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ORIGINAL

August 9, 2002

HAND DELIVERED

Ms. Blanca S. Bayo, Director
Division of Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Petition for approval of new environmental program for cost recovery through environmental cost recovery clause by Tampa Electric Company; FPSC Docket No. 020726-EI

Dear Ms. Bayo:

Pursuant to a data request from Staff, we enclose on behalf of Tampa Electric Company the original and fifteen (15) of an Affidavit of Gregory M. Nelson, Director Environmental Affairs of Tampa Electric. This Affidavit is submitted in support of the Petition filed on behalf of Tampa Electric on July 15, 2002.

Sincerely,

James D. Beasley

JDB/pp
Enclosures

cc: Jim Breman (w/enc.)
Marlene Stern (w/enc.)
Angela Llewellyn (w/enc.)
Horwad Bryant (w/enc.)

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State of Florida

County of Hillsborough

BEFORE ME, the undersigned authority, personally appeared GREGORY M. NELSON, who first stated that he is Director Environmental Affairs of Tampa Electric Company, and that the information below is true and correct to the best of his knowledge, information and belief.

Staff's Informal Request for Clarification of the NO_x Reduction Agreement Between the Florida Department of Environmental Protection ("FDEP") and Tampa Electric Company ("Tampa Electric")

I have been responsible for the management of Tampa Electric's environmental permitting and compliance programs since 1998. I personally witnessed and participated in the original design, permitting and construction of the Polk Power Station as well as recent activities regarding reductions in the permitted nitrogen oxides ("NO_x") emission rate.

The FDEP did not initially concur with Tampa Electric's Best Available Control Technology ("BACT") analysis for NO_x and ultimately issued their BACT determination requiring a NO_x emissions limit of five ppmvd at 15 percent O_2 and the installation of a Selective Catalytic Reduction ("SCR") system on the unit for NO_x control on May 11, 2001. Due to numerous technical, economic and policy issues, Tampa Electric could not accept the FDEP's proposed limit and application of an SCR on the unit. Therefore, on May 25, 2001 Tampa Electric filed for an Administrative Hearing contesting the FDEP's BACT determination.

Subsequent to filing for an Administrative Hearing, Tampa Electric had numerous meetings and discussions with the FDEP seeking an alternative resolution. The attached document, dated January 30, 2002, is correspondence written from myself to Howard Rhodes, Division Director of the Division of Air Resources Management at the FDEP. This correspondence details Tampa Electric's final settlement proposal to the FDEP.

Through this correspondence, I proposed that in light of Tampa Electric's continued desire to utilize beneficial alternative biomass feedstocks, the FDEP reconsider its determination and establish a BACT limit for NO_x of 15 ppmvd at 15 percent O_2 on a 30-day rolling average when firing syngas.

The settlement proposal also stated that Tampa Electric would only be able to achieve continuous compliance with this limit through the modification of existing equipment and control systems as well as the installation of additional equipment used to minimize NO_x emissions by July 1, 2003. Specifically, in discussions with the FDEP, I explained in greater detail the necessary actions for continuous compliance would include:

1) the modification of existing equipment and controls to increase air flow from the main air compressor ("MAC") to the diluent nitrogen (N_2) compressor; and
2) the installation of additional equipment, namely, the installation of a syngas saturator.

Based on my January 30, 2002 correspondence and ongoing discussions during the negotiation process, the FDEP issued the Notice of Final Permit on February 5, 2002 requiring Tampa Electric to establish a BACT limit for NO_x of 15 ppmvd at 15 percent O_2 on a 30-day rolling average when firing syngas. Furthermore, due to the technical difficulties that an SCR would introduce in Tampa Electric's commitment to utilize biomass as a renewable alternative fuel on Polk Unit 1, the FDEP agreed not to require an SCR system to achieve compliance with the NO_x limit. Finally, it was understood by all parties that although the addition of an SCR would not be required to meet the new limit, the additional work outlined above would be necessary to achieve continuous compliance with the new emissions standard.

The inclusion of biomass into the negotiations was a key component in the resolution of the issue to establish a reasonable NO_x emissions limit. Additionally, the removal of the requirement for an SCR system coupled with the cost to facilitate biomass handling and processing will still realize a net savings to customers of five to six million dollars.

Dated at Tampa, Florida this 8th day of August 2002.

GREGORY M. NELSON

Sworn to and subscribed before me this 8th day of August 2002, with the Affiant being personally known to the undersigned.

NOTARY PUBLIC

My Commission expires: (Notary Stamp)

ANGELA LYNN LLEWELLYN
Notary Public - State of Florida
My Commission Expires Mar 24, 2006
Commission # DD 101564
Bonded By National Notary Assn.

TAMPA ELECTRIC

January 30, 2002

Mr. Howard Rhodes
Division Director
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
MS 5500
Twin Towers Office Building
Tallahassee, Florida 32399-2400

Via Fax and Mail

Re: Tampa Electric Company (TEC)
Polk Power Station
Biomass Test Burn

Dear Mr. Rhodes:

The purpose of this letter is to update you on the progress of Tampa Electric Company's ("TEC") attempt to use biomass as a gasification feedstock in Polk Unit 1 and to request that you consider some additional factors in making a determination of Best Available Control Technology ("BACT"). As you are aware, TEC received authorization to perform the test burn from the Florida Department of Environmental Protection ("Department") on December 21, 2001. Upon receipt of the authorization, TEC immediately began procuring biomass fuel to facilitate the test burn. On December 30 and 31, 2001, TEC successfully gasified a blend of biomass, coal and pet coke, in accordance with the authorization. The blend consisted of approximately one percent biomass by weight, which equates to approximately one ton of biomass gasified per hour.

Due to the initial success of the biomass test burn, TEC would like to continue to test other renewable fuels in Polk Unit 1. This is a process that TEC is undertaking in an attempt to introduce a portion of biomass into the fuel mix for Polk Unit 1. At this time, TEC is evaluating the use of eucalyptus, cottonwood, switchgrass and other similar wood products. However, the introduction of biomass as a viable alternative fuel in Polk Unit 1 is developmental in nature and will need to be evaluated over a period of time based on numerous factors, including fuel suppliers, economics, operational constraints and unit capabilities. The ability to gasify these renewable fuels and other environmentally beneficial fuel sources complements TEC's green energy program for which it has an approved tariff in place. In addition, the use of biomass as a feedstock will provide environmental benefits to the public.

The recent Department draft determination (DEP File Nos. 1050233-007-AC and PSD-FL-194F), requiring the application of a Selective Catalytic Reduction System (SCR) on Polk Unit 1, would jeopardize the viability of TEC's renewable energy program at Polk Power Station. TEC believes that the application of an SCR to Polk Unit 1 will further complicate operation of the unit and thereby discourage further exploration of renewable fuel sources at the site. The application of SCR to Polk Unit 1 will also introduce additional factors that will make it difficult to determine the effects of biomass fuel and operation variations versus those caused by SCR on the overall reliability of Unit 1.

In light of our continued desire to test beneficial alternative feedstocks, TEC requests that the Department reconsider this determination and establish a BACT limit for NO_x, when firing syngas, of 15 ppmvd @ 15% O_2 on a 30-day rolling average. TEC will be able to achieve continuous compliance with this limit through the modification of existing equipment and control systems as well as the installation of additional equipment used to minimize NO_x emissions by July 1, 2003. TEC proposes to submit for Department approval, a NO_x compliance plan outlining the specific modifications necessary to achieve continuous compliance with the proposed BACT limit for NO_x.

The current NO_x emission limit for Polk Unit 1, when firing syngas, is 25 ppmvd @ 15% O_2, which represents the interim BACT in accordance with the initial permit for this facility. The proposed NO_x emission limit will result in a reduction in allowed NO_x emissions from Polk Unit 1 of 40%, while maintaining the unit's ability to gasify renewable fuels.

We note that TEC is not inherently opposed to SCR technology on conventional combined cycle plants. In accordance with our agreements with the Department and EPA we will install SCR on eleven (11) new natural gas-fired combustion turbines at the nearby Bayside Station using combustion turbines manufactured by General Electric. On these new units, SCR will be applied to achieve 3.5 ppmvd on units that can achieve 9 ppmvd without SCR. Similarly, the United States Department of Energy is not inherently opposed to SCR as it has funded several demonstration projects on coal-fired plants and hosts conferences on this subject.

TEC believes that its BACT proposal fits well the utilization of biomass fuel. We would be happy to work with you to more definitively substantiate this position. TEC appreciates the Department's cooperation in the review of this matter. If you need any additional information or clarification on any of the issues presented above, please do not hesitate to contact me at (813) 641-5016

Sincerely,

Gregory M. Nelson
Director
Environmental Affairs

EA/bmr/LRC100