

Kathleen Truesdell

From: Gregory Darvin <darwin@atmosphericdynamics.com>
Sent: Monday, July 19, 2010 4:42 PM
To: Kathleen Truesdell
Cc: Jim McLucas
Subject: RE: OGS compliance with GHG emission performance standard

Kathleen, the section below is based on the BACT section (Appendix F) along with the emissions for CO₂e in Appendix A.

Basically, the ISO plant design value of 624 MW is divided by the total CO₂e from the turbines to produce compliance with the 1100 MW limit:

624 MW ISO conditions
227-242 metric tons CO₂e per hour for both turbines.

Using 242 metric tons:

242 metric tons = 532,400 lbs CO₂e per hour

$(532,400 \text{ CO}_2\text{e}/624 \text{ MW}) = 853.21 \text{ lbs/MW}$ which is in compliance with the limit of 1100 lbs/MW.

From the application:

Although the mass emissions limits will be stated in pounds of the individual pollutants and in carbon dioxide equivalents (CO₂E), the Air District's BACT determination is based upon a Design Base Heat Rate for the facility of 6,852 Btu/kWhr (net) (HHV) and 6,743 Btu/kWhr (gross) (HHV), assuming base load operation of both units, i.e., without duct firing, corrected to ISO conditions. Depending upon which greenhouse gas reporting system's emissions factor for CO₂ is applied, this would translate as approximately 792.9 to 815.5 lbs/MWhr CO₂E (net), or 780.3 to 802.5 lbs/MWhr CO₂E (gross).

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-----Original Message-----

From: Kathleen Truesdell [mailto:ktruesdell@baaqmd.gov]
Sent: Monday, July 19, 2010 4:15 PM
To: Gregory Darvin
Cc: Jim McLucas
Subject: OGS compliance with GHG emission performance standard

Hi Greg,

Please submit a calculation showing compliance with the attached regulation.

Thanks,
Kathleen

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