



TAMPA ELECTRIC

December 21, 2007

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

Re: Tampa Electric Company - Big Bend Station
Big Bend Unit 3 and Unit 4
Modifications to Selective Catalytic Reduction System Permits
DEP File 0570039-030 AC
DEP File 0570039-031 AC
Duct Work Separation for Scrubber Tower

Dear Ms. Vielhauer:

Presented below are Tampa Electric Company's (TEC) comments in response to the draft permit modifications and accompanying Technical Evaluation and Preliminary Determination related to the aforementioned permits, issued by the Florida Department of Environmental Protection (FDEP) on October 30, 2007.

Firstly, it should be recognized that in 1998, TEC stepped forward and became the first utility in the nation to agree to a massive emissions reduction program with the United States Environmental Protection Agency (EPA) and the FDEP. In doing so, the company installed pollution control equipment at substantially lower costs, improved system reliability and forged a path of environmental leadership. This project is part of TEC's \$1.2 billion initiative to reduce emissions. The duct split project is a part of that massive emission reduction program and should not be subject to a process designed to address emission increases. This point is supported by the fact that the changes to the permit proposed by FDEP do not have any requirements associated with them other than recordkeeping. The recordkeeping requirement can also be accommodated by the "Operating Change Without Permit Revision" process. TEC continues to assert that an "Operating Change Without Revision" pursuant to 62-213.420 FAC is the appropriate mechanism for implementing this change since the duct split project does not trigger PSD or state construction permitting requirements. More importantly, no permit changes are necessary to ensure TEC continues to operate the plant in compliance with applicable requirements and at the current historically low emission levels. TEC requests that for future projects of this nature, FDEP exercise its discretion in a manner that does not unnecessarily add more process without additional environmental protection.

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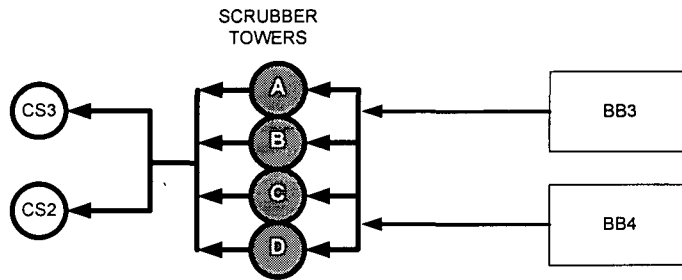
Specific comments on the draft documents are presented below.

- In the first sentence of Section 2.4, “The key regulatory provisions applicable to Stanton Units 1 and 2” should be changed to “The key regulatory provisions applicable to Big Bend Units 3 and 4.”
- In the second to last paragraph of Section 4.0, it should be noted that Electric Power Research Institute (EPRI) sponsored high gas velocity tests on Unit 4. Therefore the ability to treat flue gas from Unit 3 and 4 was due to implementing the DBA program *and* operating at high gas velocity.
- In the last paragraph of Section 4.0, FDEP states, “The primary benefit of the scrubber improvement is that it provided additional scrubber capacity for TECO Acid Rain SO₂ strategy providing the company with more options regarding sales or purchases of allowances.” Although the result of the scrubber improvement allowed for the sale of some allowances, the proceeds of which benefit TEC customers, the primary benefits of the scrubber improvement is comply with the Phase II Acid Rain Program and a very significant reduction in emissions.
- The last paragraph in Section 5.0 indicates that Unit 3 was integrated with the Unit 4 scrubber without a publicly-noticed construction permit. This precedent demonstrates that FDEP has the discretion to approve the requested change in the manner preferred by TEC. This authority should not be diminished when the emissions change is neutral.
- The table in Section 6.0 has an erroneous presumption regarding the Unit 4 limit beginning in 2010. There is no basis for presuming that Unit 4 will have to meet a 95% removal efficiency requirement if Unit 4 continued to share a scrubber with Unit 3. Condition 40.D of the Consent Decree (CD) states, “Nothing in this Consent Decree shall alter requirements of NSPS, 40 C.F.R. Part 60 Subpart Da, that apply to operation of Unit 4 and the scrubber serving it.” Contrary to conclusions of the Technical Basis indicating that Unit 3 requirements can affect the stringency of Unit 4 requirements, Condition 40.D preserves the 90% removal efficiency requirement for Unit 4 and makes the governing efficiency requirement of any scrubber configuration equivalent. Therefore, there is no basis for concluding that the duct split project changes the effective limits for Unit 4 and there is no basis for a permit modification as a result of this project.
- With regard to the table in Section 6.0, it is important to note that TEC can comply with either the lb/MMBtu limit or the removal efficiency limit.
- The note associated with the table in Section 6.0 states, “Inferred from reading of permits and CD that did not actually contemplate scrubber split.” This is misleading. Although the CD may not have explicitly contemplated the duct split (as well as many other scrubber improvements), the duct split is certainly a result of the scrubber availability requirements agreed upon in the CD.

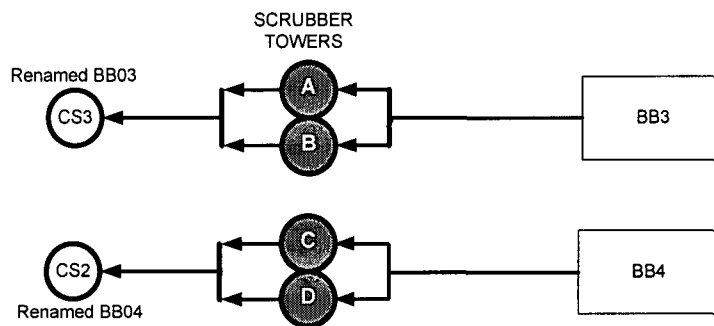
- The last paragraph of Section 6.0 states, “Also as long as Unit 3 and 4 are served by the same scrubber, Unit 4 will be scrubbed to a greater degree than otherwise required”. This conclusion is not supported by a complete reading of the Consent Decree or a review of actual data. In Paragraph 40.D, the CD preserves the permitted BB4 NSPS limits notwithstanding the BB3 requirements. The CD also stipulates what is effectively the governing limit for both units, a 93% removal efficiency when both units are served by the same scrubber system. This limit represents the effective average of the BB3 and 4 removal efficiency limits as they are today and will be in the future. The concept that emissions are not changed is also supported by recent actual data showing statistically equivalent removal efficiency regardless of the scrubbed operating configuration.
- In the second paragraph of Section 7.0 it is stated that, “[i]n recent years emissions from Unit 4 have been less than they were before sharing the scrubber with Unit 3.” The implication seems to be that because Unit 4 shares a scrubber with Unit 3, Unit 4 has experienced a lower emission rate. The lower emissions from Unit 4 are not a result of sharing a scrubber with Unit 3 but are a result a significant investment in recent upgrades in the scrubber. Significant improvements were made in 2000 and 2001 to all Big Bend scrubbers. Therefore the implication that a drop in Unit 4 emissions is a result of the fact that it shared a scrubber with Unit 3 is misleading. A review of recent actual data shows that Unit 3 and Unit 4 emissions are statistically equivalent regardless of whether they operate individually or together. Therefore, it is incorrect to state that significant Unit 4 emission reductions have been realized due to compliance requirements of Unit 3.
- In Section 9.0, FDEP describes the basis for claiming this project triggers permitting requirements. TEC disputes the claim that “normal operations have not yet commenced under the split mode with actual separation of the modules compared with the original configuration of Unit 4.” Unit 4 has operated in the two-module configuration that is proposed after the duct split and this mode of operation comports with current permit requirements. Likewise, Unit 3 has also operated in this mode. During 2007 alone, Unit 4 operated in the two-module mode for 29 days and Unit 3 operated in this mode for 62 days. The fluid dynamics of the system have always had a tower bias where the flue gas would naturally travel the path of least resistance. Therefore, normal operations have commenced as each unit alone can run with any number of towers, however load may be adjusted to ensure removal efficiency requirements are met. As a result, the future potential test is not applicable. As depicted in Figure 1 below, the duct split project is simply a new plumbing arrangement designed to preclude the loss of two boilers due to a scrubber outage after 2009, when the ability to operate unscrubbed expires. Ductwork itself has no impact on emissions and we are proposing no changes to the scrubber, therefore this duct split project cannot cause an increase in actual or potential emissions by any interpretation of the definition. Furthermore, any potential emissions increase due to increased unit availability is offset by reductions realized by operating Unit 3 scrubbed 100% of the time after 2009. Regardless, it should be noted that this project is designed to preserve unit availability at current levels while reducing overall emissions.

FIGURE 1 - DUCT SPLIT DIAGRAM

BB3 & 4 BEFORE DUCT SPLIT



BB3 & 4 AFTER DUCT SPLIT



- In Section 10.0, FDEP concludes that there is a possibility that the project results in a significant net emissions increase and could thereby trigger a major modification under PSD. There is no basis for this conclusion given the analysis in the Section 9.0 response above. Although the significant emission rate for SO₂ is low, this project is part of a significant emission reduction project for SO₂ and there is no basis for claiming any increase as a result of this project.

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TEC continues to assert that an "Operating Change Without Revision" pursuant to 62-213.420 FAC is the appropriate mechanism for implementing this change since the duct split project does not trigger PSD or state construction permitting requirements. TEC requests that for future projects of this nature, FDEP exercise its discretion in a manner that does not unnecessarily add more process without additional environmental protection.

Please contact Julie Ward or me at (813) 228-1282 if you have any questions or comments regarding this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Byron Burrows', with a long horizontal flourish extending to the right.

Byron Burrows, P.E. BCEE
Manager – Air Programs
Environmental, Health & Safety

EHS/rlk/SCG191

cc: Ms. Mara Grace Nasca, FDEP SW
Mr. Al Linero, FDEP
Mr. Lynn Robinson, EPCHC