



May 20, 2012

*Leigh Ann*  
*Module 1099Z*

RECEIVED

MAY 29 2012

DIVISION OF AIR  
RESOURCE MANAGEMENT

Jeff Koerner – Chief  
Bureau of Air Regulation  
Division of Air Resources Management  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399

**RE: Request To Modify Manatee Plant Air Construction Permit – 0810010-007-AC**

Dear Mr. Koerner:

In 2002 Manatee Plant added natural gas fuel to Units 1&2 which up to that time were 100% #6 Residual Fuel Oil (RFO) fired units. At the time it was recognized that the units would likely not make full load (nominal 800 MW) on 100% gas fuel due to the different heat release characteristic of natural gas vs. fuel oil. As a result, FPL requested a natural gas firing permitted capacity of 5,670 MMBtu/hr. when firing 100% natural gas. The oil firing permitted capacity remained at 8,650 MMBtu/hr following the addition of natural gas.

By 2007 Manatee Plant Units 1&2 had installed Reburn as a NOx control technology to lessen the likelihood that Hillsborough County would fall into non-attainment of the ambient air quality standard for ozone. The Reburn technology introduced significant changes to the fuel burning arrangement of the boilers: burners in the main burner section of the boiler were reduced from 32 burners to 24, fuel injector nozzles were added above the main burner zone and additional Overfire Air was added to the front and rear walls above the new fuel injectors. The Reburn modifications brought with them changes to the heat absorption of the boiler, particularly when firing natural gas. As a result, the units are able to fire more natural gas and achieve greater generation on 100% gas than before.

To take advantage of the greater natural gas firing capability, the plant requests an increase to the natural gas-firing permitted capacity from 5,670 MMBtu/hr. to 8,650 MMBtu/hr., which is equivalent to the oil-firing capacity. The benefits of more natural gas-firing capability include less sulfur dioxide (SO<sub>2</sub>) emissions, less Particulate Matter (PM) emissions, less incremental NOx emissions, and less opacity vs. oil fuel.

I have enclosed for your use the R.O. Statement Page and the P.E. Certification page.

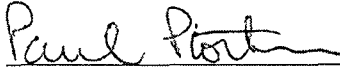
We look forward to working with the Department to accommodate this change. If you have any questions, or require additional information, please call me at (941) 776-5211 or Kevin Washington at (561) 691-2877.

Paul Plotkin  
Manatee Plant General Manager and R.O.

Attachments:2

**Owner/Authorized Representative Statement**

**Complete if applying for an air construction permit or an initial FESOP.**

1. Owner/Authorized Representative Name : Paul Plotkin
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Florida Power & Light Manatee Power Plant Street Address: 19050 State Road 62 City: Parrish State: FL Zip Code: 34219-9220
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( 941 ) 776-5211 - ext. Fax: ( 941 ) 776-5219
4. Owner/Authorized Representative E-mail Address: paul_plotkin@fpl.com
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  <div style="display: flex; justify-content: space-between;"><div> Signature</div><div><u>5/20/12</u> Date</div></div>

### Professional Engineer Certification

1. Professional Engineer Name: Edward Preast Registration Number: 33225
2. Professional Engineer Mailing Address... Organization/Firm: Florida Power & Light Environmental Services Street Address: 700 Universe Blvd. City: Juno Beach State: FL Zip Code: 33408
3. Professional Engineer Telephone Numbers... Telephone: (561) 691 - 2679 ext. Fax: (561 ) 691 - 7049
4. Professional Engineer E-mail Address: ed_preast@fpl.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i>  (1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i>  (2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i>  (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i>  (4) <i>If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i>  (5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  <div style="display: flex; justify-content: space-between;"><div>Edward Preast Signature (seal)</div><div>5/23/12 Date</div></div>

\* Attach any exception to certification statement.