From: Velasco, Robert A.
To: McWade, Tammy
Subject: RE: Revised Emission Calculations No. 2
Date: Monday, June 17, 2013 3:14:25 PM

Tammy:

Please see responses to your comments:

1. In accordance with AP-42 Table 1.4-1, NO_X emission factor for Controlled – Low NO_X Burners of 140 lb/10^6 scf is used when firing only natural gas during low load operation. Please confirm.

   TEC Response: The ignition system are expected to operate as " controlled – low NO_X burner at 140 lb/10^6 scf" pursuant AP-42 Table 1.4-1 when firing natural gas only during low load operation.

2. The project is not increasing the steam production rate of Units 1 – 4. Please confirm.

   TEC Response: The project will not increase the steam production/heat input of the Units 1 to 4. The permit shall authorize firing of solid fuels and natural gas or natural gas only up the design heat input limits in Conditions A.2 and B.2. The permit should be revised accordingly to authorize these new operating conditions (e.g. revisions to conditions A.23, A.24 and B.21).

Best Regards,

(Rob) Robert A. Velasco, P.E., BCEE, QEP
EHS Air Programs
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601
Phone: (813) 228-4232
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From: McWade, Tammy [mailto:Tammy.McWade@dep.state.fl.us]
Sent: Monday, June 17, 2013 1:29 PM
To: Velasco, Robert A.
Subject: RE: Revised Emission Calculations No. 2

Hi Rob,

As per our conversation, I need the following clarifications on Unit 1 – 4 natural gas igniters:

1. In accordance with AP-42 Table 1.4-1, NOx emission factor for Controlled – Low NOx

Burners of 140 lb/10^6 scf is used when firing only natural gas during low load operation. Please confirm.

2. The project is not increasing the steam production rate of Units 1 – 4. Please confirm.

Thank you,

Tammy T. McWade
Engineer Specialist III
Florida Department of Environmental Protection
Division of Air Resource Management (DARM)
Office of Permitting and Compliance (OPC)
Phone: 850/717-9086
GIC: 59586

Please take a few minutes to share your comments on the service you received from the department by clicking on this link. DEP Customer Survey.
From: Velasco, Robert A. [mailto:RAVelasco@tecoenergy.com]
Sent: Monday, June 17, 2013 9:02 AM
To: McWade, Tammy
Subject: Revised Emission Calculations No. 2

Tammy:

As previously discussed, the revised PSD applicability emission rates for the igniter project are attached. Emission rates were revised to include CO2e on each table and to reduce the VOC emission increase from 39.9 to 39.0 tpy on Table 4. For co-firing and low load operation (Table 4), reduced the amount of natural gas (heat input) for co-firing for each unit slightly to reduce the VOC emission increase to 39.0 tpy. Revised co-firing natural gas heat input rates for each unit are as follows:

Unit ID	Natural Gas Heat Input Cap (MMBtu/yr)
1	5,015,495
2	4,295,353
3	5,029,622
4	5,534,935

Heat input for low load firing stays the same. Please review and contact me if you have any questions.

Best Regards,

(Rob) Robert A. Velasco, P.E., BCEE, QEP

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