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BUREAU OF AIR REGULATION

June 23, 2008

Ms. Trina Vielhauer
Chief, Bureau of Air Regulation
Florida Department of Environmental
Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx
Airbill No. 7984 6613 8569

**Re: Tampa Electric Company HL Culbreath Bayside Power Station-
Installation of Eight Simple Cycle Combustion Turbines
Project No. 0570040-024-AC**

Dear Ms. Vielhauer:

As you know, on March 19, 2008, Tampa Electric Company ("TEC") submitted to the Department of Environmental Protection ("DEP") an application for air construction permit to install and operate eight simple cycle combustion turbines at the HL Culbreath Bayside Power Station in Hillsborough County, Florida. The project consists of four Pratt & Whitney FT8-3 SwiftPac aeroderivative CT Units. Each of the units is comprised of two simple cycle combustion turbines coupled to one common generator having a nominal gross generating capacity of 62 megawatts. The proposal is to fire the combustion turbines exclusively with pipeline quality natural gas and operate the units in peaking service for no more than 2,500 hours per year per simple cycle combustion turbine. Our proposal is to utilize water injection and oxidation catalyst technologies to control emissions of nitrogen oxides and carbon monoxide, respectively.

We have been in discussions with the Bureau concerning the completeness of the application for construction permit and we are compiling responses to questions that have been raised. One of the issues that has arisen concerns the appropriate level of technology for these units and whether selective catalytic reduction equipment should be installed on these units. The project is being reviewed under the PSD rules of DEP.

In reviewing project details in anticipation of completing the response to the DEP's request for additional information, it has come to our attention that PSD review may not apply to this project. The purpose of this letter is to provide you with a general outline of our reasoning in reaching this conclusion and to request a meeting with you and other representatives of the Bureau to discuss this in more detail in the very near future.

As you know, TEC entered into a Consent Decree with the United States in October of 2000. The Consent Decree has been subsequently amended and it is still in effect. The purpose of the Consent Decree was to resolve concerns about whether certain activities conducted at the Big Bend and Gannon Generating Stations required review under the PSD regulations. The question revolved primarily around the issue of whether the projects were exempt from the regulations or whether permit review was required. TEC's position is that the activities were within the scope of the exclusions from rule requirements, but entered into the settlement nevertheless to avoid protracted litigation.

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Under the terms of the Consent Decree certain decisions were required to be made with respect to the continued operations of both the Big Bend and the Gannon Generating Stations. As you know, the Gannon Station is now known as the Bayside Station. The Consent Decree generally required that TEC either install pollution control equipment on the then existing coal fired units at the Gannon Station, or commit to re-powering the station with natural gas fired combined cycle units. The Consent Decree addresses the issues of netting of emissions in Paragraph 86.1, as follows:

86.1 Netting. For any and all emission control actions taken by Tampa Electric to comply with the terms of this Consent Decree, including but not limited to upgrading of ESPs and scrubbers, installation of scrubbers, installation of SCRs and the Re-powering of Gannon or Big Bend Units, any emission reductions generated thereby shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Acts New Source Review program, provided, however, that nothing in this Decree shall be construed to prohibit Tampa Electric's seeking such treatment for emissions decreases resulting from the difference in emissions between:

- (i) those that would have resulted from installing on an existing Gannon or Big Bend coal-fired Unit: an SCR that maintains 0.10 lb/mmBTU NOx Emission Rate, a scrubber that maintains an SO2 Removal Efficiency of 95%, and an ESP that maintains a PM Emission Rate of less than 0.010 lb/mmBTU and
- (ii) those that result from Re-Powering that same Unit and meeting a NOx Emission Rate of no greater than 3.5 ppm.

Based upon our reading of Paragraph 86.1 of the Consent Decree, we believe that the emission reductions resulting from the re-powering project are more than sufficient to compensate for the emissions expected from the installation and operation of the simple cycle combustion turbines.

The decreases that we propose to utilize for the netting analysis have not been relied upon for other PSD purposes. The decreases are federally enforceable and the Consent Decree in Paragraph 86.1 outlines the requirements for netting, which we believe are met here. Attached for your review is a spreadsheet which provides an analysis and demonstrates the decreases compared against the increases that are anticipated as a result of the project.

We will be contacting your office in the very near future to schedule a meeting to discuss this further. In the meantime, please let me know if you need any additional information or have any questions concerning the foregoing. We look forward to meeting with you to discuss this in more detail.

Sincerely,



Byron T. Burrows, P.E.
Manager-Air Programs
Environmental, Health & Safety

c/enc: Mr. Jeff Koerner, FDEP
Mr. David Lloyd, EPA Region 4
Ms. Mara Grace Nasca, FDEP SW
Mr. Sterlin Woodard, EPCHC

**BPS P&W Peaker Project
PSD NOx Netting Evaluation**

Step 1. Determine the emissions increases from the proposed project.

P&W SC CT's (8)

Emission rate (per CT) <i>(lb/hr)</i>	Max Hours (per CT) <i>(hrs)</i>	Annual Emissions (per CT) <i>(tpy)</i>	Total (8) CT Emissions <i>(tpy)</i>
32	2500	40	320

Emergency Generator Emissions

Emission rate (per EG) <i>(lb/hr)</i>	Max Hours (per EG) <i>(hrs)</i>	Annual Emissions (per EG) <i>(tpy)</i>	Total (2) EG Emissions <i>(tpy)</i>
16	100	0.8	1.6

Total Emission Increases= 321.6

Step 2 Determine the beginning and ending dates of the contemporaneous period as it relates to the proposed modification.

Gannon Unit 6 shut down date: 9/30/2003

Application Submitted to FDEP by: 9/30/2008 to meet contemporaneous requirement

Step 3 Determine which emissions units at the source have experienced an increase or decrease in emissions during the contemporaneous period.

All emission decreases due to Gannon repowering

Increases due only to P&W project

Step 4 Determine which emissions changes are creditable.

The decreases that we propose to utilize for the netting have not been relied upon for other PSD purposes. The decreases are federally enforceable and the Cc Decree in Paragraph 86.1 outlines the requirements for netting, which we believe are met here. Therefore, the emissions changes are creditable.

Step 5 Determine, on a pollutant-by-pollutant basis, the amount of each contemporaneous and creditable emissions increase and decrease.

Old Level-GN 6 emissions that would have resulted from installing on an existing Gannon coal-fired Unit, an SCR that maintains 0.10 lb/mmBTU NOx Emission

Calculations for 86.1 (i)

	GROSS GENERATION (MWh) ¹	GN6 AVG GROSS HEAT RATE (BTU/KWh)	Calculated GN6 AVG GROSS HEAT INPUT (MMBTU)	Calculated Emissions @ 0.10 lb/MMBtu (tpy)
ST2 (GN6) 2006	1,440,991	11,424	16,461,881	823
ST2 (GN6) 2007	1,658,282	11,424	18,944,214	947
Average				885

Notes:

1. gross generation values from ST-2 - Steam Turbine 2 (repowered Gannon Unit 6) output

2. Heat rate based on last years of Gannon operation

New Level- GN Unit 6 was repowered as BPS Unit 2;

BPS 2 NOx Emissions:

Calculations for 86.1 (ii)

BPS NGCC Unit 2 Steam Turbine

	Emission rate (per CT) ¹ (lb/hr)	Actual Hours (ST) (hrs)	Annual Emissions (per CT) (tpy)	Total (4) CT Emissions (tpy)
ST2 2006	23.1	7808	90.2	361
ST2 2007	23.1	8559	98.9	395
Average				378

Notes:

1. 3.5 ppmvd corrected to 15% oxygen at base load is equivalent to 23.1 lb/hr

SUMMARY

Total emissions if added SCR to GN6:	885 tpy
Total Allowable emissions for BPS 2 (4 units):	378 tpy
Reductions that TEC can take credit for:	507 tpy

Step 6 Sum all contemporaneous and creditable increases and decreases with the increase from the proposed modification to determine if a significant net emissions increase will occur.

Proposed Mod. (increase):	321.6 tpy
Creditable Increase:	0
Creditable Decrease:	507 tpy
Net emissions reduction:	185 tpy

Source: Draft New Source Review Workshop Manual, October 1990