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BUREAU OF AIR REGULATION

Michael F. Vogt
Project Manager

July 12, 2000

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road, MS # 5505
Tallahassee, Florida 32399-2400

Re: Hardee County Generating Facility
DEP File No. 0490044-001-AC (PSD-FL-281)

Dear Mr. Linero:

In accordance with your recent request, please find enclosed revised estimates of hazardous air pollutant ("HAP") emission rates for the Hardee County Generation Facility.

Our environmental consultant, Environmental Consulting & Technology, Inc. (ECT), developed the enclosed emission estimates. They are based on the April 2000 revisions to AP-42, Section 3.1 (Stationary Gas Turbines). The revised AP-42 factors are based on stack test results for small (<40 MW) combustion turbines (CTs) which show considerable variability. The revised AP-42 HAP emission factors are considered to over-estimate actual HAP emissions from large "F" class CTs such as those proposed for the Hardee County Generation Facility. The AP-42 HAP emission estimates demonstrate that the proposed Hardee County Generation Facility will not qualify as a major HAP source.

Should you have any questions regarding these estimates, please do not hesitate to contact me at (314) 993-2700.

Sincerely,

Michael F. Vogt

Enclosure

**HAP EMISSION ESTIMATES
GENERAL ELECTRIC 7241FA CTs**

**Table 4A. Hardee County Generating Facility, CT-1, CT-2, and CT-3
General Electric 7241FA CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 20 °F	100% - 59 °F	100% - 90 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,890.2	1,768.4	1,627.6
Maximum Annual Hours:	hrs/yr	N/A	3,000	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		20 °F (lb/hr)	59 °F (lb/hr)	90 °F (lb/hr)	Annual (ton/yr)	
1,3-Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.003
Acetaldehyde	4.00E-05	0.076	0.071	0.065	0.106	0.318
Acrolein	6.40E-06	0.012	0.011	0.010	0.017	0.051
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.023	0.021	0.020	0.032	0.095
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.060	0.057	0.052	0.085	0.255
Formaldehyde	7.10E-04	1.342	1.256	1.156	1.883	5.650
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.002	0.002	0.002	0.003	0.010
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.004	0.004	0.004	0.006	0.018
Propylene Oxide	2.90E-05	0.055	0.051	0.047	0.077	0.231
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.246	0.230	0.212	0.345	1.034
Xylene	6.40E-05	0.121	0.113	0.104	0.170	0.509
Maximum Individual HAP		1.342	1.256	1.156	1.883	5.650
Total HAPs		1.942	1.817	1.672	2.725	8.175

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 4B. Hardee County Generating Facility, CT-1, CT-2, and CT-3
General Electric 7241FA CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 20 °F	100% - 59 °F	100 % - 90 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,903.6	1,776.9	1,617.4
Maximum Annual Hours:	hrs/yr	N/A	2,500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		20 °F	59 °F	90 °F	Annual	
		(lb/hr)	(lb/hr)	(lb/hr)	(ton/yr)	
1,3-Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.003
Acetaldehyde	4.00E-05	0.076	0.071	0.065	0.089	0.267
Acrolein	6.40E-06	0.012	0.011	0.010	0.014	0.043
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.023	0.021	0.019	0.027	0.080
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.061	0.057	0.052	0.071	0.213
Formaldehyde	7.10E-04	1.352	1.262	1.148	1.577	4.731
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.002	0.002	0.002	0.003	0.009
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.004	0.004	0.004	0.005	0.015
Propylene Oxide	2.90E-05	0.055	0.052	0.047	0.064	0.193
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.247	0.231	0.210	0.289	0.866
Xylene	6.40E-05	0.122	0.114	0.104	0.142	0.426
Maximum Individual HAP		1.352	1.262	1.148	1.577	4.731
Total HAPs		1.956	1.825	1.662	2.282	6.845

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 5. Hardee County Generating Facility, CT-1, CT-2, and CT-3
General Electric 7241FA CTs
Distillate Fuel Oil-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 18 °F	100% - 59 °F	100% - 90 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,997.8	1,882.3	1,711.8
Maximum Annual Hours:	hrs/yr	N/A	500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		18 °F	59 °F	90 °F	Annual	
		(lb/hr)	(lb/hr)	(lb/hr)	(ton/yr)	
1,3-Butadiene	1.60E-05	0.032	0.030	0.027	0.008	0.023
Acetaldehyde	N/A	N/A	N/A	N/A	N/A	N/A
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	1.10E-05	0.022	0.021	0.019	0.005	0.016
Benzene	5.50E-05	0.110	0.104	0.094	0.026	0.078
Beryllium	3.10E-07	0.001	0.001	0.001	0.000	0.000
Cadmium	4.80E-06	0.010	0.009	0.008	0.002	0.007
Chromium	1.10E-05	0.022	0.021	0.019	0.005	0.016
Ethylbenzene	N/A	N/A	N/A	N/A	N/A	N/A
Formaldehyde	2.80E-04	0.559	0.527	0.479	0.132	0.395
Lead	1.40E-05	0.028	0.026	0.024	0.007	0.020
Manganese	7.90E-04	1.578	1.487	1.352	0.372	1.115
Mercury	1.20E-06	0.002	0.002	0.002	0.001	0.002
Naphthalene	3.50E-05	0.070	0.066	0.060	0.016	0.049
Nickel	4.60E-06	0.009	0.009	0.008	0.002	0.006
Polycyclic Aromatic Hydrocarbons	4.00E-05	0.080	0.075	0.068	0.019	0.056
Propylene Oxide	N/A	N/A	N/A	N/A	N/A	N/A
Selenium	2.50E-05	0.050	0.047	0.043	0.012	0.035
Toluene	N/A	N/A	N/A	N/A	N/A	N/A
Xylene	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Individual HAP		1.578	1.487	1.352	0.372	1.115
Total HAPs		2.573	2.424	2.205	0.606	1.818

^(a) - EPA AP-42, Tables 3.1-4. and 3.1-5., April 2000.

Source: ECT, 2000.

**Table 7. Hardee County Generating Facility, CT-1, CT-2, and CT-3
General Electric 7241FA CTs
Annual Emission Rates: Hazardous Air Pollutants**

Pollutant	Annual Emissions (ton/yr)
1,3-Butadiene	0.025
Acetaldehyde	0.318
Acrolein	0.051
Arsenic	0.016
Benzene	0.158
Beryllium	0.000
Cadmium	0.007
Chromium	0.016
Ethylbenzene	0.255
Formaldehyde	5.650
Lead	0.020
Manganese	1.115
Mercury	0.002
Naphthalene	0.058
Nickel	0.006
Polycyclic Aromatic Hydrocarbons	0.071
Propylene Oxide	0.231
Selenium	0.035
Toluene	1.034
Xylene	0.509
Maximum Individual HAP	5.650
Total HAPs	9.577

Source: ECT, 2000.

**HAP EMISSION ESTIMATES
WESTINGHOUSE 501F CTs**

**Table 4A. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501F CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 32 °F	100% - 59 °F	100% - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,962.1	1,836.2	1,686.0
Maximum Annual Hours:	hrs/yr	N/A	3,000	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		32 °F (lb/hr)	59 °F (lb/hr)	95 °F (lb/hr)	Annual (ton/yr)	
1,3 Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.004
Acetaldehyde	4.00E-05	0.078	0.073	0.067	0.110	0.331
Acrolein	6.40E-06	0.013	0.012	0.011	0.018	0.053
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.024	0.022	0.020	0.033	0.099
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.063	0.059	0.054	0.088	0.264
Formaldehyde	7.10E-04	1.393	1.304	1.197	1.956	5.867
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.003	0.002	0.002	0.004	0.011
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.004	0.004	0.004	0.006	0.018
Propylene Oxide	2.90E-05	0.057	0.053	0.049	0.080	0.240
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.255	0.239	0.219	0.358	1.074
Xylene	6.40E-05	0.126	0.118	0.108	0.176	0.529
Maximum Individual HAP		1.393	1.304	1.197	1.956	5.867
Total HAPs		2.016	1.886	1.732	2.830	8.489

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 4B. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501F CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 32 °F	100% - 59 °F	100% - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,962.1	1,836.2	1,686.0
Maximum Annual Hours:	hrs/yr	N/A	2,500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		32 °F	59 °F	95 °F	Annual	
		(lb/hr)	(lb/hr)	(lb/hr)	(ton/yr)	
1,3-Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.003
Acetaldehyde	4.00E-05	0.078	0.073	0.067	0.092	0.275
Acrolein	6.40E-06	0.013	0.012	0.011	0.015	0.044
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.024	0.022	0.020	0.028	0.083
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.063	0.059	0.054	0.073	0.220
Formaldehyde	7.10E-04	1.393	1.304	1.197	1.630	4.889
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.003	0.002	0.002	0.003	0.009
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.004	0.004	0.004	0.005	0.015
Propylene Oxide	2.90E-05	0.057	0.053	0.049	0.067	0.200
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.255	0.239	0.219	0.298	0.895
Xylene	6.40E-05	0.126	0.118	0.108	0.147	0.441
Maximum Individual HAP		1.393	1.304	1.197	1.630	4.889
Total HAPs		2.016	1.886	1.732	2.358	7.074

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 5. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501F CTs
Distillate Fuel Oil-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 32 °F	100% - 59 °F	100% - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,888.8	1,768.2	1,620.4
Maximum Annual Hours:	hrs/yr	N/A	500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		32 °F (lb/hr)	59 °F (lb/hr)	95 °F (lb/hr)	Annual (ton/yr)	
1,3-Butadiene	1.60E-05	0.030	0.028	0.026	0.007	0.021
Acetaldehyde	N/A	N/A	N/A	N/A	N/A	N/A
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	1.10E-05	0.021	0.019	0.018	0.005	0.015
Benzene	5.50E-05	0.104	0.097	0.089	0.024	0.073
Beryllium	3.10E-07	0.001	0.001	0.001	0.000	0.000
Cadmium	4.80E-06	0.009	0.008	0.008	0.002	0.006
Chromium	1.10E-05	0.021	0.019	0.018	0.005	0.015
Ethylbenzene	N/A	N/A	N/A	N/A	N/A	N/A
Formaldehyde	2.80E-04	0.529	0.495	0.454	0.124	0.371
Lead	1.40E-05	0.026	0.025	0.023	0.006	0.019
Manganese	7.90E-04	1.492	1.397	1.280	0.349	1.048
Mercury	1.20E-06	0.002	0.002	0.002	0.001	0.002
Naphthalene	3.50E-05	0.066	0.062	0.057	0.015	0.046
Nickel	4.60E-06	0.009	0.008	0.007	0.002	0.006
Polycyclic Aromatic Hydrocarbons	4.00E-05	0.076	0.071	0.065	0.018	0.053
Propylene Oxide	N/A	N/A	N/A	N/A	N/A	N/A
Selenium	2.50E-05	0.047	0.044	0.041	0.011	0.033
Toluene	N/A	N/A	N/A	N/A	N/A	N/A
Xylene	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Individual HAP		1.492	1.397	1.280	0.349	1.048
Total HAPs		2.433	2.277	2.087	0.569	1.708

^(a) - EPA AP-42, Tables 3.1-4. and 3.1-5., April 2000.

Source: ECT, 2000.

**Table 7. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501F CTs
Annual Emission Rates: Hazardous Air Pollutants**

Pollutant	Annual Emissions (ton/yr)
1,3-Butadiene	0.024
Acetaldehyde	0.331
Acrolein	0.053
Arsenic	0.015
Benzene	0.156
Beryllium	0.000
Cadmium	0.006
Chromium	0.015
Ethylbenzene	0.264
Formaldehyde	5.867
Lead	0.019
Manganese	1.048
Mercury	0.002
Naphthalene	0.055
Nickel	0.006
Polycyclic Aromatic Hydrocarbons	0.068
Propylene Oxide	0.240
Selenium	0.033
Toluene	1.074
Xylene	0.529
Maximum Individual HAP	5.867
Total HAPs	9.803

Source: ECT, 2000.

**HAP EMISSION ESTIMATES
WESTINGHOUSE 501D5A CTs**

**Table 4A. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501D5A CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 20 °F	100% - 59 °F	100 % - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,429.2	1,319.4	1,218.1
Maximum Annual Hours:	hrs/yr	N/A	3,000	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		32 °F	59 °F	95 °F	Annual (ton/yr)	
		(lb/hr)	(lb/hr)	(lb/hr)		
1,3-Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.003
Acetaldehyde	4.00E-05	0.057	0.053	0.049	0.079	0.237
Acrolein	6.40E-06	0.009	0.008	0.008	0.013	0.038
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.017	0.016	0.015	0.024	0.071
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.046	0.042	0.039	0.063	0.190
Formaldehyde	7.10E-04	1.015	0.937	0.865	1.405	4.215
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.002	0.002	0.002	0.003	0.008
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.003	0.003	0.003	0.004	0.013
Propylene Oxide	2.90E-05	0.041	0.038	0.035	0.057	0.172
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.186	0.172	0.158	0.257	0.772
Xylene	6.40E-05	0.091	0.084	0.078	0.127	0.380
Maximum Individual HAP		1.015	0.937	0.865	1.405	4.215
Total HAPs		1.468	1.355	1.251	2.033	6.100

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 4B. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501D5A CTs
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 20 °F	100% - 59 °F	100 % - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,429.2	1,319.4	1,218.1
Maximum Annual Hours:	hrs/yr	N/A	2,500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		20 °F (lb/hr)	59 °F (lb/hr)	95 °F (lb/hr)	Annual (ton/yr)	
1,3-Butadiene	4.30E-07	0.001	0.001	0.001	0.001	0.002
Acetaldehyde	4.00E-05	0.057	0.053	0.049	0.066	0.198
Acrolein	6.40E-06	0.009	0.008	0.008	0.011	0.032
Arsenic	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	1.20E-05	0.017	0.016	0.015	0.020	0.059
Beryllium	N/A	N/A	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A	N/A	N/A
Ethylbenzene	3.20E-05	0.046	0.042	0.039	0.053	0.158
Formaldehyde	7.10E-04	1.015	0.937	0.865	1.171	3.513
Lead	N/A	N/A	N/A	N/A	N/A	N/A
Manganese	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A	N/A	N/A
Naphthalene	1.30E-06	0.002	0.002	0.002	0.002	0.006
Nickel	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	2.20E-06	0.003	0.003	0.003	0.004	0.011
Propylene Oxide	2.90E-05	0.041	0.038	0.035	0.048	0.143
Selenium	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	1.30E-04	0.186	0.172	0.158	0.214	0.643
Xylene	6.40E-05	0.091	0.084	0.078	0.106	0.317
Maximum Individual HAP		1.015	0.937	0.865	1.171	3.513
Total HAPs		1.468	1.355	1.251	1.694	5.083

^(a) - EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2000.

**Table 5. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501D5A CTs
Distillate Fuel Oil-Firing: Hazardous Air Pollutants**

Parameter	Units	Case		
		100% - 20 °F	100% - 59 °F	100 % - 95 °F
Maximum Hourly Fuel Flow:	10 ⁶ Btu/hr (HHV)	1,425.6	1,316.4	1,215.6
Maximum Annual Hours:	hrs/yr	N/A	500	N/A

Pollutant	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Rates (Per CT)				CT1-3 Annual (ton/yr)
		20 °F	59 °F	95 °F	Annual	
		(lb/hr)	(lb/hr)	(lb/hr)	(ton/yr)	
1,3-Butadiene	1.60E-05	0.023	0.021	0.019	0.005	0.016
Acetaldehyde	N/A	N/A	N/A	N/A	N/A	N/A
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	1.10E-05	0.016	0.014	0.013	0.004	0.011
Benzene	5.50E-05	0.078	0.072	0.067	0.018	0.054
Beryllium	3.10E-07	0.000	0.000	0.000	0.000	0.000
Cadmium	4.80E-06	0.007	0.006	0.006	0.002	0.005
Chromium	1.10E-05	0.016	0.014	0.013	0.004	0.011
Ethylbenzene	N/A	N/A	N/A	N/A	N/A	N/A
Formaldehyde	2.80E-04	0.399	0.369	0.340	0.092	0.276
Lead	1.40E-05	0.020	0.018	0.017	0.005	0.014
Manganese	7.90E-04	1.126	1.040	0.960	0.260	0.780
Mercury	1.20E-06	0.002	0.002	0.001	0.000	0.001
Naphthalene	3.50E-05	0.050	0.046	0.043	0.012	0.035
Nickel	4.60E-06	0.007	0.006	0.006	0.002	0.005
Polycyclic Aromatic Hydrocarbons	4.00E-05	0.057	0.053	0.049	0.013	0.039
Propylene Oxide	N/A	N/A	N/A	N/A	N/A	N/A
Selenium	2.50E-05	0.036	0.033	0.030	0.008	0.025
Toluene	N/A	N/A	N/A	N/A	N/A	N/A
Xylene	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Individual HAP		1.126	1.040	0.960	0.260	0.780
Total HAPs		1.836	1.695	1.566	0.424	1.272

^(a) - EPA AP-42, Tables 3.1-4. and 3.1-5., April 2000.

Source: ECT, 2000.

**Table 7. Hardee County Generating Facility, CT-1, CT-2, and CT-3
Westinghouse 501D5A CTs
Annual Emission Rates: Hazardous Air Pollutants**

Pollutant	Annual Emissions (ton/yr)
1,3-Butadiene	0.018
Acetaldehyde	0.237
Acrolein	0.038
Arsenic	0.011
Benzene	0.114
Beryllium	0.000
Cadmium	0.005
Chromium	0.011
Ethylbenzene	0.190
Formaldehyde	4.215
Lead	0.014
Manganese	0.780
Mercury	0.001
Naphthalene	0.041
Nickel	0.005
Polycyclic Aromatic Hydrocarbons	0.050
Propylene Oxide	0.172
Selenium	0.025
Toluene	0.772
Xylene	0.380
Maximum Individual HAP	4.215
Total HAPs	7.079

Source: ECT, 2000.

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PUBLIC MEETING
HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS BUILDING
WAUCHULA, HARDEE COUNTY, FLORIDA
July 12, 2000 6:00 p.m.

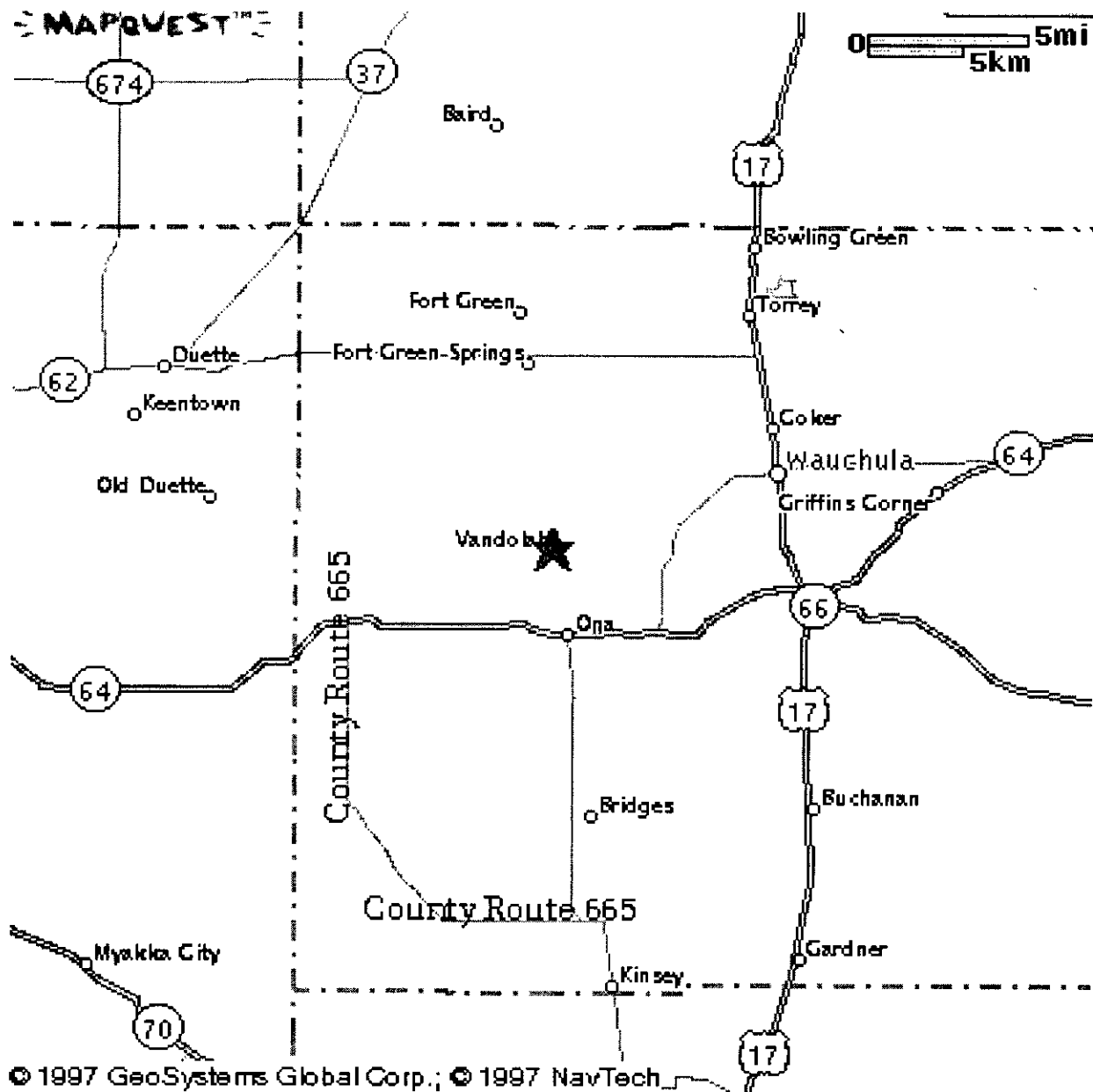
THIS MEETING IS OPEN TO THE PUBLIC

- | | | |
|----|--------------------------------------------------------|------------------|
| 1. | Call to Order/Introduction | Al Linero |
| 2. | Description of the Department's PSD Permitting Process | Department Staff |
| 3. | Description of the Proposed Project | Department Staff |
| 4. | Department's Review To Date | Department Staff |
| 5. | Ambient Impact Analysis | Department Staff |
| 6. | Public Comment | |
| 7. | Conclusion/Adjournment | Department Staff |

FLORIDA DEP AIR PERMITTING SUMMARY SHEET

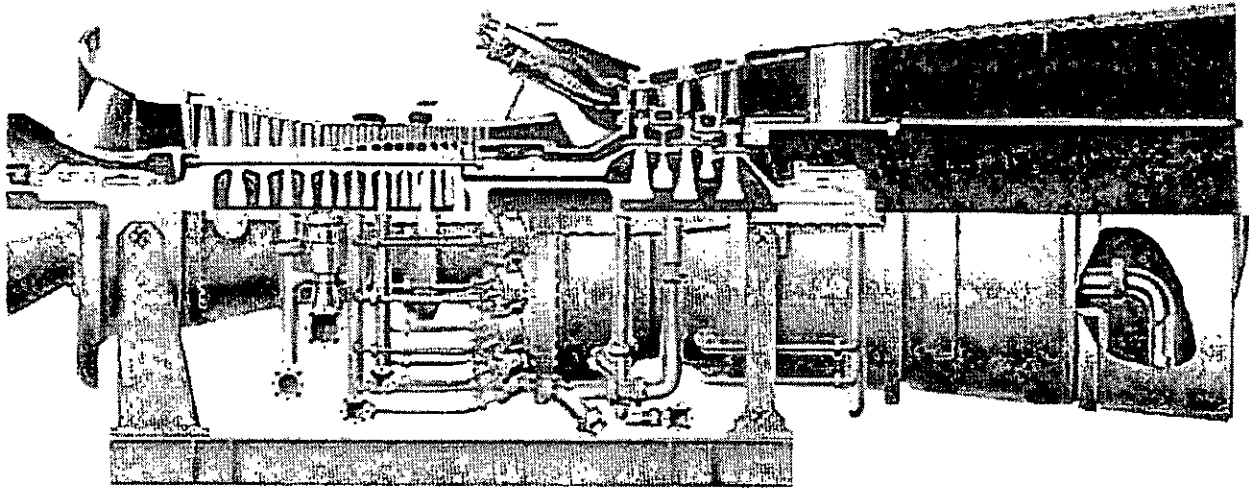
**GRANITE POWER PARTNERS II – HARDEE COUNTY GENERATION FACILITY
THREE 120-170 MEGAWATT GAS -FIRED COMBUSTION TURBINES
PUBLIC MEETING – WAUCHULA, HARDEE COUNTY
JULY 12, 2000**

Granite Power Partners II, L.P. (GPP-II, L.P.) submitted an application to construct three 120-180 megawatt (MW) combustion turbine electrical generators and ancillary equipment in Hardee County. The location is near Vandolah and Fort Green Ona Roads, approximately 5 miles West of Wauchula, Hardee County.



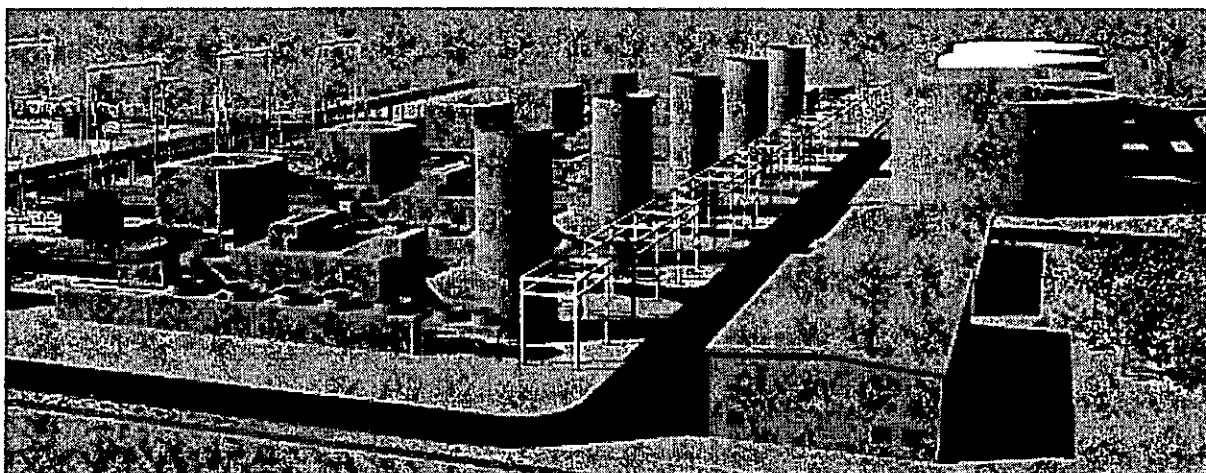
Each unit will be a gas-fired combustion turbine that will directly generate approximately 120-170 MW of electricity. The manufacturer has not yet been but will certainly be General Electric or Siemens-Westinghouse. A 180 MW ABB option was withdrawn. The units will operate in simple cycle and intermittent duty. There will not be separate heat recovery steam generators and steam-driven electrical generators. The project includes three 100-foot stacks, a 1.5 million-gallon storage tank for back-up diesel fuel, and a 10 million Btu per hour gas heater.

Following is a picture of a GE 7FA, which is one of the models proposed for this project.



Basically these units are like jet engines. Air is drawn in and compressed. Fuel is introduced in the combustors. Hot exhaust gases expand in the rotor section. The rotational motion of the shaft drives the compressor and the electrical generator normally located before the compressor section.

We do not have an artist's rendition of the site. Following is a picture borrowed from a similar project for five of these units in Brevard County (reference Oleander website www.oleanderpower.com)



The key air emissions will consist of nitrogen oxides, carbon monoxide, particulate matter, and sulfur dioxide. Air pollution control will be accomplished through "Dry-Low NO_x combustion" and use of natural gas with low sulfur diesel oil as backup. If Westinghouse is chosen as the manufacturer, the units will operate only on natural gas without any back-up fuel. GPP-II, L.P. requested only 3,000 hours per year of operation. That is roughly 40 percent of the time in a year. Actual hours of operation are more likely to be on the order of 1000 hours per year. The next speakers will explain the details of the emission limits, control technology, and ambient impacts in more detail.

The Florida Department of Environmental Protection (DEP) is the permitting authority for the air construction permit under Chapter 403 of the Florida Statutes, Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code.

The DEP Bureau of Air Regulation in Tallahassee received the application on January 18 of this year. We distributed it to the EPA Region 4 office in Atlanta, the U.S. Fish and Wildlife Service's Air Quality Branch in Denver, Colorado, and our DEP Southwest District Office in Tampa.

The Technical Evaluation and Preliminary Determination and the draft air permit were completed and sent to the applicant on April 14 along with the Department's Intent to Issue. Copies were provided to the previously - mentioned agencies and to Hardee County. Copies were made available for public inspection at DEP offices in Tallahassee and Tampa. We also posted these materials at www.dep.state.fl.us/air/permitting.htm

The Department's Public Notice of Intent to Issue Air Construction Permit was published by the applicant in the Herald-Advocate on April 27. It provided a 30-day period for anyone to submit comments on the Department's proposed action or to request this public meeting. It also provided a 14-day period for anyone whose substantial interests are affected by the Department's decision to file a petition for an administrative hearing. We have not received any public comments in response to the Public Notice except for a request by a citizen to hold this public meeting. Our Office of General Counsel received one petition for an administrative hearing from the same citizen.

This public meeting was noticed in the Florida Administrative Weekly on June 30 (this publication is available free of charge on the web at election.dos.state.fl.us). This meeting was also noticed in the Herald-Advocate.

Copies of the Intent to Issue package are available at this meeting. We also have a few copies on diskette. If we run out, we will be happy to make you copies and send them to you. As I mentioned before, you can view this package on our website. The actual application and entire file are available for public review and copying at our offices in Tallahassee and Tampa.

Issues such as noise and the plant location are beyond the scope of our authority in making this permitting decision. These fall within local ordinances and local planning and zoning authorities. We also do not exercise authority over the pipeline that will provide fuel to the plant. This is within the purview of separate federal, state and local approval processes.

DEP will consider comments specifically related to air emissions and control that are submitted here and over the next week. These comments will be reviewed when issuing the final permit decision. The request for an administrative hearing before a judge was dismissed with leave to amend the petition. The petition was not amended and resubmitted.

Comments may be submitted at this public meeting, E-Mailed, or mailed to:

CONTACT: A. A. Linero, P.E Administrator
New Source Review Section
Bureau of Air Regulation
2600 Blair Stone Road., M.S. 5505
Tallahassee, Florida 32399
Tel: (850)921-9523
Fax: (850)922-6979
Internet: alvaro.linero@dep.state.fl.us

AIR MODELING: Chris Carlson, Meteorologist
New Source Review Section, Tallahassee
Tel: (850)921-9537

AIR COMPLIANCE: Bill Proses
DEP S.W. District, Tampa
Tel: (813)744-6100

LEGAL CONTACT: Douglas Beason, Attorney
Office of General Counsel, Tallahassee
Tel: (850)488-9730

MEETING MODERATOR: Gerry Kissell, P.E.
DEP S.W. District, Tampa
Tel: (813)744-6100

COMMENT CARD
DEP PUBLIC MEETING
July 12, 2000

(please print)

NAME: Ann Vanek / citizens for a Rational Energy Policy
ADDRESS: 345 Crest St.
Sanford, FL 32771

COMMENTS:

thank you
for a Wonderful Presentation - well done.

We are concerned with the DEP's lack of authority to look at the cumulative impact of the 25-30 plants currently locating in FL. We feel these plants pose a serious threat to the ambient air quality and therefore Human Health. Even this plant will increase the emissions in the city by nearly 100%.

COMMENT CARD
DEP PUBLIC MEETING
July 12, 2000

(please print)

NAME: Anay Quint, POLE SIERRA
ADDRESS: PO Box 2237
LAKELAND, FL 33806

COMMENTS:

THANKS FOR THE PRESENTATION. PLEASE CONSIDER CUMULATIVE EFFECTS OF POWER PLANTS IN FLORIDA. ALTHOUGH THE PRESENTATION NOTES MINIMAL EFFECTS OF PM, SO₂, NO_x ON PEOPLE, HOW ABOUT ON AIRWAYS? CONSIDER HAVING SOMEONE RESEARCH EFFECTS ON PEOPLE. (JUST DO A LITERATURE REVIEW)

FACSIMILE COVER SHEET



LS POWER, LLC
655 Craig Road, Suite 336
St. Louis, MO 63141
(314) 993-2700 Fax (314) 993-2790

DATE: 7/10/00

Fax #: 850-922-6979

TO: Al Leno

FROM: Mike Vogt

SUBJECT: Nancy Grant Petition

PAGES TO FOLLOW:

Per our conversation

RECEIVED

JUN 29 2000

FLORIDA DEPARTMENT OF STATE
Katherine Harris Secretary of State
Division of Elections
Bureau of Administrative Code

BUREAU OF AIR REGULATION

The Elliot Building - 401 South Monroe St. - Tallahassee, Fl. 32399-0250 - (850)488-8427

Billed to:

DEPT OF ENVIRONMENTAL PROTECTION
AIR RESOURCES MANAGEMENT OFFICE
2600 BLAIR STONE ROAD
MAIL STATION 5505
TALLAHASSEE, FL 32399-2400
Attn: AL LINERO

*PA
6-29-00*

Account: 7627 Invoice Date: 06/30/2000 Invoice Number: 043965

P.O. #	Publication in Florida Administrative Weekly	# units	\$each	Extension
1 00798	Volume:26/26 Pages:3113	28	0.79	\$22.12
Invoice # must appear on all checks and correspondence. Please pay balance due:				\$22.12
F.E.I.D. number: 59-3466865		*** Net Due - 15 days - No Discount ***		

TO INSURE PROPER CREDIT, PLEASE RETURN THIS PORTION.

Department of State - Division of Administrative Services - Bureau of Planning, Budget and Financial Services
The Capitol - Room 1901 - Tallahassee, Fl. 32399-0250

Account: 7627 Invoice Date: 6/27/00 Number: 43965 Amount Due: \$22.12

State Agencies - Journal Transfer to Account Code: 45-50-2-561001-45100000-00
Org Code / EO : 4510-3020 R3 Object: 010000 Category: 001903

For Accounting Use Only: Object Code: 019032 Cat: 001903 ARGL: 16300 GL: 67100

Samas Account Code/Vendor: 37-20-2-035001-37550000-00

PLACE: Division of Real Estate, Commission Meeting Room 301, North Tower, 400 West Robinson Street, Orlando, Florida

PURPOSE: Official business of Commission – among topics included, but not limited to, are proposed legislation affecting Chapter 475, Part I, F.S., rule development workshops, Florida Administrative Code 61J2 rule amendments, budget discussions, escrow disbursement requests, Recovery Fund Claims, education issues, petitions for declaratory statement, and disciplinary actions.

If a person decides to appeal a decision made by the Commission, with respect to any matter considered at this meeting or hearing, a record of the proceedings for such purpose, upon which the appeal is based, may be required. Probable Cause Panel(s) may also meet during this session. Portions of the Probable Cause are not open to the public.

A copy of the agenda may be obtained by writing: Deputy Clerk, Florida Real Estate Commission, Administration Office, P. O. Box 1900, Orlando, Florida 32802-1900.

Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the Department of Business and Professional Regulation, (407)245-0800, at least five (5) calendar days prior to the meeting. If you are hearing or speech impaired, please call the Division of Real Estate using the Florida Dual Party Relay System, which can be reached at 1(800)955-8770 (Voice) and 1(800)955-8771 (TDD).

DEPARTMENT OF ENVIRONMENTAL PROTECTION

The Department of Environmental Protection (DEP) announces two public meetings of the TMDL Allocation Technical Advisory Committee (TAC) to which all persons are invited.

DATE AND TIME: Monday, July 10, 2000, 9:00 a.m. – 4:30 p.m.

PLACE: Department of Environmental Protection, Room 609, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400

DATE AND TIME: Monday, July 31, 2000, 9:30 a.m. – 4:30 p.m.

PLACE: Orlando Public Library, 101 East Central Boulevard, The Oak Room, Orlando, Florida 32801

PURPOSE: The purpose of the Allocation TAC is to assist in the development of a report, pursuant to s. 403.067(6), Florida Statutes, providing recommendations for allocating load reductions to contributing source(s) once Total Maximum Daily Loads (TMDLs) have been determined for parameters of concern. Discussion may include options to fairly and equitably allocate pollution loads to both nonpoint and point sources, including consideration of existing treatment levels and management practices, and environmental, economic, and technological feasibility.

A copy of the agenda for the meeting may be obtained by contacting: Jan Mandrup-Poulsen, Department of Environmental Protection, 2600 Blair Stone Road, MS 3555, Tallahassee, Florida 32399-2400 or by calling him at (850)921-9488.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting the Personnel Services Specialist, Bureau of Personnel, (850)488-2996. If you are hearing or speech impaired, please contact the agency by calling 1(800)955-8771 (TDD).

The Department of Environmental Protection announces a public meeting to which all persons are invited:

DATE AND TIME: July 12, 2000, 7:00 p.m. – 9:00 p.m.

PLACE: Hardee County Board of County Commissioners Building, 412 West Orange Street, Room A-202, Wauchula, Florida

PURPOSE: To accept public comments and provide status of Department's Intent to Issue an Air Construction Permit to Granite Power Partners II, L.P. to construct three 170 megawatt simple cycle combustion turbine-electrical generators West of Wauchula in unincorporated Hardee County, Florida. The permitting action is subject to the Department's rules for the Prevention of Significant Deterioration of Air Quality and Best Available Control Technology (BACT).

A copy of the agenda and the Department's proposed permit and supporting documents can be obtained by contacting: Al Linero, Department of Environmental Protection, 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399, phone (850)921-9529, or by phoning the Bureau of Air Regulation's New Source Review Section, (850)921-9533.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting the Personnel Service Specialist, Bureau of Personnel, (850)488-2996. If you are hearing or speech impaired, please contact the agency by calling 1(800)955-8771 (TDD).

The Florida Department of Environmental Protection, Division of Recreation and Parks announces a public workshop to which all persons are invited.

DATE AND TIME: Thursday, July 13, 2000, 7:00 p.m. (CDT)

PLACE: Sandestin Golf and Beach Resort, Bayside Conference Center, 9300 Highway 98, West, Sandestin, Florida

PURPOSE: To receive comments regarding management and land uses for Grayton Beach State Recreation Area before the development of a management plan for the park.

Memorandum

Florida Department of Environmental Protection

To: Interested Parties

From: Al Linero, P.E.
New Source Review Section

Date: June 27, 2000

Re: Public Meeting Regarding an Application for PSD Permit from Granite Power Partners II, L.P.

You are on our list of interested parties for the air permit application for Granite Power Partners II, L.P. Please see the enclosed notice and agenda for a public meeting that the Department has scheduled to accept comments from the public about the permit application for this proposed project.

This meeting is scheduled for Wednesday July 6, 2000, and will start at 6:00 p.m. and conclude at 9:00 p.m. The meeting will be held at the Hardee County Board of County Commissioners Building, 412 West Orange Street, Room A-202, Wauchula, Hardee County, Florida. All interested persons are invited to attend to provide oral or written comments to the Department about this permit application.

If you have any questions about the meeting or need directions to the community center, please call the Division of Air Resources Management at (850) 488-0114.

enclosures

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PUBLIC MEETING
GRANITE POWER PARTNERS II, L.P.

The Department of Environmental Protection gives notice that a public meeting will be held regarding the Department's intent to issue an air construction permit pursuant to the rules for the Prevention of Significant Deterioration of Air Quality (PSD) to Granite Power Partners II, L.P. for construction of three 170 megawatt simple cycle combustion turbine-electrical generators and ancillary equipment west of Wauchula in unincorporated Hardee County.

The formal meeting will be held at 7:00 p.m. on Wednesday, July 12, 2000 at the Hardee County Board of County Commissioners Building, 412 West Orange Street, Room A-202, Wauchula. Department staff will also be available from 6:00 to 7:00 p.m. to discuss the proposed permit on an informal basis. Granite Power Partners may also have representatives present to discuss their proposed project from 6:00 to 7:00 p.m. Beginning at 7:00 p.m., the Department will provide the status of the permit application and receive oral and written comments regarding the Department's Intent to Issue an Air Construction Permit.

The Department's Public Notice of Intent to Issue an Air Construction Permit was published in the Herald Advocate on April 27, 2000. This public meeting was requested pursuant to the procedures described in that Public Notice. The application, meeting agenda, public notices, Technical Evaluation, draft Best Available Control Technology (BACT), draft permit, and file are available for review during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The Public Notice of Intent to Issue an Air Construction Permit, Technical Evaluation, draft permit, and draft BACT may also be accessed at www.dep.state.fl.us/air/permitting.htm

A separate notice of this public meeting was published in the Florida Administrative Weekly dated June 30, 2000 and can be viewed at election.dos.state.fl.us/faw/issues.shtml

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting the Personnel Service Specialist in the Bureau of Personnel at (850)488-2996. If you are hearing or speech impaired, please contact the agency by calling (800)955-8771 (TDD).

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
PUBLIC MEETING
REGARDING AN APPLICATION FOR PSD PERMIT FROM
GRANITE POWER PARTNERS II, L.P.

DATE AND TIME: Wednesday, July 12, 2000 at 6:00 p.m.

PLACE: Hardee County Board of County Commissioners Building, Wauchula, Hardee County, Florida

PURPOSE: To receive comments regarding the Department's receipt of an application for an air construction permit subject to the requirements of the Prevention of Significant Deterioration program (PSD permit) from Granite Power Partners II, L.P. (GPP). The applicant's address is 655 Craig Road, Suite 336, St. Louis, MO 63025. The application is for the construction of three 170 megawatt simple cycle combustion turbine-electrical generators and ancillary equipment to be located west of Wauchula in unincorporated Hardee County.

GPP proposes to construct three nominal 170 MW simple cycle, intermittent duty combustion turbine-electrical-generators with 60-foot stacks and one 1.5-million gallon fuel oil storage tank at the planned Hardee County Generation Facility (HCGF). The main fuel will be natural gas and the units are proposed by GPP to operate up to 3,000 hours per year per unit of which 500 hours per year per unit may be on maximum 0.05 percent sulfur distillate fuel oil.

This meeting is held, in part, to satisfy the public hearing requirements of Rule 62-210.350, F.A.C. The Department will formally receive oral or written comments on issues specifically related to the PSD permit application. At the meeting the Department may impose a limit on the time allowed for oral statements from each person. Written statements are encouraged. All statements will become part of the Department's public record of this project.

The complete application and official file are available for review during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays at the Department's Bureau of Air Regulation, 111 S. Magnolia Drive, Tallahassee. Written comments may be directed to Al Linero, P.E., Dept. of Environmental Protection, Bureau of Air Regulation, Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Written comments may also be sent to Al Linero via e-mail at Alvaro.Linero@dep.state.fl.us.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the agency at least 48 hours before the meeting by contacting the Personnel Service Specialist in the Bureau of Personnel at (850) 488-2996. If you are hearing or speech impaired, please contact the agency by calling 800-955-8771 (TDD).

AGENDA

- | | |
|-----------|--------------------------------------------------------|
| 7:00 p.m. | INTRODUCTION |
| | DESCRIPTION OF THE DEPARTMENT'S PSD PERMITTING PROCESS |
| | DESCRIPTION OF THE PROPOSED PROJECT |
| | DEPARTMENT'S REVIEW TO DATE |
| | AMBIENT IMPACT ANALYSIS |
| 7:30 p.m. | COMMENTS BY INTERESTED PARTIES |
| 9:00 p.m. | CONCLUSION |

FACSIMILE COVER SHEET



LS POWER, LLC
655 Craig Road, Suite 336
St. Louis, MO 63141
(314) 993-2700 Fax (314) 993-2790

DATE: May 30, 2000 FAX #: (850) 922-6979
TO: Al Linero / Joe Kahn
FROM: Mike Vogt
SUBJECT: Comments to Granite Power Partners II, L.P. Hardee Project
PAGES TO FOLLOW: 5

Please see attached letter. Original to follow via regular mail.

Joe,

I don't believe that any of the requested changes in this letter will change the results of the modeling. In the original A.P., they conducted a modeling screening analysis that considered all of the possible CT's, loads, and temperatures. Refined modeling was then conducted using the worst case scenario. Chris



LS POWER, LLC

655 Craig Road, Suite 336
St. Louis, Missouri 63141
(314) 993-2700 • Fax: (314) 993-2790

RECEIVED

JUN 05 2000

BUREAU OF AIR REGULATION

Michael F. Vogt
Project Manager

May 30, 2000

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road, MS # 5505
Tallahassee, Florida 32399-2400

Re: Hardee County Generating Facility
Notice of Intent to Issue Air Construction Permit
DEP File No. 0490044-001-AC (PSD-FL-281)

Dear Mr. Linero:

In accordance with the Notice of Intent to Issue Air Construction Permit, Granite Power Partners II, L.P., is hereby providing comments to the subject draft permit. Please see the enclosure with our detailed comments.

Should you have any questions, please do not hesitate to contact me at (314) 993-2700

Sincerely,

Michael F. Vogt

Enclosure

CC: Joe Kahn - FDEP, Bureau of Air Regulation

cc: Kissel, SWD
EPA
NPS

GRANITE POWER PARTNERS II, L.P.
Hardee County Generation Facility
Comments on Proposed PSD Permit No. PSD-FL-282

1. General Comment.

GPP requests that the ABB GT24 product be removed from the permit. GPP is no longer considering this product for the project.

2. Specific Condition No. 8, Page 7 of 16

GPP requests that additional language be added to clarify that the heat limits are included only for the purposes of determining capacity and is not intended to be a continuous limitation subject to compliance or enforcement. Suggested additional language is as follows:

{Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability}

3. Specific Condition No. 19, Page 9 of 16

GPP requests that the base load CO limit for oil-firing be increased from 20 ppmvd to 25 ppmvd at 15% O₂ to cover all of the oil-fired CTs under consideration. Alternatively, base load CO limits could be set on an individual CT basis as was done for NO_x.

GPP requests that CO limits be included to address partial load operations for the Westinghouse CTs. A CO limit during gas-firing of 83 ppmvd at 15% O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501F CT. A CO limit during gas-firing of 232 ppmvd at 15% O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501D5A CT.

GPP requests that VOC limits be included to address partial load operations for the Westinghouse CTs. A VOC limit during gas-firing of 20 ppmvd at 15% O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501F and 501D5A CTs.

GPP requests that NO_x limits be included to address partial load operations for the Westinghouse 501D5A CT. A NO_x limit during gas-firing of 45 ppmvd at 15% O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501D5A CT.

For the Westinghouse 501F and 501D5A CTs, an annual limit of no more than 500 hours per year operation at partial load (i.e., loads between 50 and 70 percent) is also requested.

GRANITE POWER PARTNERS II, L.P.
Hardee County Generation Facility
Comments on Proposed PSD Permit No. PSD-FL-282

4. Specific Condition No. 20, Page 10 of 16

GPP requests that NO_x limits be included to address partial load operations for the Westinghouse 501D5A CT. A NO_x limit during gas-firing of 45 ppmvd at 15% O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501D5A CT. For the Westinghouse 501D5A CT, an annual limit of no more than 500 hours per year operation at partial load (i.e., loads between 50 and 70 percent) is also requested.

5. Specific Condition No. 21, Page 10, 11 of 16

GPP requests that the base load CO limit for oil-firing be increased from 20 ppmvd to 25 ppmvd at 15% O₂ to cover all of the oil-fired CTs under consideration. Alternatively, base load CO limits could be set on an individual CT basis as was done for NO_x.

Consistent with prior FDEP permits for CT projects, GPP requests that compliance with the CO limits be verified by initial and annual source testing and not by CEMS. The installation of CO CEMs is costly and has not been required by FDEP for comparable CT projects. Air quality CO impacts were shown to be insignificant for the proposed Hardee County Generation Facility.

GPP requests that CO limits be included to address partial load operations for the Westinghouse CTs. A CO limit during gas-firing of 83 ppmvd at 15%O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501F CT. A CO limit during gas-firing of 232 ppmvd at 15%O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501D5A CT. For the Westinghouse 501F and 501D5A CTs, an annual limit of no more than 500 hours per year operation at partial load (i.e., loads between 50 and 70 percent) is also requested.

GPP requests that the base load natural gas- and oil-firing CO limits for the GE 7FA CT at ISO conditions be changed from 57 lb/hr to 53 lb/hr and from 71 lb/hr to 117 lb/hr, respectively, consistent with the proposed BACT limits of 12 and 23 ppmvd at 15% O₂ for natural gas- and oil-firing, respectively.

GPP requests that the base load gas-firing CO limit for the Westinghouse 501F CT at ISO conditions be changed from 57 lb/hr to 76 lb/hr consistent with the proposed BACT limit of 16 ppmvd at 15% O₂.

GPP requests that the base load gas-firing CO limit for the Westinghouse 50D5A CT at ISO conditions be changed from 42 lb/hr to 32 lb/hr consistent with the proposed BACT limit of 10 ppmvd at 15% O₂.

GRANITE POWER PARTNERS II, L.P.
Hardee County Generation Facility
Comments on Proposed PSD Permit No. PSD-FL-282

6. Specific Condition No. 22, Page 11 of 16

GPP requests that VOC limits be included to address partial load operations for the Westinghouse CTs. A VOC limit during gas-firing of 20 ppmvd at 15%O₂ for partial loads between 50 and 70 percent load is requested for the Westinghouse 501F and 501D5A CTs.

GPP requests that the base load gas-firing VOC limit for the Westinghouse 501F CT at ISO conditions be changed from 7.8 lb/hr to 8.8 lb/hr consistent with the proposed BACT limit of 3.0 ppmvd at 15% O₂.

7. Specific Condition No. 23, Page 11 of 16

GPP requests that the note comment be revised to specify ISO conditions as follows:

[Note: Emissions of SO₂ and SAM (at ISO conditions) will be limited by this condition to 9.3 lb/hr and 1.1 lb/hr respectively while firing natural gas, and 98.1 lb/hr and 11.3 lb/hr respectively.]

8. Specific Condition No. 24, Page 11 of 16

Consistent with prior FDEP permits for CT projects, GPP requests that this condition be deleted; i.e., use Specific Condition No. 25 opacity limits as a surrogate for PM/PM₁₀.

9. Specific Condition No. 30, Page 13 of 16

Consistent with prior FDEP permits for CT projects, GPP requests that PM/PM₁₀ testing using EPA Reference Methods 5 or 7 be deleted. CTs, and in particular simple-cycle CTs, generate large volumes of exhaust gas with very low PM concentrations making PM stack testing impractical.

10. Specific Condition No. 41, Page 15 of 16

Consistent with prior FDEP permits for CT projects, GPP requests that compliance with the CO limits be verified by initial and annual source testing and not by CEMS. The installation of CO CEMS is costly and has not been required by FDEP for comparable CT projects. Air quality CO impacts were shown to be insignificant for the proposed Hardee County Generation Facility.

GRANITE POWER PARTNERS II, L.P.
Hardee County Generation Facility
Comments on Proposed PSD Permit No. PSD-FL-282

11. Specific Condition No. 42, Page 15 of 16

GPP requests deletion of the reference to CO CEMS in Specific Condition No. 10; see Comment 9 above.

12. Section 39, Page 14 of 16.

The first line of the sentence includes a typographic error. "IPSAPC" should be "Granite Power Partners."



FAX Cover Sheet

USEPA - Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

TO:

AL Linero

FOEP

① Joe

② File

FAX #:

850-922-6979

RE:

Granite Power Partners II

cc: Nancy Grant ✓
Tom Davis, ECT ✓
Mike Vogt of Granite ✓

5/30/00

FROM:

Katy Forney
Air Permits Section, Region 4 USEPA

Phone #: 404-562-9130

Date:

5-26-00

of Pages (including cover):

3

COMMENTS:

If this FAX is poorly received, please call
Katy Forney: 404-562-9130





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 26 2000

4APT-ARB

Mr. A. A. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Preliminary Determination and draft PSD Permit for Granite Power Partners II -
Hardee County Generating Facility located near Wauchula, FL

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for the Granite Power Partners II - Hardee County Generating Facility dated April 14, 2000. The draft PSD permit is for the proposed construction and operation of three simple cycle combustion turbines (CTs) with a total nominal generating capacity of 540 megawatts (MW). One of the following four types of turbines is being considered for installation at the Granite Power facility: GE 7FA, Siemens Westinghouse 501F, Siemens Westinghouse 501D5A, and ABB GT-24. The CTs will combust pipeline quality natural gas as the primary fuel and distillate fuel oil as a backup fuel (for GE or ABB turbines only). As proposed, all CTs will be allowed to operate 3,000 hours per year, and for certain CTs, fuel oil can be fired up to 500 hours of the 3,000 hours per year. Total emissions from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC) and particulate matter (PM/PM₁₀).

Based on our review of the preliminary determination and draft PSD permit for Granite Power, we have the following comments. These comments supplement our letter dated April 12, 2000, containing comments on the PSD permit application.

1. It is our understanding that the applicant will be submitting additional information regarding the potential to emit and regulatory analysis of hazardous air pollutants to FDEP, which will then be forwarded onto the Environmental Protection Agency (EPA) Region 4.
2. Section III, condition 13, states that no single combustion turbine shall operate more than 4,000 hours in a single year and on average each unit will operate 3,000 hours per calendar year. The economic analyses for SCR and catalytic oxidation are based on 3,000 hours of operation per year. In order for the cost evaluations to remain valid, each combustion turbine should be limited to no more than 3,000 hours per year.

3. As indicated in Condition 26 and 27 of the draft permit, FDEP is proposing to allow excess emissions due to startup, shutdown or malfunction for up to 2 hours in any 24-hour period. It is the EPA's policy that BACT applies during all normal operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating procedures for the process and control equipment. Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.

Thank you for the opportunity to comment on the preliminary determination and draft PSD permit for the Granite Power Partners II facility in Hardee County, FL. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,



R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: SWD
N. Grant
M. Vost, Granite
NPS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 16 2000

RECEIVED

MAY 24 2000

4APT-ARB

BUREAU OF AIR REGULATION

A. A. Linero, P.E.
Administrator
New Source Review Section
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJECT: Custom Fuel Monitoring Schedule Proposed for Granite Power Partners II -
Hardee Generating Station located in Hardee County, Florida

Dear Mr. Linero:

This letter is in response to your April 14, 2000, request for approval of a custom fuel monitoring schedule for Granite Power Partners II - Hardee Generating Station. Granite Power will operate three natural gas and oil fired simple cycle combustion turbines subject to 40 C.F.R. Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. As requested, Specific Conditions 41, 42, 43, 45 and 46 have been reviewed. Region 4 has concluded that the use of acid rain nitrogen oxides (NO_x) continuous emission monitoring system (CEMS) for demonstrating compliance, as described in Specific Conditions 41, 42 and 43, is acceptable. Region 4 has also concluded that the natural gas custom fuel monitoring schedule proposed in Specific Condition 45 and the fuel oil monitoring schedule described in Specific Condition 46 are both acceptable.

According to 40 C.F.R. 60.334(b)(2), owners and operators of stationary gas turbines subject to Subpart GG are required to monitor fuel nitrogen and sulfur content on a daily basis if a company does not have intermediate bulk storage for its fuel. 40 C.F.R. 60.334(b)(2) also contains provisions allowing owners and operators of turbines that do not have intermediate bulk storage for their fuel to request approval of custom fuel monitoring schedules that require less frequent monitoring of fuel nitrogen and sulfur content.

Region 4 reviewed Specific Condition 45 which allows SO₂ emissions to be quantified using procedures in 40 C.F.R. 75 Appendix D in lieu of daily sampling as required by 40 C.F.R. 60.334(b). Since the specific limitations listed in the permit condition are consistent with previous determinations, we have concluded that the use of this custom fuel monitoring schedule is acceptable.

Specific Conditions 42 and 43 involve the method used to monitor NO_x excess emissions. Under the provisions for 40 C.F.R. 60.334(c)(1), the operating parameters used to identify NO_x

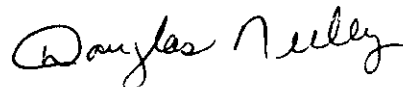
excess emissions for Subpart GG turbines are water-to-fuel injection rates and fuel nitrogen content. As an alternative to monitoring NO_x excess emissions using these parameters, Granite Power is proposing to use a NO_x CEMS that is certified for measuring NO_x emissions under 40 C.F.R. Part 75. Based upon a determination issued by EPA on March 12, 1993, NO_x CEMS can be used to monitor excess emissions from Subpart GG turbines if a number of conditions specified in the determination are met and included in the permit condition.

Specific Condition 41 addresses the potential for correcting results to ISO standard day conditions. The basis for this requirement is that, under the provisions of 40 C.F.R. 60.335(c), NO_x results from performance tests must be converted to ISO standard day conditions. As an alternative to continuously correcting results to ISO standard day conditions, Granite Power plans to keep records of the data needed to make this conversion, so that NO_x results could be calculated on an ISO standard day condition basis anytime at the request of EPA or the Florida DEP. This approach is acceptable, since the construction permit contains NO_x limits that are more stringent than those in Subpart GG, and compliance with Subpart GG for these units would be a concern only in cases when a turbine is in violation of the NO_x limits in its permit.

Finally, Specific Condition 46 addresses the monitoring schedule for fuel oil. According to 40 C.F.R. 60.334(b)(1), the nitrogen and sulfur content of the fuel oil must be monitored each time a new shipment of fuel oil is transferred to bulk storage. Granite Power is proposing to use the fuel analysis provided by the fuel vendor instead of sampling each shipment directly. Provided that all the oil received at the plant complies with the applicable sulfur content limit of 0.8 weight percent, this approach is acceptable, since the specific condition states that the fuel vendor's analyses will comply with the test method requirements of 40 C.F.R. 60.335(d).

If you have any questions about the determination provided in this letter, please contact Katy Forney of my staff at 404-562-9130.

Sincerely,



R. Douglas Neeley
Chief

Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: SWD
NPS

FAX

Date: 5-23-00

Number of Pages Including Cover Sheet 2

To:

Al Limer

From:

Nancy Grant

Phone #

850-488-0114

Phone #

863-494-9696

Fax #

850-922-6979

Fax #

863-993-3700

Remarks:

forward request for meeting

May 22, 2000

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Nancy Grant
P.O.Box 573
Arcadia, Florida
Telephone: 863/494-9696
Fax: 863/993-3700

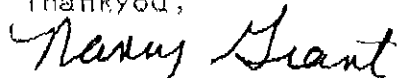
Concerning:

DEP File No. 0490044-001 AC (PSD-FL-281)
Granite Power Partners II, L.P.
Hardee County Generation Station- Units 1-3
Hardee County

This is a request for a public meeting concerning a proposed power plant in Hardee County. The date of publication of the Public Notice of Intent to Issue Air Permit was April 27th, 2000.

My request is within the thirty days of the issuance of this notice.

Thankyou,


Nancy Grant



Florida Department of Environmental Protection

Jeb Bush Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David Struhs Secretary

FAX TRANSMISSION

Post-it* Fax Note 7671 Date 5/15 # of pages 5 To Michael Vogt From de lineo Co./Dept. Granite PP Co. DEP-DAEM Phone # 850-921-9523

DATE: 5-10-00 TO: MARJANE MOWATT PHONE: 921-9720

FROM: MIKE ALVIN, BAR/NSR PHONE: 921-9530 Division of Air Resources Management FAX: 850.922.6979

RE: CC:

Total number of pages including cover sheet: 5

Message THIS PETITION FOR AN ADM. HEARING CAME TO OUR FAX MACHINE. CAN YOU PLEASE SEE THAT IT ENDS UP AT THE RIGHT PLACE? Thanks Mike Alvin

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve, and Manage Florida's Environmental and Natural Resources"

FAX

Date: 5-10-00

Number of Pages Including Cover Sheet 4

To: Mike Halpin

FROM: Nancy Grant

Phone # 850-488-0114

Phone # 863-494-9696

Fax # 850-922-6979

Fax # 863-993-3700

Remarks: April 27 - May 10
This is the 14th day.

May 10, 2000

Petition for Administrative Proceeding
under sections 120.569 and 120.57 of the Florida Statutes

DEP File No. 0490044-001-AC (PSD-FL-281)
Granite Power Partners II, L.P.
Hardee County Generation Station-Units 1-3

(a) Agency effected:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/488-6967

(b) Petitioner:

Nancy Grant
P.O. Box 573
Arcadia, Florida 34265
Telephone: 863/494-9696
Fax: 863/993-3700

(b) how the petitioner's substantial interests will be
affected by the agency determination:

As you have heard from petitions throughout the State of Florida the substantial interests remain the same. The health, well being, and quality of my life as well as yours, my grandchildren and yours will be directly felt by the decisions that you make. Contaminating the air we breath and using the state guidelines for excuses will be met with deadly results.

(c) statement of how petitioner received notice of agency
action or proposed action:

I followed the trail from the leads of John
Ellis's,(I.P.S. Powers, Avon Park Corporation) and
from the notice of intent from the Hardee paper.

Petition: page 2

(d) statement of all disputed issues of material fact:

Our utilities, FPL has stated, would not build plants such as proposed outside our towns. These plants are not for any other purpose than lining the applicants wallet. Excess pollution for this purpose is wrong.

This is a violation of our God given rights under the Constitution of the United States for clean air, pure water and sunshine.

The Clean Air Act of the United States has set standards that should ensure we as a people do not become ill or suffer disease because of the air we breathe from polluting, unnecessary, money making, plants that benefit no one except the narrow minded, money hungry, monsters that don't care about even the planet they live on. They would destroy even their own family to make that money. When is enough enough.

There are a lot of material facts that will stand up in court and that is where this is going. Did any of you pay any attention at all to the Earth Day Rally in Washington DC just recently?

(e) statement of ultimate facts alleged and facts that warrant reversal:

The obvious fact is that you cannot permit unlimited polluting factories in an already polluted environment. The accumulated effect of all of these plants is going to have a destructive effect on Hardee County as well as the surrounding area. The taxes from these plants are what Little Backwoods Commissioners look at, that is what the Phosphate Industry calls them. This is a wake-up petition.

The entire Florida Statutes need to be updated to meet our desperate environmental needs before we have destroyed completely our home, planet Earth.

Our elected officials will now be held accountable for their neglect. They haven't kept up with the times.

Petition: page 3

- (f) a statement of the specific rules or statutes the petitioner contends require reversal or modification

That is putting it mildly, these so called rules are dated 1977. They need to be updated as previously stated. The hand writing is on the wall. They don't address the problem that is facing this state, this nation AT ALL!

- (g) statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take:

Do not permit any more merchant plants. It doesn't take a whole lot of common sense to see the problem. We as a nation are like a flock of sheep following these rules to our destruction. Permit all these plants that come your way and I'm afraid you are going to be held responsible for the damage they cause, the lives they take.

I am also requesting the Administrative hearing be held in Hardee County.

Nancy Grant
May 10, 2000



LS POWER, LLC

655 Craig Road, Suite 336
St. Louis, Missouri 63141
(314) 993-2700 • Fax: (314) 993-2790

RECEIVED
MAY 08 2000
BUREAU OF AIR REGISTRATION

Michael F. Vogt
Project Manager

May 4, 2000

A.A. Linero
Dept. of Environmental Protection
Division of Air Resources Management
Twin Towers Office Building, Mail Station 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: DEP File No. 0490044-001-AC (PSD-FL-281)

Dear Mr. Linero:

Per your request, the proof of publication and the affidavit of publication in the Wauchula, Florida Herald-Advocate are enclosed. If you have any further questions, please contact me. Thank you.

Sincerely,

Mike Vogt

cc: File
EPA
NPS
SWD

AFFIDAVIT OF PUBLICATION
The Herald-Advocate
 Published Weekly at Wauchula, Florida

STATE OF FLORIDA,
 COUNTY OF HARDEE

Before the undersigned authority personally appeared Jim Kelly who on oath says he is the editor of The Herald-Advocate, a newspaper published at Wauchula, in Hardee County, Florida, that the attached copy of advertisement, being a Notice of intent to issue in the matter of DEP File No. 0490044-001-AC in the _____ Court, was published in said newspaper in the issues of April 27, 2000

Affiant further says that the said Herald-Advocate is a newspaper published at Wauchula, in said Hardee County, Florida, and that the said newspaper has heretofore been continuously published in said Hardee County, Florida, each week and has been entered as second class mail matter at the post office in Wauchula, in said Hardee County, Florida, for a period of one year next preceding the publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Jim Kelly

Sworn to and subscribed before me this 27 day of April A. D. 2000
Theresa V. Cimmino
 Notary Public
 My Commission Expires June 15 to 2002

NOTARY PUBLIC
 STATE OF FLORIDA
 Theresa V. Cimmino
 Commission # CC 739052
 Expires June 15, 2002
 BONDED THRU
 ATLANTIC BONDING CO., INC.

ALL NEW
W 2001 OLDSMOB
 \$1,705 cash due at lease signing. Includes security dep.
OR \$17,999
 DIA DISCOUNT/REBATE \$2,285
 PRICE \$20,285
 FACTURER'S

SAVE UP TO \$2783
EW 2000 BUICK
 Cash Due At Lease Signing minus \$400 College Scholarship, \$1,200 Cash Value at Lease Signing
OR \$17,999
 DIA DISCOUNT/COLLEGE GRAD \$1,782
 PRICE \$19,782
 FACTURER'S

UNDER INVOICE \$1,000

**PUBLIC NOTICE OF INTENT TO
ISSUE AIR CONSTRUCTION PERMIT**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

DEP File No. 0490044-001-AC
(PSD-FL-281)

Granite Power Partners II, L.P.
Hardee County Generation Station —
Units 1-3
Hardee County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit under the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality to Granite Power Partners II, L. P. The permit is to construct: three nominal 120-180 megawatt (MW) natural gas and distillate fuel oil-fired combustion turbine-electrical generators; three 100-foot stacks; a 10 million Btu per hour natural gas-fired heater; and one 1.5 million gallon fuel oil storage tank for the proposed Hardee County Generation Station West of Wauchula in Hardee County. A Best Available Control Technology (BACT) determination was required for sulfur dioxide (SO₂), particulate matter (PM/PM₁₀), nitrogen oxides (NO_x), sulfuric acid mist (SAM), and carbon monoxide (CO) pursuant to Rule 62-212.400, F.A.C. The applicant's name and address are Granite Power Partners II, L. P., 655 Craig Road, Suite 336, St. Louis Missouri 63025.

The gas turbine manufacturer and model have not been selected. The options are: General Electric Model 7FA (170 MW); Westinghouse Model 501D5A (120 MW); Westinghouse Model 501F (170 MW); or ABB Alstom Model GT-24 (180 MW). The units will operate in simple cycle mode and intermittent duty. The units will operate primarily on natural gas and will be permitted to operate 3,000 hours per year. Within the 3000 hours per year and depending on the model, fuel oil firing will be permitted for 0-500 hours per year.

NO_x emissions will be controlled by Dry Low NO_x combustors or selective catalytic reduction (SCR). The emission limits proposed for gas firing are between 5 and 15 parts per million by volume at 15 percent oxygen (ppm) and depend on the manufacturer, control technology, and use of backup fuel oil. NO_x will be controlled to 42 ppm by wet injection or to 10 ppm by SCR when firing backup fuel oil. Sulfuric acid mist, SO₂, and PM/PM₁₀ will be limited by use of clean fuels. Emissions of VOC and CO will be controlled by good combustion practices.

The maximum emissions from the combustion turbines and the natural gas heater in tons per year based on the original application are summarized below. There will be minor emissions of VOC from the fuel oil storage tank.

*Harold Associate
4/27/00*

*Hardee Co.
News Article*

Pollutant
PM/PM₁₀
CO
NO_x
VOC
SO₂
Sulfuric Acid Mist

Maximum Potential Emissions

128
518
950
74
108
14

PSD Significant Emission Rate

25/15
100
40
40
40
7

Air quality and regional haze impact analyses were conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II significant impact levels. There will be insignificant impacts on visibility in the Class I Chassahowitzka National Wildlife Area. Based on the required analyses, the Department has reasonable assurance that the proposed project will not cause or significantly contribute to a violation of any AAQS or PSD increment.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties list-

ed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays at:

Department of Environmental
Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department Environmental
Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information. The Department's technical evaluations and Draft Permit can be viewed at www.dep.state.fl.us/air/permitting.htm by clicking on Construction Permits.

4:27c



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 12 2000

RECEIVED

APR 17 2000

BUREAU OF AIR REGULATION

4APT-ARB

A. A. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

**SUBJ: PSD Permit Application for Granite Power Partners II
Hardee County Generating Facility located near Wauchula, FL**

Dear Mr. Linero:

Thank you for sending the prevention of significant deterioration (PSD) permit application for the Granite Power Partners II - Hardee County Generating Facility dated January 19, 2000. The PSD permit application is for the proposed construction and operation of three simple cycle combustion turbines (CTs) with a total nominal generating capacity of 540 megawatts (MW). One of following four types of turbines is being considered for installation at the Granite Power facility: GE 7FA, Siemens Westinghouse 501F, Siemens Westinghouse 501D5A, and ABB GT-24. The CTs will combust pipeline quality natural gas as the primary fuel and distillate fuel oil as a backup fuel. As proposed, the CTs will be allowed to operate 3,000 hours per year with up to 500 hours per year firing fuel oil. Total emissions from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC) and particulate matter (PM/PM₁₀).

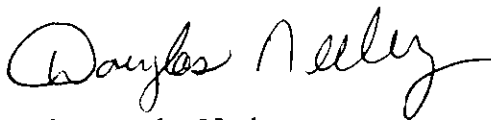
Based on our review of the PSD permit application for Granite Power, we have the following comments:

1. The applicant proposed a best available control technology (BACT) NO_x emission limit of 25 ppmvd (15% oxygen) for natural gas firing if the ABB GT-24 turbines are installed. BACT NO_x emission limits for most recent simple cycle projects in Region 4 and elsewhere are well below 25 ppmvd while firing natural gas. Our conclusion is that the NO_x BACT emission rate should be much less than 25 ppmvd regardless of the turbine model selected by the applicant.
2. In Appendix D of the PSD permit application, the formaldehyde emission factor seems to originate from Chapter 1 of AP-42 Supplement D. Chapter 1 discusses external combustion sources, while Chapter 3 discusses stationary internal combustion sources (including CTs) and is more appropriate for estimating emissions from combustion turbines.

3. In the economic analyses, the cost of SCR and catalytic oxidation are evaluated based on 3,000 hours of operation per year. This operational limit needs to be included in the draft PSD permit as the maximum number of hours/year a single CT can operate for these analyses to remain valid.
4. The proposed BACT for particulate matter (PM₁₀) is between 10 and 20% opacity for visible emissions (depending on which turbine manufacturer is chosen). This visible emissions opacity limit is proposed as a surrogate for a BACT particulate matter emissions rate limit. It is acceptable to use the 10 - 20% opacity limit as a surrogate for monitoring and recordkeeping; however, the permit conditions should also list the corresponding emission rate for particulate matter (i.e., 9.9 lb/hr for natural gas, 18.7 lb/hr for fuel oil.)

Thank you for the opportunity to comment on the PSD permit application for the Granite Power Partners II facility in Hardee County, FL. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,



R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

April 14, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gregg Worley, Chief
Preconstruction/HAP Section
Air, Radiation Technology Branch
US EPA Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: PSD Review and Custom Fuel Monitoring Schedule
Hardee Generation Station
PSD-FL-281

Dear Mr. Worley:

Enclosed are two copies of the Department's Intent to Issue package for the Granite Power Partners II Hardee Generation Station in Hardee County. It will be a natural gas and oil-fired simple cycle facility consisting of three nominal 120-180 megawatt (MW) simple cycle combustion turbine-electrical generators. The project is not subject to the Florida's Power Plant Siting procedure because it will generate no electricity from steam.

We received your comments on the application by fax on April 12. We made at least a couple of changes as result of those comments but were not able to incorporate all of them into the draft permit which was already under review by our management. We will address all comments in our final action. In the meantime, please provide any additional comments on the Draft BACT determination and Draft Permit.

Please send your written comments on or approval of the applicant's proposed custom fuel monitoring schedule. The plan is based on the letter dated January 16, 1996 from Region V to Dayton Power and Light. The Subpart GG limit on SO₂ emissions is 150 ppmvd @ 15% O₂ or a fuel sulfur limit of 0.8% sulfur. Neither of these limits could conceivably be violated by the use of pipeline quality natural gas with a sulfur limit of 1 grain per 100 standard cubic feet or by back-up fuel oil with a 0.05% sulfur content. The requirements have been incorporated into the enclosed draft permit as Specific Conditions 45 and 46 and read as follows:

45. Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:

- The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.

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April 14, 2000

- The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
- Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
- This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO₂ emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

46. 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).

Please comment on Specific Conditions 41 and 42 which allow the use of the acid rain NO_x CEMS for demonstrating compliance as well as reporting excess emissions, as well as Specific Condition 43 which allows the use of CEMS in lieu of measuring the water to fuel ratio. Typically NO_x emissions will be less than 9 ppmvd @15% O₂ (natural gas) which is less than one-tenth of the applicable Subpart GG limit based on the efficiency of the unit. A CEMS requirement is stricter and more accurate than any Subpart GG requirement for determining excess emissions.

The Department recommends your approval of the custom fuel monitoring schedule and these NO_x monitoring provisions. If you have any questions on these matters please contact me at 850/921-9523.

Sincerely,



A. A. Linero, P.E. Administrator
New Source Review Section

AAL/al

Enclosures