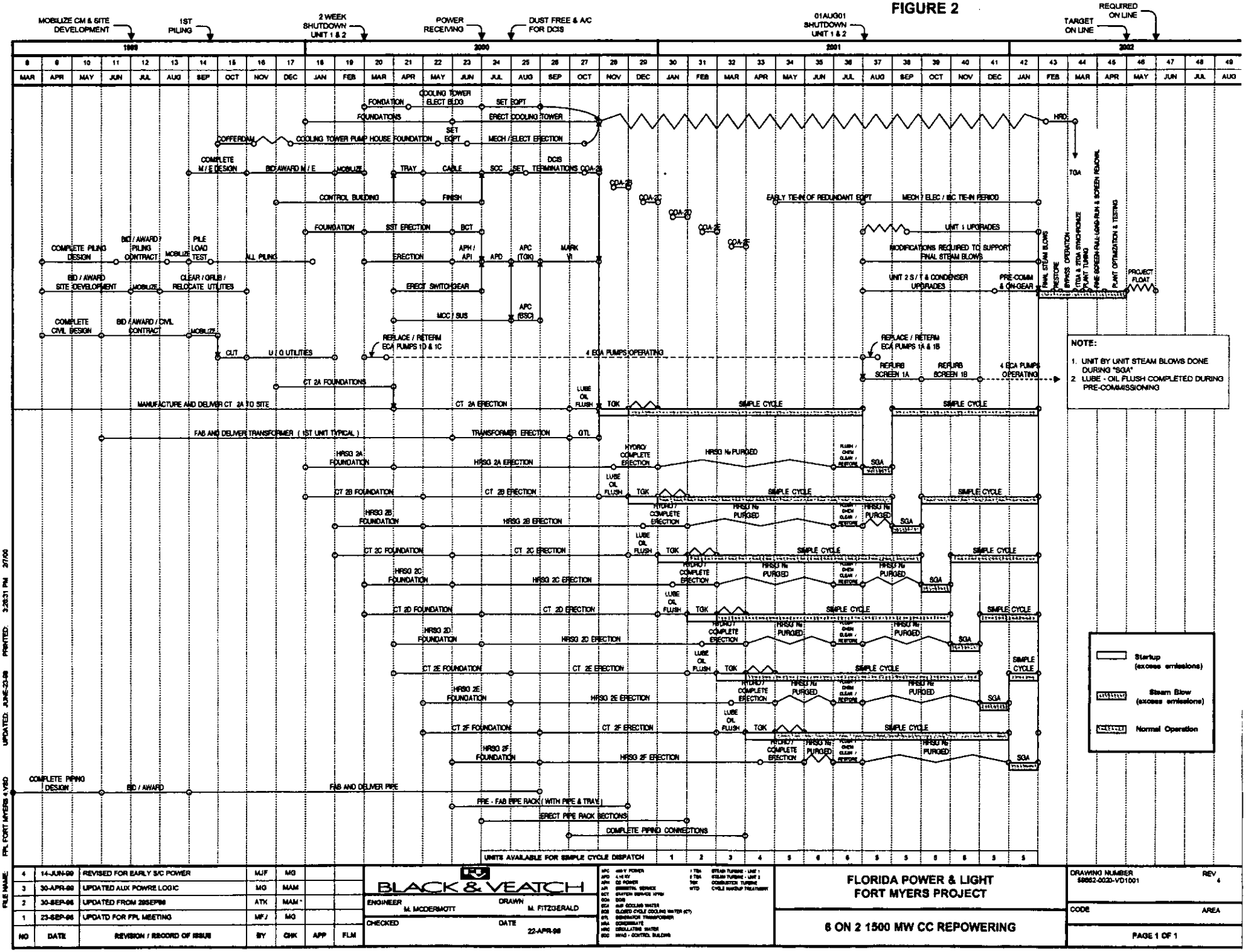
DRAWING NUMBER 59662-0020-VD1001 REV 4

CODE AREA

PAGE 1 OF 1

FILE NAME: FPL FORT MYERS 4 VSD UPDATED: JUNE-23-99 PRINTED: 3:26:31 PM 27/00

FIGURE 2



NO	DATE	REVISION / RECORD OF ISSUE	BY	CHK	APP	FLM
4	14-JUN-99	REVISED FOR EARLY S/C POWER	MJF	MG		
3	30-APR-99	UPDATED AUX POWR LOGIC	MG	MAM		
2	30-SEP-98	UPDATED FROM 29SEP98	ATK	MAM*		
1	23-SEP-98	UPDATD FOR FPL MEETING	MFJ	MG		

BLACK & VEATCH

ENGINEER M. MCDERMOTT
DRAWN M. FITZGERALD
CHECKED
DATE 22-APR-99

FLORIDA POWER & LIGHT
FORT MYERS PROJECT

6 ON 2 1500 MW CC REPOWERING

DRAWING NUMBER 58882-0020-VD1001
REV 4
CODE
AREA
PAGE 1 OF 1

FILE NAME: FPL FORT MYERS 4.VSD UPDATED: JUNE-23-99 PRINTED: 3:28:31 PM 2/7/00

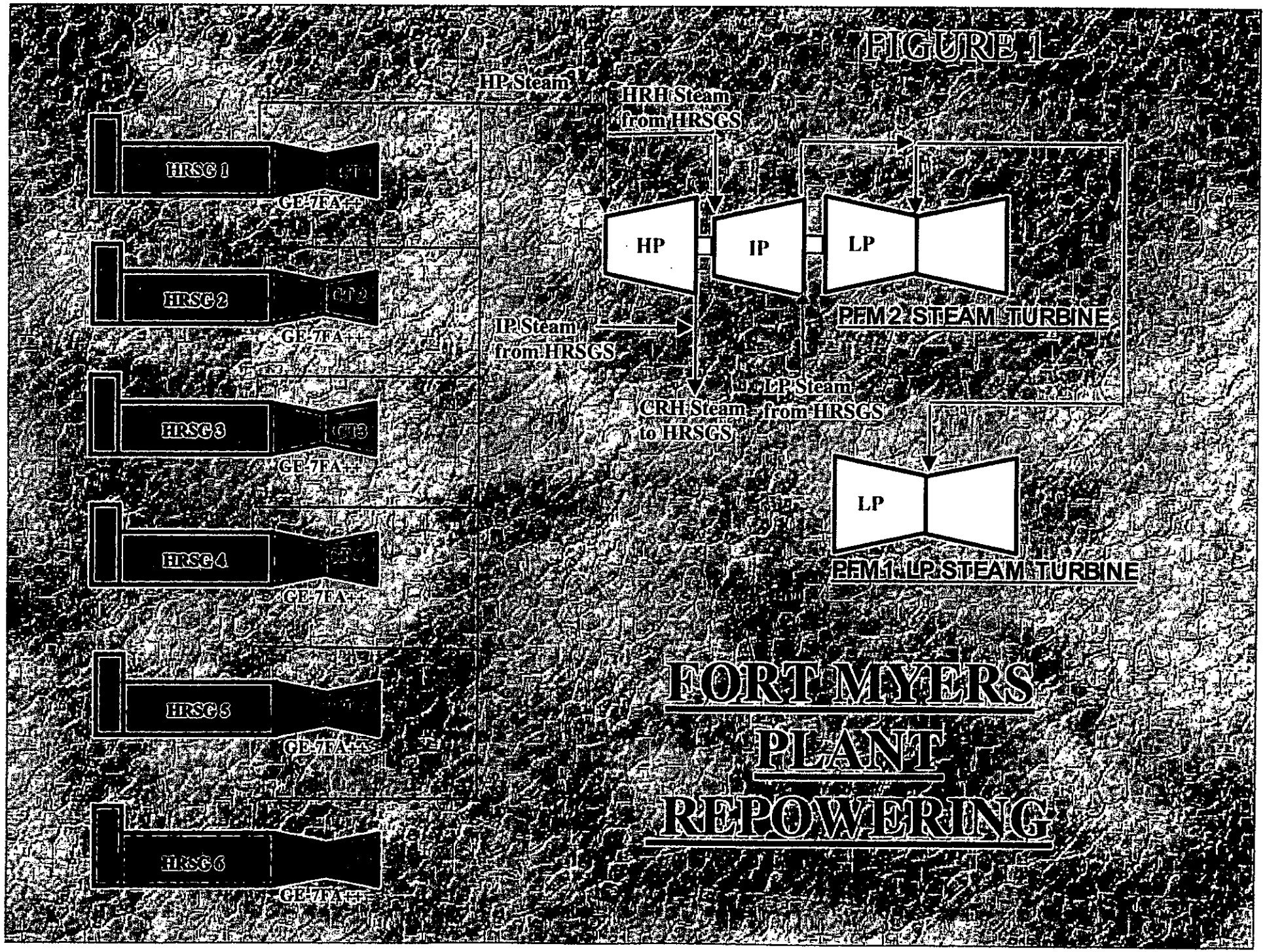


FIGURE 1
HP Steam
HRH Steam from HRSGS
HRSG 1
GE 7FA+
HRSG 2
GE 7FA+
HRSG 3
GE 7FA+
HRSG 4
GE 7FA+
HRSG 5
GE 7FA+
HRSG 6
GE 7FA+
HP
IP
LP
PFM 2 STEAM TURBINE
IP Steam from HRSGS
CRH Steam to HRSGS
LP Steam from HRSGS
LP
PFM 1 LP STEAM TURBINE
FORT MYERS PLANT REPOWERING

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 14, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper
Repowering Licensing Manager
Florida Power & Light
Post Office Box 14000
Juno Beach, Florida 33408

RE: FPL Ft. Myers Plant 096
Facility No. 0710002-004-AC

Dear Mr. Piper:

The Department reviewed your request dated September 15, 1999 to modify the above mentioned construction permit. The request is acceptable and the referenced permit is hereby modified as follows:

SPECIFIC CONDITION 10

The test method for visible emissions shall be EPA Method *9 and the test method for nitrogen oxides shall be EPA Method 7 or 7E,* adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

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 120.60(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 120.60(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.

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.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision 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 pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10/15/99 to the person(s) listed:

Mr. Richard Piper, FPL*

Phil Barbaccia DEP SD

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.

Charlotte J. Hayes (Clerk) 10/15/99 (Date)

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. Richard Piper
Relicensing Licensing Mgr.
FPL
P.O. Box 14000
Juno Beach, Fl 33408

4a. Article Number
Z 031 391 961

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
OCT 17 1995

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form 381[illegible] ember 1994 102595-98-B [illegible] Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Z 031 391 961

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to: Richard Piper, FPL	
Street & Number: P.O. Box 14000	
Post Office, State, & ZIP Code: Juno Bch. Fl 33408	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: FPL 10/15/95	

PS Form **3800**, April 1995

Florida Power & Light Company, Environmental Services Dept., P.O. Box 14000, Juno Beach, FL 33408

FPL

RECEIVED
SEP 20 1999
BUREAU OF AIR REGULATION

September 15, 1999

Mr. Al Linero, P.E.
State of Florida
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

0710002-006 -AC

Re: FPL Fort Myers Plant
Air Construction Permit #0710002-004AC
Specific Condition 10

Dear Mr. Linero:

Pursuant to our telephone conversation of this morning, please modify the subject permit condition to allow the use of EPA Method 7E as an alternate to EPA Method 7. These methods are both approved for use on combustion turbines and have been used at other similar FPL facilities. Thank you in advance for your help.

Please do not hesitate to contact me at (561) 691-7058 if I you have any questions.

Very truly yours,

Rich Piper
Repowering Licensing Manager
Florida Power & Light Company

Monitoring of Operations

9. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

10. The test method for visible emissions shall be EPA Method *9 and the test method for nitrogen oxides shall be EPA Method 7*, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2), F.A.C.]

12. Applicable Test Procedures.
(a) Required Sampling Time.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

FPL ENVIRONMENTAL SERVICES DEPARTMENT
PO BOX 14000
JUNO BEACH, FL 33408

DATE: September 15, 1999

SEND TO:
NAME: AL LINERO
COMPANY: FDEP
FAX NUMBER: 850 922 6979

Teresa - do a "one stop" permitting action w/o public notice. Use latest standard language.

FROM:
RICHARD PIPER
FPL ENVIRONMENTAL SERVICES
PHONE: (561) 691-7058
FAX: (561) 691-7070
rich_piper@fpl.com

0710002-006-AC

NUMBER OF PAGES INCLUDING FAX COVER: 3

MESSAGE:
AL -

Per our discussion this morning. Hard copy is in the mail. I've also ginned up a letter on that other matter we discussed.

Best Regards -
Rich Piper

Florida Power & Light Company, Environmental Services Dept., P.O. Box 14000, Juno Beach, FL 33408

FPL

September 15, 1999

Mr. Al Linero, P.E.
State of Florida
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: FPL Fort Myers Plant
Air Construction Permit #0710002-004AC
Specific Condition 10

Dear Mr. Linero:

Pursuant to our telephone conversation of this morning, please modify the subject permit condition to allow the use of EPA Method 7E as an alternate to EPA Method 7. These methods are both approved for use on combustion turbines and have been used at other similar FPL facilities. Thank you in advance for your help.

Please do not hesitate to contact me at (561) 691-7058 if I you have any questions.

Very truly yours,

Rich Piper
Repowering Licensing Manager
Florida Power & Light Company

Monitoring of Operations

9. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

~~From~~ SPECIFIC CONDITION NO 10

10. The test method for visible emissions shall be EPA Method *9 and the test method for nitrogen oxides shall be EPA Method 7*, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

7A

11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2), F.A.C.]

12. Applicable Test Procedures.
(a) Required Sampling Time.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 30, 1999

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Chairman
Lee County Board of County Commissioners
Post Office Box 398
Fort Myers, Florida 34219

Dear Mr. Chairman:

We received a letter from David M. Owen, Assistant County Attorney requesting that the Department "provide actual notice to Lee County of any proposed agency actions concerning FDEP permits affecting all aspects of FPL's repowering of the Fort Myers Plant."

The Division of Air Management's Bureau of Air Regulation in Tallahassee issued the attached Notice of (Final Air Construction) Permit on November 25, 1998 for the repowering project. We will advise you of any future applications and FDEP actions should FPL request amendments to or modifications of the issued air construction permit.

For reference, we did have a number of conversations with consultants working on behalf of the County. Their specific interest regarded the precise sequence in which the new units are to be installed and phased into combined cycle operation as well as the retirement dates for the existing boilers. FPL subsequently prepared a letter to the County's Environmental Services Department detailing the sequence and the impacts on emissions.

If you have any questions regarding this matter, please call me or Al Linero at 850/488-0114.

Sincerely,

A. A. Linero, P.E. 7/20

for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/al

Peggy Highsmith, DEP SD
Perry Odom, DEP OGC
David M. Owen, Esq., Lee County

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the Matter of an Application for Permit by:

Mr. William Reichel, General Manager
FPL Fort Myers Plant
Post Office Box 430
Fort Myers, Florida 33905

DEP File No. 0710002-004-AC
1500 MW Gas Repowering Project
Lee County

Enclosed is the Final Permit Number 0710002 -004AC to construct six (6) 170 megawatt General Electric MS7241FA gas-fired combustion turbine-generators with unfired heat recovery steam generators (HRSG) that will raise sufficient steam to produce approximately another 480 MW via the existing steam-driven electrical generators at the FPL Fort Myers Plant near Tice, Lee County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., 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 Legal Office; 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 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

C.H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 11-25-98 to the person(s) listed:

Mr. William Reichel, FPL*
Mr. Richard Piper, FPL
Ms. Peggy Highsmith, SD
Mr. Doug Neeley, EPA
Mr. John Bunyak, NPS
Mr. Ken Kosky, P.E., Golder Associates
Mr. Peter Cunningham, Esq., HGSS

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.

Kuri Fisher (Clerk) 11-25-98 (Date)

Fold at line over top of envelope to the right of the return address

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

...h to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Chairman
Lee Co Board of
Co. Comm
PO Box 398
Ft. Myers, Fl
33902

4a. Article Number
Z 333 618 120

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
8/5/99

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811,** December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

Z 333 618 120

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to Chairman	
Street & Number Lee Co. Bd CC	
Post Office, State, & ZIP Code Ft. Myers, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	FPL
Return Receipt Showing to Whom & Date Delivered	Ft Myers
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	8-3-99

PS Form **3800,** April 1995

RECEIVED

JUL 26 1999

DIVISION OF AIR RESOURCES MANAGEMENT

Al Linero pls. handle or be prepared to [illegible] 7/29

LEE COUNTY
SOUTHWEST FLORIDA

BOARD OF COUNTY COMMISSIONERS

John E. Manning
District One

Douglas R. St. Cerny
District Two

Ray Judah
District Three

Andrew W. Coy
District Four

John E. Albion
District Five

Donald D. Stilwell
County Manager

James G. Yaeger
County Attorney

Diana M. Parker
County Hearing Examiner

Writer's Direct Dial Number: (941) 335-2236

BUREAU OF AIR REGULATION
JUL 29 1999
RECEIVED

July 16, 1999

99 JUL 23 AM 9:40
RECEIVED BY
LEE CO. ATTORNEY

Perry Odom, Esq.
General Counsel
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

RE: REPOWERING PROJECT FOR FLORIDA POWER & LIGHT (FPL) COMPANY'S FORT MYERS ELECTRIC POWER PLANT

Dear Mr. Odom:

As you are likely aware at this time, Florida Power & Light Company (FPL) currently owns and operates an electrical power plant in Fort Myers, Florida which is being considered for repowering. It is our understanding that the Florida Department of Environmental Protection (FDEP) is, or will be in the near future, evaluating several applications from FPL for the modifications to this plant in order to operate its boilers on natural gas rather than fuel oil. Since this electric power facility directly affects the environment of Lee County, Lee County would like to be kept informed with respect to the issuance of the "repowering" permits from the FDEP for the FPL Fort Myers facility.

On behalf of the Board of County Commissioners of Lee County, I am respectfully requesting that the Department provide actual notice to Lee County of any proposed agency actions concerning FDEP permits affecting all aspects of FPL's repowering of the Fort Myers electric power plant. You may address such notice(s) to the Chairman of the Lee County Board of County Commissioners, with a copy to me, as follows:

FPL REPOWERING REQ.odom.wpd

RE: REPOWERING PROJECT FOR FLORIDA POWER & LIGHT (FPL) COMPANY'S FORT MYERS ELECTRIC POWER PLANT .

Chairman, Lee County Board of County Commissioners
Post Office Box 398
Fort Myers, Florida 33902.

Thank you for your assistance with this request, and please feel free to call me at your convenience if you have any questions about our need to be kept notified of FPL's progress with the facility repowering.

Cordially,

David M. Owen
Assistant County Attorney

DMO:dm
xc: Board of County Commissioners
James G. Yaeger, County Attorney
Howard Rhodes, Director, Division of Air Resource Management, FDEP
David York, P.E., FDEP
Mimi Drew, Director, Division of Water Facilities, FDEP
Peggy Highsmith, Director of District Management, FDEP (Fort Myers)
Jan Mandrup-Poulson, Water Quality Assessment Administrator, FDEP
J.W. French, P.E., Director, Public Works Administration
Larry Johnson, P.E., Director, Environmental Services
Lindsey Sampson, P.E., Director, Solid Waste Management
David S. Dee, Esq., Landers & Parsons, P.A.
Douglas S. Roberts, Esq., Hopping, Green, Sams & Smith, P.A.
Neale Montgomery, Esq., Pavese, Garner, et al.