Effingham County Power

3440 McCall Road, Rincon, Georgia 31326

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November 22, 2010

Tyneshia Tate
Stationary Source Permitting Program
Georgia Department of Natural Resources
EPD, Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, GA 30354

Re: Technical Review Comments, Application No. 19810
Effingham County Power, Rincon, AIRS No.: 10300012

Dear Ms. Tate:

The following information is provided in response to EPD's technical review of the above referenced application:

1. Provide carbon dioxide emissions estimates from the proposed project.
   See the attached spreadsheet.

2. "Provide the specific source testing data and vendor specification data on which emissions estimations are based."
   Emissions estimates are based on maximum heat input and BACT for the proposed units. Start up and shut down emissions are pulled from CEMS and operational experience with the existing facility.

3. "Verify that the emissions estimated using emissions testing data associated with natural gas-fired turbines provide an accurate representation of emissions from the proposed engines when firing fuel oil."
   Maximum heat input, along with BACT, is used to calculate the estimated emissions when the proposed units are firing fuel oil.

4. "Verify that emission estimates for the proposed engines included in the permit application provide an accurate estimation for startup and shutdown emissions while firing fuel oil."
   We are in the process of compiling this data for submittal.

Please let me know if you have any other questions. I can be reached at 912-826-3232 or via email at jdickerson@camsops.com.

Sincerely,

Jobie S. Dickerson
EHS Specialist

Phone: (912) 823-3200 Fax: (912) 826-3203

Effingham Power, Block 2

Expected CO2 Emissions

10/8/2010

Source	HI Nat. Gas MMBtu/hr	hrs/yr	Total HI MMBtu/yr	CO2 Emissions (in metric tons)	ch4	n20	CO2 E	HI Fuel Oil MMBtu/hr	hrs/yr	Total HI MMBtu/yr	CO2 Emissions (in metric tons)	ch4	n20	CO2E
CT3	1,859	5,601	10,412,259	561,372.2	10.4	1.0	561,913.6	1,962	1,000	1,962,000	144,431.2	2.0	0.2	144,433.34
CT4	1,859	5,601	10,412,259	561,372.2	10.4	1.0	561,913.6	1,962	1,000	1,962,000	144,431.2	2.0	0.2	144,433.34
DB3	470	4,000	1,880,000	101,359.3	1.9	0.2	101,457.1							
DB4	470	4,000	1,880,000	101,359.3	1.9	0.2	101,457.1							
FP2	8.75	8,760	76,650	4,132.5	0.1	0.0	4,136.5							
AB2	17	2,500	42,500	2,291.4	0.0	0.0	2,293.6							
Sub Total				**1,331,887.0**	**24.7**	**2.5**	**1,333,171.5**				**288,862.4**	3.9	0.4	288,866.68

(Nat. Gas)	HI MMBtu	No. of Events	Total HI MMBtu/yr	CO2 Emissions (in metric tons)
Cold starts	8,204	10	82,036	4,422.9
Warm starts	1,494	290	433,260	23,359.0
Shut down	160	300	48,000	2,587.9
Sub Total				**30,369.8**

CO2 Nat Gas	**1,333,171.50**
CO2 Fuel Oil	**288,866.68**
CO2 SU/SD	**15,184.90**
Total All CO2 e (in Metric Tons)	**1,637,223.1**

Based on maximum run time, 59° F @base load, includes CO2 equivelents for methane and nitrous oxide

Effingham Power, Block 2

Max CO2 Emissions

10/8/2010

	HI Nat. Gas		Total HI	CO2 Emissions				HI Fuel Oil		Total HI	CO2 Emissions			
Source	**MMBtu/hr**	**hrs/yr**	**MMBtu/yr**	**(in metric tons)**	**ch4**	**n20**	**CO2 E**	**MMBtu/hr**	**hrs/yr**	**MMBtu/yr**	**(in metric tons)**	**ch4**	**n20**	**CO2E**
CT3	1,859	7,760	14,425,840	777,762.6	14.4	1.4	778,512.7	1,962	1,000	1,962,000	144,431.2	2.0	0.2	144,433.34
CT4	1,859	7,760	14,425,840	777,762.6	14.4	1.4	778,512.7	1,962	1,000	1,962,000	144,431.2	2.0	0.2	144,433.34
DB3	470	4,000	1,880,000	101,359.3	1.9	0.2	101,457.1							
DB4	470	4,000	1,880,000	101,359.3	1.9	0.2	101,457.1							
FP2	8.75	8,760	76,650	4,132.5	0.1	0.0	4,136.5							
AB2	17	2,500	42,500	2,291.4	0.0	0.0	2,293.6							
Sub Total				**1,764,667.7**	**32.7**	**3.3**	**1,766,369.7**				**288,862.4**	3.9	0.4	288,866.68

CO2 Nat Gas	**1,766,369.70**
CO2 Fuel Oil	288,866.68
Total All CO2 e (In Metric Tons)	2,055,236.4

Based on maximum run time, 59° F @base load, includes CO2 equivelents for methane and nitrous oxide