

US EPA ARCHIVE DOCUMENT



November 1, 2012

Ms. Aimee Wilson
U.S. EPA Region 6, 6PD
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

RE: Response to Questions Regarding Application for a Prevention of Significant Deterioration Air Quality Permit for Greenhouse Gas Emissions
La Paloma Energy Center, LLC
Harlingen, Cameron County, Texas

Ms. Wilson:

This is a response to your questions in your October 15, 2012 email regarding the above referenced application for a Prevention of Significant Deterioration (PSD) air quality permit for greenhouse gas emissions. Your questions are duplicated below followed by a response:

1. *Will the LPEC be a base load or load following?*

Base Load

2. *Can you please give me the output based limit (lb CO₂/MWh) net with duct burning for each turbine? I only saw a range given in the application.*

GE7FA: 945.2 lb CO₂/MWh (net)
Siemens SGT6-5000F(4): 944.4 lb CO₂/MWh (net)
Siemens SGT6-5000F(5): 965.7 lb CO₂/MWh (net)

3. *Will the facility be installing CO₂ monitors or O₂ monitors on the turbines? For the monitors installed, which methods/protocols will be complied with?*

Each combustion turbine unit will have NO_x and O₂ continuous emission monitors and fuel flow meters as required by 40 CFR Part 75. As discussed in Section 7.0 of the La Paloma GHG application, CO₂ emissions will be monitored using the fuel flow meter, a site specific Fc factor and equation G-4 of 40 CFR Part 75. This is the same CO₂ monitoring method as approved in the draft Channel Energy Center Permit PSD-TX-955-GHG, Condition 2.

4. *How are startups and shutdowns defined? Example - Is startup defined as the period that begins when there is measurable fuel flow to the combustion turbine and ends when the combustion turbine load reaches 60 percent? Is a shutdown defined as the period that begins when the load falls below 60 percent and ends when there is no longer measurable fuel flow to the combustion turbine? Will startups and shutdowns be limited in duration?*

A planned startup of each combustion turbine will be defined in the TCEQ permit as the period that begins when the data acquisition and handling system measures fuel flow to the combustion turbine and ends when the combustion turbine generator load reaches 60 percent. A planned startup for each combustion turbine will be limited to six hours per event. A planned shutdown of each combustion turbine will be defined as the period that begins when the combustion turbine generator output drops below 60 percent load and ends when there is no longer measurable fuel flow to the combustion turbine. A planned shutdown for each combustion turbine will be limited to 60 minutes per event.

5. *Will there be a shakedown period for the turbines?*

The shakedown period for each turbine will be the period of time beginning with initial startup and ending no later than initial performance testing. This shakedown period for each turbine will not exceed 180 days.

6. *Which pollutants will LPEC undergo PSD review for TCEQ?*

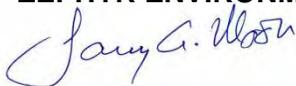
The pollutants undergoing PSD review for the TCEQ application include: VOC, NO_x, CO, PM, PM₁₀, PM_{2.5}, and H₂SO₄.

7. *For the SF6 circuit breakers, the application states they will be designed to meet the latest ANSI C37.013 standard. Is this in the form of a certification that we would get a copy of?*

A copy of the standard is attached.

Should you have any questions regarding this response, please contact me by email at lmooon@zephyrenv.com or by telephone at 512-879-6619 or Ms. Kathleen Smith at ksmith@coronado-ventures.com or by telephone at 281-253-4385.

Sincerely,
ZEPHYR ENVIRONMENTAL CORPORATION



Larry A. Moon, P.E.
Principal

Enclosure

cc: Ms. Kathleen Smith, Coronado Ventures

A copy of the standard for SF₆ circuit breakers, ANSI IEEE C37.1013, was submitted and is part of the administrative record of the permit. It is available for inspection at Region 6, please call (214) 665-7596.