FPL.

Manatee Energy Center, 19050 State Road 62, Parrish, Fl 34219

June 12, 2012

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JUN 18 2012

DIVISION OF AIR RESOURCE MANAGEMENT

A. A. Linero, P.E.
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399

RE: Additional Information On The Request To Modify Manatee Plant Air Construction Permit – 0810010-077-AC and Initial Request To Establish A Lower Fuel Oil Sulfur Limit.

Dear Mr. Linero:

On May 20, 2012 FPL requested a permit change to the Air Construction permit referenced above to increase the natural gas firing capacity of Units 1&2 from 5,670 MMbtu/hr. to 8,650 MMbtu/hr. Subsequently, the Department requested more information on the proposed change with respect to emissions.

In our original request to add natural gas to the facility in April 2002 the plant supplied information to the Department including the following short term emission rate discussion:

Short-Term Rates—As you would expect, the short-term emission rates are lower for all of the following pollutants while firing natural gas than while firing fuel oil, in both pounds per hour and pounds per million British thermal units (lb/mmBtu), as shown in the following table.

Manatee Units 1 and 2 **Short-Term Emission Rate Comparison** *Pounds Per Hour* *Pounds Per Million Btu*		
Pollutant	**Fuel Oil**	**Natural Gas**
Sulfur Dioxide	9,183 1.06	3 0.0006
Particulate Matter (PM/PM10)	719 0.08	10 0.002
Nitrogen Oxides	2,545 0.29	1,152 0.20
Carbon Monoxide	5,450 0.63	2,608 0.46

Volatile Organic Compounds	44 0.005	17 0.003

In addition to these regulated air pollutants, the emissions of carbon dioxide are also lower while firing natural gas than while firing fuel oil, which is environmentally beneficial.

Furthermore, to the extent that natural gas is co-fired with fuel oil, the emissions would be reduced in proportion to the ratio of gas to oil, and thus co-firing is also an environmentally beneficial method of operation.

For discussion purposes, the short term rates provided in 2002 are still relevant for today's requested increase of natural gas firing, as any increase above 5,670 MMbtu/hr on gas will displace an equivalent amount of fuel oil firing with the benefit of lower emissions. For example, an increase of 1 MMbtu of gas firing can reduce SO_2 by 1.0594 lbs.; PM by 0.078 lbs.; NOx by 0.09 lbs.; CO by 0.17 lb.; and VOC by 0.002 lb.

The addition of natural gas firing capability to Units 1&2 has resulted in much lower emissions from the fossil steam boilers over the years. In the last five years (2007-2011) natural gas has comprised ~55% of the total fuel burned in the boilers. Adding more gas firing capability will continue to provide for lower emissions.

In this permitting action FPL also requests that the Department establish an equivalent fuel oil sulfur limit for Units 1&2 as identified in the BART Determination For Manatee Power Plant, May 2012. FPL proposes that an equivalent 0.7 percent sulfur fuel oil, burned alone or co-fired with a requisite amount of natural gas, be considered as BART and become effective December 31, 2013. If future Court, Legislative, or EPA action invalidates the BART provisions of the Clear Air Visibility Rule (CAVR), FPL requests that the 0.7 percent fuel oil sulfur limit is also invalidated by such action.

Thank you for consideration of our request. If you have any questions, need any additional information, or would like to schedule a meeting to discuss this matter, please contact me at (941) 776-5211 or Kevin Washington at (561) 691-2877.

Sincerely,

Paul Plotkin

Paul Plotkin
Manatee Plant General Manager and Responsible Official