

March 26, 2012

Jeffrey F. Koerner, Program Administrator Florida Department of Environmental Protection Division of Air Resource Management Office of Air Permitting and Compliance 2600 Blair Stone Road, M.S. 5505 Tallahassee, Florida 32399-2400 Email Distribution Only jeff.koerner@dep.state.fl.us

Re: Tampa Electric Company - Big Bend Station
Title V Permit Number 0570039-045-AV
BB Unit 3 Boiler Improvement Projects
Air Construction Permit Application
EPAP No. 3208-1
Facility ID No. 0570039

Dear Mr. Koerner:

Tampa Electric Company (TEC) has submitted an air construction permit application No. 3208-1 to construct boiler improvement projects on unit 3. This project is being implemented to counteract observed deteriorating boiler performance experienced in part due implementing over \$300 million in pollution reduction projects at Big Bend Station.

The proposed project consists of a physical modification and routine maintenance. The physical modification involves adding additional boiler surface area to increase the outlet steam temperatures of the High Temperature Superheater and High Temperature Reheater and minimize the slagging potential in the upper furnace and Radiant Super Heater. The routine maintenance includes the replacement of the high temperature superheater (HTSH), high temperature reheater (HTR), economizer, radiant super heater (RSH) and nose arch. These modifications are necessary to minimize future degradation of the boiler and in part due to combustion modifications made to reduce emissions as agreed in the Consent Final Judgment (FDEP), Consent Final Judgment (DEP vs. TECO), dated December 16, 1999, and the Consent Decree (EPA), dated February 29, 2000.

The emission calculations were conducted under the premises of the WEPCO decision and the 2002 NSR revisions, which specifies a past-actual-to-future actual applicability test. This test is considered appropriate since this is a modification of an "existing" emissions unit.

This project will <u>not</u> modify the combustion system or coal feeding system. The boiler will operate at low NOx condition using 10% excess air, so the past actual and future projected actual TAMPA ELECTRIC COMPANY

P. D. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

Mr. Jeffrey F. Koerner March 23, 2012 Page 2 of 2

heat input-weighted emissions are identical. The future projected actual emissions data were calculated using annual heat input projections from the TEC's planning and growth Model, PAR. The model confirms that past actual boiler utilization is essentially equal to future projected boiler utilization. These calculations show there is no net increase in projected emissions and therefore no net increase above applicable PSD significant emission rate levels. Therefore, this project is not subject to the PSD/NSR requirements of Section 62-212.400, F.A.C.

Paragraph V.M. of the Consent Final Judgment provides that Tampa Electric Company is protected from triggering PSD/NSR requirements with regard to repairs, maintenance and physical or operational changes while completing the terms of the agreement. TEC believes this project, *BB Unit 3 Boiler Improvement Projects*, is covered under the requirements of this paragraph. Furthermore, the proposed revision of the maximum heat capacity to 4,370 mmBtu per hour for compliance testing purposes is also covered under this paragraph.

This project is a physical change to an existing unit that does not increase emissions and therefore does not meet the definition of modification as defined in applicable regulations including 62-210.200(199), F.A.C. An air construction permit shall be obtained by the owner of any proposed new, reconstructed, or modified facility or emissions unit pursuant to Chapter 62-210.300(1)(a) F.A.C. Since the project does not meet the definition of "modification," TEC believes this project is exempt from the air construction permit requirements. Based on discussions with the DEP and nature of this project, TEC is voluntarily submitting an air construction permit application for this project.

Please contact me at (813) 228-4232 or Byron Burrows at (813) 228-1282, if you have any questions or comments.

Sincerely,

Robert A. Velasco, P.E., BCEE, QEP

Air Programs

Environmental, Health & Safety

EHS/iym/RAV140

cc Robert Wong, FDEP Diana Lee, EPCHC