

October 14, 2009

Mr. Scott M. Sheplak, P.E. Florida Department of Environmental Protection Mail Station #5505 2600 Blair Stone Road Tallahassee, FL 32399 RECEIVED

OCT 15 2009

BUREAU OF AIR REGULATION

Via: Email and FedEx Airbill No. 7960 2964 8120

Re: Comments on Polk Power Station

Draft/Proposed Title-V Permit Renewal

File No.: 1050233-026-AV

Dear Mr. S. Sheplak:

Included are Tampa Electric Company's (Tampa Electric) comments on Polk Power Station's draft/proposed Title-v permit renewal.

Comments concerning the Table 2, Summary of Compliance Requirements:

Page 7 of 7 - E.U. ID No.

Brief Description: The combustion turbines are incorrectly identified.

E.U. ID No. Brief Description

[-011] 165 MW Simple Cycle Combustion Turbine No. $\frac{3}{4}$ 4 [-012] 165 MW Simple Cycle Combustion Turbine No. $\frac{4}{5}$

Comments concerning the Table 2, Summary of Air Pollutant Standards and Terms:

Page 7 of 7 - E.U. ID No.

Brief Description: The combustion turbines are incorrectly identified.

E.U. ID No. Brief Description

[-011] 165 MW Simple Cycle Combustion Turbine No. 3 4 [-012] 165 MW Simple Cycle Combustion Turbine No. 4 5

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

Comments concerning the Appendix U, List of Unregulated Emissions Units and/or Activities:

Page U-1 of 3

Brief Description: All activities associated with surface coating operations are not identified. Surface preparation activities including nominal blasting should be included with this emission unit.

Permit 1050233-026-AV FDEP Proposed Language:

Surface coating operations within a single facility, provided:

a. The surface coating operation shall use only coatings containing 5.0 percent or less VOC, by volume, or the total quantity of coatings containing greater than 5.0 percent VOC, by volume, used at the facility shall not exceed 6.0 gallons per day, averaged monthly, where the quantity of coatings used includes all solvents and thinners used in the process or for cleanup; and

b. Such operations are not subject to any unit-specific applicable requirement.

Suggested change:

Surface coating operations within a single facility, provided:

- a. The surface coating operation shall use only coatings containing 5.0 percent or less VOC, by volume, or the total quantity of coatings containing greater than 5.0 percent VOC, by volume, used at the facility shall not exceed 6.0 gallons per day, averaged monthly, where the quantity of coatings used includes all solvents and thinners used in the process or for cleanup; and
- b. Such operations are not subject to any unit-specific applicable requirement.
 b. Any sand blasting activities done associated with surface preparation for coating purposes shall:
 - 1. Use black beauty or equivalent as the abrasive material
 - 2. When possible, be conducted in enclosed areas
 - 3. Minimize fugitive emissions to the extent possible
- c. Such operations are not subject to any unit-specific applicable requirement.

Comments concerning Appendix I, List of Insignificant Emissions Units and/or Activities:

Page I-1 of 2

Brief Description: Tampa Electric would like to identify additional insignificant emission points that may need to be included on list.

- 1. Brine stack: This point vents evaporating water from the brine slurry. The brine consists of the mineral matter contained in the coal. This emission point is similar to insignificant emissions units numbers 20 (Wastewater treatment equipment) and 22 (Inorganic substance storage tanks greater than 550 gallons).
- 2. Vibrating screen: Ungasified material is passed over the vibrating screen separating the carbon from the mineral matter in order to recycle the carbon back into the gasification process. Water vapor containing trace amounts of ammonia and sour gas is off gassed at this point. This emission point is similar to insignificant emissions unit number 28 (coal beneficiation process).
- 3. Mill stacks: Solid fuel and water is mixed in a rod mill to make a slurry. Heat is generated during this process and the mill stacks vent water vapor. These emissions are very similar to the vibrating screens' emissions but in a lot lower concentrations.
- 4. Brine prill tower: Air is vented during the cooling and drying of the brine concentration system. Emissions consist of water vapor and some brine liquid or particulate of brine. The tower does have a mist eliminator. This emission point is similar to insignificant emission unit number 20 (Wastewater treatment equipment).

Comments concerning Permit Section III, Subsection F; Emissions Units -009 & -010

Page III.F.-2

Brief Description: Tampa Electric request the same language be carried forward in the permit's renewal as it was originally written in permits PSD-FL-263 and 1050233-012-AV. Permit 1050233-012-AV revision was issued for the purpose of incorporating the terms and conditions of permit PSD-FL-263 for the construction of two gas turbines (Polk units 2 & 3).

Permit 1050233-026-AV FDEP Proposed Language:

F.12. Excess Emissions Allowed - Startup, Shutdown or Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open).

Permit 1050233-012-AV, 1050233-016-AV, 1050233-022-AV Language:

Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open).

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Permit PSD-FL-263 Language:

Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open).

Comments concerning Permit Section III, Subsection F; Emissions Units -009 & -010

Page III.F.-4

Brief Description: Tampa Electric requests the use of supplier agreement contracts to satisfy the requirements for sulfur monitoring of the fuel oil. Proposed permit 1050233-026-AV references permits PSD-FL-263 and 1050233-015-AC to support the fuel oil sampling requirement.

Permit 1050233-015-AC, section III, specific condition D.34 references permit PSD-FL-263 to support the fuel oil sampling requirement.

Permit PSD-FL-263, section III, specific condition 44, cites 40 CFR 60.335(d) – which does not exist, as the basis for the fuel oil sampling requirement. 40 CFR 60.335 addresses test methods and procedures for NO_X emissions. In fact, the term "sulfur" is mentioned only three times in the whole 40 CFR 60.335. Paragraph 40 CFR 60.335(b)10 contains two instances of the term "sulfur". The paragraph is a requirement to determine the total sulfur content from three individual fuel samples during the performance test. Paragraph 40 CFR 60.335(b)(10)(ii) mentions the existence of measurement inadequacies for some ASTM methods for total sulfur in a gaseous fuel.

Polk Power Station has demonstrated continued compliance to the maximum allowed 0.05 percent sulfur content in the distillate fuel oil via sample analysis since the construction of Units 2 and 3. Fuel oil sulfur content controls have not changed during this time and will continue to be included in supplier contractual agreements.

All of the term fuel oil agreements define the maximum allowed sulfur content of the No. 2 fuel oil to be 5%, wt. Bill of landings (i.e. shipment manifests) are retained by Tampa Electric and are auditable for continued demonstration of compliance to the sulfur fuel oil requirement. Suppliers use ASTM methods to ensure contractual agreements are being met.

Permit 1050233-026-AV FDEP Proposed Language:

F.21. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were

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conducted and shall comply with the requirements of 40 CFR 60.335(d). The use of the NO_X CEMS satisfies the requirement for nitrogen monitoring. [PSD-FL-263; and, 1050233-015-AC]

Suggested change:

F.21. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). The use of the NO_X CEMS satisfies the requirement for nitrogen monitoring. The use of retained term fuel oil agreements and bill of landings satisfies the requirement for sulfur monitoring. [PSD-FL-263; and, 1050233-015-AC]

Tampa Electric appreciates your cooperation in this matter and if you have any questions, please call me at (813) 228-4433.

Sincerely,

Joshua D. Ellwein, P.E. Principal Engineer - Air Programs Environmental, Health & Safety

EHS/rlk/JDE148

Sheplak, Scott

From:

Kelleher, Rebecka [rikelleher@tecoenergy.com]

Sent:

Wednesday, October 14, 2009 2:39 PM

To:

Sheplak, Scott

Cc:

Ellwein, Joshua D.

Subject:

Polk Power Station Permit Renewal

Attachments: Polk Power Station Permit Renewal.pdf

Please see attached.

Thank You, Rebecka Kelleher RLKelleher@TECOEnergy.com

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