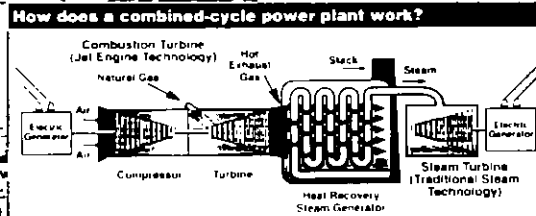
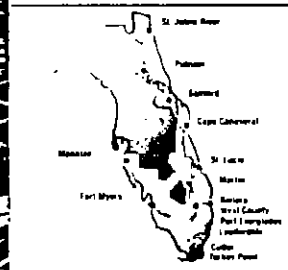
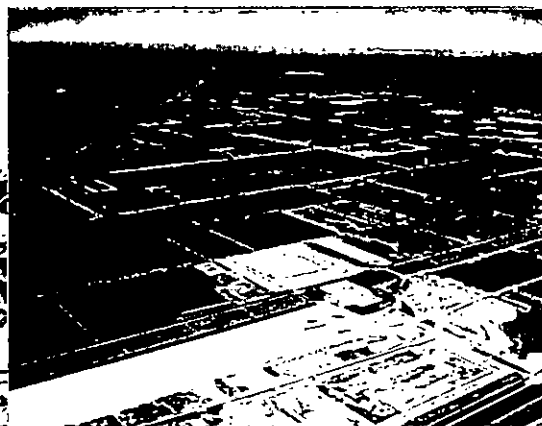


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# West County e n e r g y c e n t e r



## Air Construction/PSD Permit Application Sufficiency Information



**ATTACHMENT 5FDEP-3**

**BACT EVALUATION TABLES  
LOWERING NO<sub>x</sub> EMISSIONS**

Table SFDEP3-1. Capital Cost for Selective Catalytic Reduction and SCONox™ for the GE Frame 7FA Combined Cycle Combustion Turbine  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONox™	Basis of Cost Component
<b>Direct Capital Costs</b>			
Pollution Control Equipment	\$1,293,825	\$14,750,000	Vendor Estimates
Ammonia Storage Tank	\$126,350	\$0	\$35 per 1,000 lb mass flow developed from vendor quotes
Flue Gas Ductwork	\$44,505	\$69,725	Vatavauk, 1990
Instrumentation	\$50,000	\$50,000	Additional NO <sub>x</sub> Monitor and System
Taxes	\$77,629	\$885,000	6% of SCR Associated Equipment and Catalyst
Freight	\$64,691	\$737,500	5% of SCR Associated Equipment
Total Direct Capital Costs (TDCC)	\$1,657,001	\$16,492,225	
<b>Direct Installation Costs</b>			
Foundation and supports	\$132,560	1,319,378	8% of TDCC and RCC; OAQPS Cost Control Manual
Handling & Erection	\$231,980	2,308,912	14% of TDCC and RCC; OAQPS Cost Control Manual
Electrical	\$66,280	659,689	4% of TDCC and RCC; OAQPS Cost Control Manual
Piping	\$33,140	329,845	2% of TDCC and RCC; OAQPS Cost Control Manual
Insulation for ductwork	\$16,570	164,922	1% of TDCC and RCC; OAQPS Cost Control Manual
Painting	\$16,570	164,922	1% of TDCC and RCC; OAQPS Cost Control Manual
Site Preparation	\$5,000	\$5,000	Engineering Estimate
Buildings	\$15,000	\$15,000	Engineering Estimate
Total Direct Installation Costs (TDIC)	\$517,100	\$4,967,668	
Total Capital Costs (TCC)	\$2,174,101	\$21,459,893	Sum of TDCC, TDIC and RCC
<b>Indirect Costs</b>			
Engineering	\$165,700	\$1,649,223	10% of Total Direct Capital Costs; OAQPS Cost Control Manual
PSM/RMP Plan	\$50,000	\$0	Engineering Estimate
Construction and Field Expense	\$82,850	\$824,611	5% of TDCC; OAQPS Cost Control Manual
Contractor Fees	\$165,700	\$1,649,223	10% of TDCC; OAQPS Cost Control Manual
Start-up	\$33,140	\$329,845	2% of TDCC; OAQPS Cost Control Manual
Performance Tests	\$16,570	\$164,922	1% of TDCC; OAQPS Cost Control Manual
Contingencies	\$49,710	\$494,767	3% of TDCC; OAQPS Cost Control Manual
Total Indirect Capital Cost (TInCC)	\$563,670	\$5,112,590	
Total Direct, Indirect and Capital Costs (TDICC)	\$2,737,771	\$26,572,482	Sum of TCC and TInCC

Sources: Foster Wheeler, 2002. ABB Alstom, 2000. EPA, 1990, 1992, and 1996 (OAQPS Cost Control Manual).  
Golder, 2005. Vatavuk, 1990 (Estimating Costs of Air Pollution Control).

Table SFDEP3-2. Annualized Cost for Selective Catalytic Reduction and SCONox™ for the GE Frame 7FA in Combined Cycle Operation  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONox™	Basis of Cost Component
<b>Direct Annual Costs</b>			
Operating Personnel	\$21,840	\$43,680	28 hours/week at \$15/hr for SCR; SCONox 2 times SCR costs
Supervision	\$3,276	\$6,552	15% of Operating Personnel, OAQPS Cost Control Manual
Ammonia	\$143,744	\$0	\$600 per ton NH <sub>3</sub> based on 19% Aqueous NH <sub>3</sub>
PSM/RMP Update	\$15,000	\$0	Engineering Estimate
Inventory Cost	\$4,735	\$7,103	Capital Recovery (10.98%) for 1/3 catalyst for SCR; SCONox 1.5 times SCR
Catalyst Cost	\$129,382	\$194,074	3 years catalyst life; Based on Vendor Budget Estimate
Contingency	\$9,539	\$7,542	3% of Direct Annual Costs
<b>Total Direct Annual Costs (TDAC)</b>	<b>\$327,518</b>	<b>\$258,951</b>	
<b>Energy Costs</b>			
Electrical	\$28,032	\$70,080	80kW/h for SCR @ \$0.04/kWh times Capacity Factor; 200 kW for SCONox
MW Loss and Heat Rate Penalty	\$409,462	\$712,108	0.36 % output for SCR; 0.6% for SCONox; EPA, 1993
Steam Costs for SCONox	\$0	\$690,567	17,795 lb/hr 600 °F, 85 psig, steam (1,329 Btu/lb steam); 90% boiler eff; \$3/mmBtu
Natural Gas for SCONox	\$0	\$48,737	80 lb/hr, 0.044 lb/scf, 1,020 Btu/scf; \$3/mmBtu
<b>Total Energy Costs (TEC)</b>	<b>\$437,494</b>	<b>\$1,521,493</b>	
<b>Indirect Annual Costs</b>			
Overhead	101,316	30,139	60% of Operating/Supervision Labor and Ammonia
Property Taxes	27,378	265,725	1% of Total Capital Costs
Insurance	27,378	265,725	1% of Total Capital Costs
Annualized Total Direct Capital	300,607	2,917,659	10.98% Capital Recovery Factor of 7% over 15 years times sum of TDACC
<b>Total Indirect Annual Costs (TIAC)</b>	<b>\$456,679</b>	<b>\$3,479,247</b>	
<b>Total Annualized Costs</b>	<b>\$1,221,691</b>	<b>\$5,259,691</b>	Sum of TDAC, TEC and TIAC
Incremental Cost Effectiveness (2.5 to 2.0)	\$4,449	\$2,844	per incremental ton of NO <sub>x</sub> Removed
	315.97	315.97	tons NO <sub>x</sub> removed /year; 2.5 ppmvd corrected to 15% oxygen

Source: Golder, 2005. EPA, 1993 (Alternative Control Techniques Document--NOx Emissions from Stationary Gas Turbines, Page 6-20).

Table 5FDEP3-3. Maximum Potential Incremental Emissions (TPY) with Selective Catalytic Reduction (SCR) and SCONOX™: GE-7FA  
(2.0 ppm)

Pollutants	Incremental Emissions (tons/year) of SCR			Incremental Emissions (tons/year) of SCONOX™		Total
	Primary	Secondary	Total	Primary	Secondary	
Particulate	11.43	0.24	11.67		1.40	1.40
Sulfur Dioxide		0.09	0.09		0.53	0.53
Nitrogen Oxides	-315.97	4.44	-311.52	-315.97	25.77	-290.19
Carbon Monoxide		2.66	2.66		15.46	15.46
Volatile Organic Compounds		0.17	0.17		1.01	1.01
Ammonia	111.13					
Total:	-193.41	7.61	-185.80	-315.97	44.17	-271.79
Carbon Dioxide (all energy requirements)		4,219.47	4,219.47		24,483.32	24,483.32

Basis:	SCR	SCONOX™	SCONOX™
Lost Energy (mmBtu/year)	66,623	386,579 total	245,607 steam and natural gas only
Secondary Emissions (lb/mmBtu): Assumes natural gas firing in NOx controlled steam unit.			
Particulate	0.0072		
Sulfur Dioxide	0.0027		
Nitrogen Oxides w/LNB	0.1333		
Carbon Monoxide	0.0800		
Volatile Organic Compounds	0.0052		

(Note: Secondary emissions of criteria pollutants for SCONOX based on the total lost energy minus steam and natural gas since emissions of these pollutants will be controlled in the proposed unit. Emissions of CO<sub>2</sub> will result for all uses.)

Reference: Table 1.4-1 and 1.4-2. AP-42, Version 2/98

Table 5FDEP3-4. Comparison of Alternative BACT Control Technologies for NO<sub>x</sub> on One CT/HRSG: GE-7FA

	Alternative BACT Control Technologies		
	DLN Only	DLN with SCR (2.0 ppmvd corrected)	DLN with SCONOx™ (2.0 ppmvd corrected)
Technical Assessment	Feasible	Available, Feasible and Demonstrated	Not Demonstrated
Economic Impact <sup>a</sup>			
Capital Costs	included	\$2,737,771	\$26,572,482
Annualized Costs	included	\$1,221,691	\$5,259,691
Cost Effectiveness (per ton of Nox removed)			
Incremental from 2.5 ppm	NA	\$4,449	\$2,275
Environmental Impact <sup>b</sup>			
Total NO <sub>x</sub> (TPY)	395	79.2	79.2
NO <sub>x</sub> Reduction (TPY)	NA	316	316
Ammonia Emissions (TPY)	0	111	0
PM Emissions (TPY)	0	11.7	0
Secondary Emissions (TPY)	0	7.6	43.5
Net Emission Reduction (TPY)	NA	-186	-272
Additional Greenhouse Gas (as CO <sub>2</sub> ; tons/year)	0	4,219	24,483
Energy Impacts <sup>c</sup>			
Energy Use (kWh/yr)	0	6,480,928	37,605,339
Energy Use (kWh/yr) - Back Pressure	0	5,780,128	11,560,257
Energy Use (kWh/yr) - Other	0	700,800	26,045,082
Energy Use (Equivalent Residential Customers/year)	0	540	3,134
Energy Use (mmBtu/yr) at 10,000 Btu/kWh	0	66,623	386,579
Energy Use (mmcf/yr) at 1,000 Btu/cf for natural gas	0	67	387
Energy Use (percent of combustion turbine output)	0	0.43%	2.47%

<sup>a</sup> See Tables 5FDEP3-1 and 2 for detailed development of capital costs (including recurring costs) and annualized costs.

<sup>b</sup> See emission data presented in Table 5FDEP-3.

<sup>c</sup> Energy impacts are estimated due to the lost energy from heat rate penalty and electrical usage for the SCR operation at 8,760 hours per year. Lost energy for SCR is based on 0.345 percent of 166 MW. SCR electrical usage is based on 0.080 MWh per SCR system. Lost Energy for SCONOx™ includes 0.6 percent of turbine output and steam usage. SCONOx™ electrical usage based on 0.2 MW/hr per system.

Table 5FDEP3-5. Capital Cost for Selective Catalytic Reduction and SCONOX™ for the GE Frame 7FB Combined Cycle Combustion Turbine  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONOX™	Basis of Cost Component
<b>Direct Capital Costs</b>			
Pollution Control Equipment	\$1,840,969	\$16,712,000	Vendor Estimates
Ammonia Storage Tank	\$126,000	\$0	\$35 per 1,000 lb mass flow developed from vendor quotes Vatavauk, 1990
Flue Gas Ductwork	\$44,505	\$69,725	Additional NO <sub>x</sub> Monitor and System
Instrumentation	\$50,000	\$50,000	6% of SCR Associated Equipment and Catalyst
Taxes	\$110,458	\$1,002,720	5% of SCR Associated Equipment
Freight	\$92,048	\$835,600	
<b>Total Direct Capital Costs (TDCC)</b>	<b>\$2,263,981</b>	<b>\$18,670,045</b>	
<b>Direct Installation Costs</b>			
Foundation and supports	\$181,118	1,493,604	8% of TDCC and RCC; OAQPS Cost Control Manual
Handling & Erection	\$316,957	2,613,806	14% of TDCC and RCC; OAQPS Cost Control Manual
Electrical	\$90,559	746,802	4% of TDCC and RCC; OAQPS Cost Control Manual
Piping	\$45,280	373,401	2% of TDCC and RCC; OAQPS Cost Control Manual
Insulation for ductwork	\$22,640	186,700	1% of TDCC and RCC; OAQPS Cost Control Manual
Painting	\$22,640	186,700	1% of TDCC and RCC; OAQPS Cost Control Manual
Site Preparation	\$5,000	\$5,000	Engineering Estimate
Buildings	\$15,000	\$15,000	Engineering Estimate
<b>Total Direct Installation Costs (TDIC)</b>	<b>\$699,194</b>	<b>\$5,621,014</b>	
<b>Total Capital Costs (TCC)</b>	<b>\$2,963,175</b>	<b>\$24,291,059</b>	Sum of TDCC, TDIC and RCC
<b>Indirect Costs</b>			
Engineering	\$226,398	\$1,867,005	10% of Total Direct Capital Costs; OAQPS Cost Control Manual
PSM/RMP Plan	\$50,000	\$0	Engineering Estimate
Construction and Field Expense	\$113,199	\$933,502	5% of TDCC; OAQPS Cost Control Manual
Contractor Fees	\$226,398	\$1,867,005	10% of TDCC; OAQPS Cost Control Manual
Start-up	\$45,280	\$373,401	2% of TDCC; OAQPS Cost Control Manual
Performance Tests	\$22,640	\$186,700	1% of TDCC; OAQPS Cost Control Manual
Contingencies	\$67,919	\$560,101	3% of TDCC; OAQPS Cost Control Manual
<b>Total Indirect Capital Cost (TInCC)</b>	<b>\$751,834</b>	<b>\$5,787,714</b>	
<b>Total Direct, Indirect and Capital Costs (TDICC)</b>	<b>\$3,715,009</b>	<b>\$30,078,773</b>	Sum of TCC and TInCC

Sources: Foster Wheeler 2002 ABB Alstom 2000, EPA 1990, 1992 and 1996 (OAQPS Cost Control Manual), Golder 2005 Vatavuk 1990 (Estimating Costs of Air Pollution Control)

Table SFDEP3-6. Annualized Cost for Selective Catalytic Reduction and SCONOX™ for the GE Frame 7FB in Combined Cycle Operation  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONOX™	Basis of Cost Component
<b>Direct Annual Costs</b>			
Operating Personnel	\$21,840	\$43,680	28 hours/week at \$15/hr for SCR, SCONOX 2 times SCR costs
Supervision	\$3,276	\$6,552	15% of Operating Personnel; OAQPS Cost Control Manual
Ammonia	\$260,958	\$0	\$600 per ton NH <sub>3</sub> based on 19% Aqueous NH <sub>3</sub>
PSM/RMP Update	\$15,000	\$0	Engineering Estimate
Inventory Cost	\$9,433	\$14,150	Capital Recovery (10.98%) for 1/3 catalyst for SCR; SCONOX 1.5 times SCR
Catalyst Cost	\$257,736	\$386,603	3 years catalyst life; Based on Vendor Budget Estimate
Contingency	\$17,047	\$13,530	3% of Direct Annual Costs
<b>Total Direct Annual Costs (TDAC)</b>	<b>\$585,290</b>	<b>\$464,515</b>	
<b>Energy Costs</b>			
Electrical	\$28,032	\$70,080	80kW/h for SCR @ \$0.04/kWh times Capacity Factor; 200 kW for SCONOX
MW Loss and Heat Rate Penalty	\$459,419	\$798,990	0.34 % output for SCR, 0.6% for SCONOX; EPA, 1993
Steam Costs for SCONOX	\$0	\$705,663	18,184 lb/hr 600 °F, 85 psig, steam (1,329 Btu/lb steam), 90% boiler eff.; \$3/mmBtu
Natural Gas for SCONOX	\$0	\$49,347	81 lb/hr; 0.044 lb/scf; 1,020 Btu/scf; \$3/mmBtu
<b>Total Energy Costs (TEC)</b>	<b>\$487,451</b>	<b>\$1,624,080</b>	
<b>Indirect Annual Costs</b>			
Overhead	171,645	30,139	60% of Operating/Supervision Labor and Ammonia
Property Taxes	37,150	300,788	1% of Total Capital Costs
Insurance	37,150	300,788	1% of Total Capital Costs
Annualized Total Direct Capital	407,908	3,302,649	10.98% Capital Recovery Factor of 7% over 15 years times sum of TDACC
<b>Total Indirect Annual Costs (TIAC)</b>	<b>\$653,853</b>	<b>\$3,934,364</b>	
<b>Total Annualized Costs</b>	<b>\$1,726,595</b>	<b>\$6,022,958</b>	Sum of TDAC, TEC and TIAC
<b>Incremental Cost Effectiveness (2.5 to 2.0)</b>	<b>\$10,225</b>	<b>\$5,160</b>	per incremental ton of NO <sub>x</sub> Removed
	<b>785.18</b>	<b>785.18</b>	tons NO <sub>x</sub> removed /year, 2.5 ppmvd corrected to 1.5% oxygen

Source: Golder 2005. EPA 1993 (Alternative Control Techniques Document--NO<sub>x</sub> Emissions from Stationary Gas Turbines, Page 6-20)



Table SFDEP3-7. Maximum Potential Incremental Emissions (TPY) with Selective Catalytic Reduction (SCR) and SCONOX™  
(2.0 ppm)

Pollutants	Incremental Emissions (tons/year) of SCR			Incremental Emissions (tons/year) of SCONOX™		
	Primary	Secondary	Total	Primary	Secondary	Total
Particulate	11.76	0.25	12.00		1.32	1.32
Sulfur Dioxide		0.09	0.09		0.50	0.50
Nitrogen Oxides	-785.18	4.55	-780.63	-785.18	24.30	-760.89
Carbon Monoxide		2.73	2.73		14.58	14.58
Volatile Organic Compounds		0.18	0.18		0.95	0.95
Ammonia	115.74					
Total:	-657.69	7.80	-649.89	-785.18	41.65	-743.54
Carbon Dioxide (all energy requirements)		4,324.70	4,324.70		23,082.70	23,082.70

Basis:	SCR	SCONOx™	SCONOx™
Lost Energy (mmBtu/year)	68,285	364,464 total	250,831 steam and natural gas only
Secondary Emissions (lb/mmBtu): Assumes natural gas firing in NOx controlled steam unit.			
Particulate	0.0072		
Sulfur Dioxide	0.0027		
Nitrogen Oxides w/LNB	0.1333		
Carbon Monoxide	0.0800		
Volatile Organic Compounds	0.0052		

(Note: Secondary emissions of criteria pollutants for SCONOX based on the total lost energy minus steam and natural gas since emissions of these pollutants will be controlled in the proposed unit. Emissions of CO<sub>2</sub> will result for all uses.)

Reference: Table 1.4-1 and 1.4-2, AP-42, Version 2/98

Table 5FDEP3-8. Comparison of Alternative BACT Control Technologies for NO<sub>x</sub> on One CT/HRSG

	Alternative BACT Control Technologies		
	DLN Only	DLN with SCR (2.0 ppmvd corrected)	DLN with SCONO <sub>x</sub> <sup>TM</sup> (2.0 ppmvd corrected)
Technical Assessment	Feasible	Available, Feasible, and Demonstrated	Not Demonstrated
Economic Impact <sup>a</sup>			
Capital Costs	included	\$3,715,009	\$30,078,773
Annualized Costs	included	\$1,726,595	\$6,022,958
Cost Effectiveness (per ton of NO <sub>x</sub> removed)			
Incremental from 2.5 ppm	NA	\$10,225	\$2,077
Environmental Impact <sup>b</sup>			
Total NO <sub>x</sub> (TPY)	867	81.5	81.5
NO <sub>x</sub> Reduction (TPY)	NA	785	785
Ammonia Emissions (TPY)	0	116	0
PM Emissions (TPY)	0	12.0	0
Secondary Emissions (TPY)	0	7.8	39.1
Net Emission Reduction (TPY)	NA	-650	-744
Additional Greenhouse Gas (as CO <sub>2</sub> ; tons/year)	0	4,325	23,083
Energy Impacts <sup>c</sup>			
Energy Use (kWh/yr)	0	7,540,874	40,248,733
Energy Use (kWh/yr) - Back Pressure	0	6,840,074	13,680,149
Energy Use (kWh/yr) - Other	0	700,800	26,568,584
Energy Use (Equivalent Residential Customers/year)	0	628	3,354
Energy Use (mmBtu/yr) at 10,000 Btu/kWh	0	68,285	364,464
Energy Use (mmcf/yr) at 1,000 Btu/cf for natural gas	0	68	364
Energy Use (percent of combustion turbine output)	0	0.45%	2.40%

<sup>a</sup> See Tables 5FDEP3-5 and 6 for detailed development of capital costs (including recurring costs) and annualized costs.

<sup>b</sup> See emission data presented in Table 5FDEP3-7.

<sup>c</sup> Energy impacts are estimated due to the lost energy from heat rate penalty and electrical usage for the SCR operation at 8,760 hours per year. Lost energy for SCR is based on 0.345 percent of 166 MW. SCR electrical usage is based on 0.080 MWh per SCR system. Lost Energy for SCONO<sub>x</sub><sup>TM</sup> includes 0.6 percent of turbine output and steam usage. SCONO<sub>x</sub><sup>TM</sup> electrical usage based on 0.2 MW/hr per system.

Table SFDEP3-9. Capital Cost for Selective Catalytic Reduction and SCONOX™ for the Frame G Combined Cycle Combustion Turbine  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONOX™	Basis of Cost Component
<b>Direct Capital Costs</b>			
Pollution Control Equipment	\$4,602,917	\$20,711,700	Vendor Estimates
Ammonia Storage Tank	\$163,912	\$0	\$35 per 1,000 lb mass flow developed from vendor quotes
Flue Gas Ductwork	\$44,505	\$69,725	Vatavauk, 1990
Instrumentation	\$50,000	\$50,000	Additional NO <sub>x</sub> Monitor and System
Taxes	\$276,175	\$1,242,702	6% of SCR Associated Equipment and Catalyst
Freight	\$230,146	\$1,035,585	5% of SCR Associated Equipment
<b>Total Direct Capital Costs (TDCC)</b>	<b>\$5,367,655</b>	<b>\$23,109,712</b>	
<b>Direct Installation Costs</b>			
Foundation and supports	\$429,412	1,848,777	8% of TDCC and RCC; OAQPS Cost Control Manual
Handling & Erection	\$751,472	3,235,360	14% of TDCC and RCC; OAQPS Cost Control Manual
Electrical	\$214,706	924,388	4% of TDCC and RCC; OAQPS Cost Control Manual
Piping	\$107,353	462,194	2% of TDCC and RCC; OAQPS Cost Control Manual
Insulation for ductwork	\$53,677	231,097	1% of TDCC and RCC; OAQPS Cost Control Manual
Painting	\$53,677	231,097	1% of TDCC and RCC; OAQPS Cost Control Manual
Site Preparation	\$5,000	\$5,000	Engineering Estimate
Buildings	\$15,000	\$15,000	Engineering Estimate
<b>Total Direct Installation Costs (TDIC)</b>	<b>\$1,630,297</b>	<b>\$6,952,914</b>	
<b>Total Capital Costs (TCC)</b>	<b>\$6,997,952</b>	<b>\$30,062,626</b>	Sum of TDCC, TDIC and RCC
<b>Indirect Costs</b>			
Engineering	\$536,766	\$2,310,971	10% of Total Direct Capital Costs; OAQPS Cost Control Manual
PSM/RMP Plan	\$50,000	\$0	Engineering Estimate
Construction and Field Expense	\$268,383	\$1,155,486	5% of TDCC; OAQPS Cost Control Manual
Contractor Fees	\$536,766	\$2,310,971	10% of TDCC; OAQPS Cost Control Manual
Start-up	\$107,353	\$462,194	2% of TDCC; OAQPS Cost Control Manual
Performance Tests	\$53,677	\$231,097	1% of TDCC; OAQPS Cost Control Manual
Contingencies	\$161,030	\$693,291	3% of TDCC; OAQPS Cost Control Manual
<b>Total Indirect Capital Cost (TInCC)</b>	<b>\$1,713,973</b>	<b>\$7,164,011</b>	
<b>Total Direct, Indirect and Capital Costs (TDICC)</b>	<b>\$8,711,925</b>	<b>\$37,226,636</b>	Sum of TCC and TInCC

Sources: Engelhard. ABB Alstom 2000. EPA 1990, 1992 and 1996 (OAQPS Cost Control Manual). Golder 2005. Vatavuk 1990 (Estimating Costs of Air Pollution Control).

Table SFDEP3-10. Annualized Cost for Selective Catalytic Reduction and SCONOX™ for the Frame G in Combined Cycle Operation  
(2.0 ppmvd corrected for gas firing)

Cost Component	Costs for SCR	Costs for SCONOX™	Basis of Cost Component
<b>Direct Annual Costs</b>			
Operating Personnel	\$21,840	\$43,680	28 hours/week at \$15/hr for SCR; SCONOX 2 times SCR costs
Supervision	\$3,276	\$6,552	15% of Operating Personnel, OAQPS Cost Control Manual
Ammonia	\$444,136	\$0	\$600 per ton NH <sub>3</sub> based on 19% Aqueous NH <sub>3</sub>
PSM/RMP Update	\$15,000	\$0	Engineering Estimate
Inventory Cost	\$23,203	\$34,805	Capital Recovery (10.98%) for 1/3 catalyst for SCR; SCONOX 1.5 times SCR
Catalyst Cost	\$633,965	\$950,948	3 years catalyst life, Based on Vendor Budget Estimate
Contingency	\$34,243	\$31,080	3% of Direct Annual Costs
<b>Total Direct Annual Costs (TDAC)</b>	<b>\$1,175,663</b>	<b>\$1,067,064</b>	
<b>Energy Costs</b>			
Electrical	\$28,032	\$70,080	80kW/h for SCR @ \$0.04/kWh times Capacity Factor; 200 kW for SCONOX
MW Loss and Heat Rate Penalty	\$759,635	\$1,321,104	0.42 % output for SCR; 0.6% for SCONOX; EPA, 1993
Steam Costs for SCONOX	\$0	\$864,810	22,285 lb/hr 600 °F, 85 psig, steam (1,329 Btu/lb steam); 90% boiler eff.; \$3/mmBtu
Natural Gas for SCONOX	\$0	\$60,922	100 lb/hr; 0.044 lb/scf; 1,020 Btu/scf; \$3/mmBtu
<b>Total Energy Costs (TEC)</b>	<b>\$787,667</b>	<b>\$2,316,916</b>	
<b>Indirect Annual Costs</b>			
Overhead	281,551	30,139	60% of Operating/Supervision Labor and Ammonia
Property Taxes	87,119	372,266	1% of Total Capital Costs
Insurance	87,119	372,266	1% of Total Capital Costs
Annualized Total Direct Capital	956,569	4,087,485	10.98% Capital Recovery Factor of 7% over 15 years times sum of TDACC
<b>Total Indirect Annual Costs (TIAC)</b>	<b>\$1,412,359</b>	<b>\$4,862,157</b>	
<b>Total Annualized Costs</b>	<b>\$3,375,689</b>	<b>\$8,246,136</b>	Sum of TDAC, TEC and TIAC
<b>Incremental Cost Effectiveness (2.5 to 2.0)</b>	<b>\$20,896</b>	<b>\$11,787</b>	per incremental ton of NO <sub>x</sub> Removed
	<b>1,438.45</b>	<b>1,438.45</b>	tons NO <sub>x</sub> removed /year; 2.5 ppmvd corrected to 15% oxygen

Source: Golder 2005. EPA 1993 (Alternative Control Techniques Document--NO<sub>x</sub> Emissions from Stationary Gas Turbines, Page 6-20)

Table 5FDEP3-11. Maximum Potential Incremental Emissions (TPY) with Selective Catalytic Reduction (SCR) and SCONO<sub>x</sub><sup>TM</sup>  
(2.0 ppm)

Pollutants	Incremental Emissions (tons/year) of SCR			Incremental Emissions (tons/year) of SCONO <sub>x</sub> <sup>TM</sup>		
	Primary	Secondary	Total	Primary	Secondary	Total
Particulate	13.43	0.39	13.81		1.77	1.77
Sulfur Dioxide		0.15	0.15		0.66	0.66
Nitrogen Oxides	-1,438.45	7.15	-1,431.30	-1,438.45	32.52	-1,405.93
Carbon Monoxide		4.29	4.29		19.51	19.51
Volatile Organic Compounds		0.28	0.28		1.28	1.28
Ammonia	155.47					
Total.	-1,269.56	12.26	-1,257.30	-1,438.45	55.74	-1,382.71
Carbon Dioxide (all energy requirements)		6,793.33	6,793.33		30,893.47	30,893.47

Basis	SCR	SCONO <sub>x</sub> <sup>TM</sup>	SCONO <sub>x</sub> <sup>TM</sup>
Lost Energy (mmBtu/year)	107,263	487,792 total	307,542 steam and natural gas only
Secondary Emissions (lb/mmBtu): Assumes natural gas firing in NO <sub>x</sub> controlled steam unit.			
Particulate	0.0072		
Sulfur Dioxide	0.0027		
Nitrogen Oxides w/LNB	0.1333		
Carbon Monoxide	0.0800		
Volatile Organic Compounds	0.0052		

(Note: Secondary emissions of criteria pollutants for SCONO<sub>x</sub> based on the total lost energy minus steam and natural gas since emissions of these pollutants will be controlled in the proposed unit. Emissions of CO<sub>2</sub> will result for all uses.)

Reference Table 1.4-1 and 1.4-2, AP-42, Version 2/98

Table SFDEP3-12. Comparison of Alternative BACT Control Technologies for NO<sub>x</sub> on One CT/HRSG

	Alternative BACT Control Technologies		
	DLN Only	DLN with SCR (2.0 ppmvd corrected)	DLN with SCONO <sub>x</sub> <sup>TM</sup> (2.0 ppmvd corrected)
Technical Assessment	Feasible	Available, Feasible and Demonstrated	Not Demonstrated
Economic Impact <sup>a</sup>			
Capital Costs	included	\$8,711,925	\$37,226,636
Annualized Costs	included	\$3,375,689	\$8,246,136
Cost Effectiveness (per ton of Nox removed) Incremental from 2.5 ppm	NA	\$20,896	\$8,859
Environmental Impact <sup>b</sup>			
Total NO <sub>x</sub> (TPY)	1550	111.8	111.8
NO <sub>x</sub> Reduction (TPY)	NA	1438	1438
Ammonia Emissions (TPY)	0	155	0
PM Emissions (TPY)	0	13.8	0
Secondary Emissions (TPY)	0	12.3	51.7
Net Emission Reduction (TPY)	NA	-1,257	-1,383
Additional Greenhouse Gas (as CO <sub>2</sub> ; tons/year)	0	6,793	30,893
Energy Impacts <sup>c</sup>			
Energy Use (kWh/yr)	0	12,112,391	55,082,493
Energy Use (kWh/yr) - Back Pressure	0	11,411,591	22,823,181
Energy Use (kWh/yr) - Other	0	700,800	32,259,312
Energy Use (Equivalent Residential Customers/year)	0	1,009	4,590
Energy Use (mmBtu/yr) at 10,000 Btu/kWh	0	107,263	487,792
Energy Use (mmcf/yr) at 1,000 Btu/cf for natural gas	0	107	488
Energy Use (percent of combustion turbine output)	0	0.54%	2.46%

<sup>a</sup> See Tables SFDEP3-9 and -10 for detailed development of capital costs (including recurring costs) and annualized costs.

<sup>b</sup> See emission data presented in Table SFDEP3-11.

<sup>c</sup> Energy impacts are estimated due to the lost energy from heat rate penalty and electrical usage for the SCR operation at 8,760 hours per year. Lost energy for SCR is based on 0.345 percent of 166 MW. SCR electrical usage is based on 0.080 MWh per SCR system. Lost Energy for SCONO<sub>x</sub><sup>TM</sup> includes 0.6 percent of turbine output and steam usage. SCONO<sub>x</sub><sup>TM</sup> electrical usage based on 0.2 MW/hr per system.

**ATTACHMENT 5FDEP-8**

**TABLES PROVIDING  
BACKGROUND SO<sub>2</sub> AND NO<sub>x</sub> SOURCES  
RELATIVE TO THE PROPOSED PROJECT  
AND  
PSD CLASS II INCREMENT RESULTS**

Table 5FDEP8-1 Summary of NO<sub>x</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses.

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum NO <sub>x</sub> Emissions	Q <sub>x</sub> (TPY) Emission Threshold <sup>b,c</sup>	Include in Modeling Analysis <sup>b</sup> ?
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)	(TPY)	(Dist - RMA) x 20	
<b>Modeling Area <sup>d</sup></b>											
	FPL West County Energy Center	Palm Beach	562.2	2953.0	0.0	0.0	0.0	NA		SIA	YES
<b>Screening Area <sup>d</sup></b>											
0990529	PALM BEACH WOOD PRODUCTS, INC.	Palm Beach	563.5	2952.1	1.3	-0.9	1.6	124	100	SIA	No
0990349	South Florida Water Mgmt. District - Pump Stn S-5A	Palm Beach	562.6	2951.3	0.4	-1.7	1.7	167	248	SIA	YES
0990530	HUBBARD CONSTRUCTION COMPANY	Palm Beach	562.1	2955.6	-0.1	2.6	2.6	359	30	SIA	YES
0990566	INDIAN TRAIL IMPROVEMENT DISTRICT	Palm Beach	564.7	2956.2	2.5	3.2	4.0	38	22	SIA	No
990620	South Florida Water Mgmt. District - Pump Stn S-319	Palm Beach	566.3	2951.5	4.1	-1.5	4.4	110	249	SIA	YES
990621	South Florida Water Mgmt. District - Pump Stn S-362	Palm Beach	565.3	2946.1	3.1	-6.9	7.6	156	248	SIA	YES
0990016	ATLANTIC SUGAR ASSOCIATION	Palm Beach	552.9	2945.2	-9.3	-7.8	12.1	230	2,266	42.8	YES
990549	South Florida Water Mgmt. District - Pump Stn S-310	Palm Beach	554.2	2940.5	-8.0	-12.5	14.8	213	249	96.8	YES
0990087	RANGER CONSTRUCTION INDUSTRIES, INC	Palm Beach	579.9	2951.7	17.7	-1.3	17.7	94	24	155.0	NO
0990583	MAGNUM ENVIRONMENTAL SERVICES, INC.	Palm Beach	580.2	2952.0	18.0	-1.0	18.0	93	29	160.6	NO
0990233	MARKS LANDSCAPING & PAVING	Palm Beach	582.1	2952.3	19.9	-0.7	19.9	92	100	198.2	NO
7775057	CRUSHER CONTRACTORS CO.		582.5	2951.2	20.3	-1.8	20.4	95	11	207.9	NO
0990300	PALM BEACH CO ANIMAL CARE AND CONTROL	Palm Beach	582.8	2952.2	20.6	-0.8	20.6	92	0	211.7	NO
0990562	SOUTH FLORIDA SHAVINGS CO	Palm Beach	579.2	2941.1	17.0	-11.9	20.8	125	2	215.0	NO
0990522	PALM BEACH TRANSFER & RECYCLING, INC.	Palm Beach	583.7	2951.5	21.5	-1.5	21.6	94	91	231.7	NO
0990333	FLORIDA GAS TRANSMISSION	Palm Beach	584.4	2957.1	22.2	4.1	22.5	80	78	250.6	NO
0990185	SIKORSKY AIRCRAFT (PRATT & WHITNEY)	Palm Beach	567.5	2975.0	5.3	22.0	22.6	14	3	252.6	NO
0990021	UNITED TECHNOLOGIES CORP. (PRATT & WHITNEY)	Palm Beach	562.0	2976.0	-0.2	23.0	23.0	360	1,756	260.0	YES
0990019	OSCEOLA FARMS	Palm Beach	544.2	2968.0	-18.0	15.0	23.4	310	1,044	268.6	YES
0990234	SOLID WASTE AUTHORITY OF PBC	Palm Beach	585.8	2960.5	23.6	7.5	24.8	72	1,766	295.1	YES
990350	South Florida Water Mgmt. District - Pump Stn S-6	Palm Beach	556.2	2927.8	-6.0	-25.2	25.9	193	247	318.1	NO
0990188	ANIMAL RESCUE LEAGUE	Palm Beach	588.6	2956.0	26.4	3.0	26.6	84	0	331.4	NO
0990026	SUGAR CANE GROWERS CO-OP	Palm Beach	534.9	2953.3	-27.3	0.3	27.3	271	3,243	346.0	YES
0990304	DEPARTMENT OF VETERANS AFFAIRS	Palm Beach	588.0	2963.0	25.8	10.0	27.7	69	2	353.4	NO
0990344	PARKWAY ASPHALT, INC.	Palm Beach	588.5	2962.1	26.3	9.1	27.8	71	19	356.6	NO
0990561	HAGEN RANCH POLO CLUB, INC.	Palm Beach	582.5	2933.3	20.3	-19.7	28.3	134	50	365.3	NO
0990324	ANNCO SERVICES, INC.	Palm Beach	579.2	2930.4	17.0	-22.6	28.3	143	100	365.6	NO
0990123	FLORIDA POWER & LIGHT (PDC/OSF)	Palm Beach	589.7	2961.2	27.5	8.2	28.7	73	16	373.9	NO
0990594	El Paso Belle Glade Generating Station	Palm Beach	533.5	2954.1	-28.7	1.1	28.7	272	365	374.4	NO
0990213	JUPITER MULCH, INC.	Palm Beach	573.1	2980.1	10.9	27.1	29.2	22	26	384.3	NO
0990061	U.S.SUGAR CORP. BRYANT MILL	Palm Beach	537.8	2969.1	-24.4	16.1	29.2	303	1,984	384.9	YES
0990543	AMERIGROW RECYCLING - DELRAY, LTD. PARTP	Palm Beach	578.1	2926.5	15.9	-26.5	30.9	149	91	418.2	NO
0990056	ST. MARY'S HOSPITAL, INC.	Palm Beach	593.0	2959.7	30.8	6.7	31.5	78	11	430.4	NO
0990045	LAKE WORTH UTILITIES	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	7,025	439.6	YES



Table 5FDEP8-I. Summary of NO<sub>x</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses.

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum NO <sub>x</sub> Emissions	Q, (TPY) Emission Threshold <sup>b,c</sup>	Include in Modeling Analysis <sup>d</sup> ?
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)	(TPY)	(Dist - RMA) x 20	
0990568	LAKE WORTH GENERATION	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	395	439.6	NO
0990325	ROYAL PALM MEMORIAL GARDENS, INC.	Palm Beach	593.4	2960.2	31.2	7.2	32.0	77	1	440.4	NO
0990305	NORTHWOOD FUNERAL HOME	Palm Beach	593.8	2960.1	31.6	7.1	32.4	77	1	447.8	NO
990550	South Florida Water Mgmt. District - Pump Stn S-335	Palm Beach	552.6	2922.0	-9.6	-31.0	32.5	197	249	449.0	NO
0990042	<b>FP&amp;L RIVIERA</b>	<b>Palm Beach</b>	<b>594.2</b>	<b>2960.6</b>	<b>32.0</b>	<b>7.6</b>	<b>32.9</b>	<b>77</b>	<b>16,565</b>	<b>457.8</b>	<b>YES</b>
0990322	TREASURE COAST CREMATORY	Palm Beach	594.0	2941.0	31.8	-12.0	34.0	111	2	479.8	NO
0990316	SCOBEE-COMBS-BOWDEN FUNERAL HOME	Palm Beach	593.7	2936.0	31.5	-17.0	35.8	118	0	515.9	NO
0990095	BETHESDA MEMORIAL HOSPITAL	Palm Beach	592.6	2931.8	30.4	-21.2	37.1	125	11	541.2	NO
0990086	GLADES CORRECTIONAL	Palm Beach	523.4	2955.2	-38.8	2.2	38.9	273	15	577.2	NO
0990308	SCOBEE-IRELAND-POTTER FUNERAL HOME	Palm Beach	592.7	2927.5	30.5	-25.5	39.8	130	0	595.1	NO
0850129	AMERICAN POWER TECH, INC	Martin	549.1	2990.8	-13.1	37.8	40.0	341	10	600.6	NO
0990332	<b>NEW HOPE POWER PARTNERSHIP (OKEELANTA PWR.)</b>	<b>Palm Beach</b>	<b>524.1</b>	<b>2940.0</b>	<b>-38.1</b>	<b>-13.0</b>	<b>40.3</b>	<b>251</b>	<b>1,498</b>	<b>605.3</b>	<b>YES</b>
0990005	<b>OKEELANTA CORP. —only Blr. 16 included in future</b>	<b>Palm Beach</b>	<b>525.0</b>	<b>2937.4</b>	<b>-37.2</b>	<b>-15.6</b>	<b>40.3</b>	<b>247</b>	<b>976</b>	<b>606.8</b>	<b>YES</b>
990614	South Florida Water Mgmt. District - Pump Stn S-370	Palm Beach	540.9	2918.5	-21.3	-34.5	40.5	212	249	610.9	NO
0990328	HARDRIVES OF DELRAY, INC	Palm Beach	590.6	2923.5	28.4	-29.5	40.9	136	0	619.0	NO
0850102	INDIANTOWN COGENERATION, L.P.	Martin	545.6	2991.5	-16.6	38.5	41.9	337	2,583	638.5	YES
0990114	BOCA RATON ANIMAL SHELTER	Palm Beach	582.5	2915.7	20.3	-37.3	42.5	151	0	649.3	NO
0850001	<b>FP&amp;L MARTIN</b>	<b>Martin</b>	<b>543.1</b>	<b>2992.9</b>	<b>-19.1</b>	<b>39.9</b>	<b>44.2</b>	<b>334</b>	<b>35,489</b>	<b>684.7</b>	<b>YES</b>
0990119	BOCA RATON COMMUNITY HOSPITAL	Palm Beach	589.5	2915.5	27.3	-37.5	46.4	144	5	727.7	NO
0110045	HARDRIVES ASPHALT CO	Broward	584.8	2910.0	22.6	-43.0	48.6	152	11	771.5	NO
0990015	BOCA RESORTS, INC	Palm Beach	592.0	2913.7	29.8	-39.3	49.3	143	45	786.4	NO
0112094	WASTE MANAGEMENT INC. OF FLORIDA	Broward	583.2	2908.0	21.0	-45.0	49.7	155	158	793.2	NO
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	21.1	-45.0	49.7	155	505	794.0	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	20.9	-45.1	49.7	155	572	794.1	NO
0112120	<b>WHEELABRATOR NORTH BROWARD</b>	<b>Broward</b>	<b>583.9</b>	<b>2907.6</b>	<b>21.7</b>	<b>-45.4</b>	<b>50.3</b>	<b>154</b>	<b>2,060</b>	<b>806.4</b>	<b>YES</b>
990615	South Florida Water Mgmt. District - Pump Stn S-372	Palm Beach	519.3	2923.6	-42.9	-29.4	52.0	236	248	840.1	NO
0112515	Enron/Pompano Energy Center	Broward	583.7	2905.4	21.5	-47.6	52.2	156	573	844.6	NO
0112136	KRAEER FUNERAL HOME	Broward	585.6	2906.2	23.4	-46.8	52.3	153	0	846.5	NO
0510001	EVERGLADES SUGAR <sup>e</sup>	Hendry	509.6	2954.2	-52.6	1.2	52.6	271	1,410	852.3	NO
0850017	TURBO COMBUSTOR TECHNOLOGY	Martin	576.6	3004.4	14.4	51.4	53.4	16	1	867.1	NO
0112103	SUN GRAPHIC, INC.	Broward	585.2	2904.3	23.0	-48.7	53.9	155	9	877.2	NO
0112175	SUPERIOR FABRICS	Broward	584.7	2902.9	22.5	-50.1	54.9	156	5	897.6	NO
0850021	STUART CONTRACTING	Martin	575.2	3006.8	13.0	53.8	55.3	14	ND	907.0	NO
0110003	W R GRACE & CO	Broward	585.6	2902.8	23.4	-50.2	55.4	155	0	907.7	NO
0510003	<b>U.S. SUGAR CORP. CLEWISTON MILL</b>	<b>Hendry</b>	<b>506.1</b>	<b>2956.9</b>	<b>-56.1</b>	<b>3.9</b>	<b>56.2</b>	<b>NA</b>	<b>2,118</b>	<b>924.7</b>	<b>YES</b>
0850015	AYCOCK FUNERAL HOME	Martin	573.5	3008.4	11.3	55.4	56.5	12	1	930.8	NO
0850006	MARTIN MEMORIAL HEALTH SYSTEMS	Martin	574.2	3008.7	12.0	55.7	57.0	12	8	939.1	NO
0110351	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	Broward	522.3	2912.2	-39.9	-40.8	57.0	224	737	940.6	NO

Table 5FDEP8-1. Summary of NO<sub>x</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses.

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum	Q, (TPY)	Include in Modeling Analysis <sup>b ?</sup>
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)	NO <sub>x</sub> Emissions (TPY)	Emission Threshold <sup>b,c</sup> (Dist - RMA) x 20	
0112146	ATLANTIC BURIAL CASKET CO. DBA ABCO	Broward	584.3	2897.7	22.1	-55.3	59.6	158	1	991.0	NO
0112152	GOLD COAST CREMATORY	Broward	584.6	2897.6	22.4	-55.4	59.8	158	10	995.1	NO
<u>Beyond Screening Area out to 100 km <sup>d</sup></u>											
0111019	HOLY CROSS HOSPITAL	Broward	588.1	2896.6	25.9	-56.4	62.1	155	9	1041.3	NO
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	-11.3	65.1	66.1	350	102	1121.5	NO
0112399	BROWARD COUNTY	Broward	564.8	2883.5	2.5	-69.5	69.6	178	35	1191.5	NO
0112410	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	Broward	555.9	2882.2	-6.3	-70.8	71.1	185	44	1221.3	NO
0110034	OWENS CORNING, TRUMBULL DIVISION	Broward	587.0	2886.4	24.8	-66.6	71.1	160	8	1221.4	NO
0110054	CITGO PETROLEUM CORP	Broward	586.9	2885.7	24.7	-67.3	71.7	160	8	1233.8	NO
0112119	<b>SOUTH BROWARD RRF</b>	<b>Broward</b>	<b>579.6</b>	<b>2883.3</b>	17.4	-69.7	<b>71.8</b>	<b>166</b>	<b>1,497</b>	<b>1236.8</b>	<b>YES</b>
0110053	TRANSMONTAIGNE TERMINALING INC.	Broward	587.1	2885.6	24.9	-67.4	71.9	160	12	1237.0	NO
0110037	<b>FLORIDA POWER &amp; LIGHT--LAUDERDALE</b>	<b>Broward</b>	<b>580.1</b>	<b>2883.3</b>	17.9	-69.7	<b>72.0</b>	<b>166</b>	<b>14,025</b>	<b>1239.2</b>	<b>YES</b>
0112116	BROWARD COUNTY ANIMAL CONTROL	Broward	582.6	2883.9	20.3	-69.1	72.1	164	0	1241.3	NO
0110036	<b>FLORIDA POWER &amp; LIGHT--PORT EVERGLADES</b>	<b>Broward</b>	<b>587.4</b>	<b>2885.3</b>	25.2	-67.7	<b>72.2</b>	<b>160</b>	<b>25,217</b>	<b>1244.8</b>	<b>YES</b>
0110050	MOTIVA ENTERPRISES LLC	Broward	586.8	2884.5	24.6	-68.5	72.8	160	10	1255.7	NO
1110071	FLORIDA POWER & LIGHT(PSL)	St. Lucie	573.9	3025.0	11.7	72.0	72.9	9	99	1259.0	NO
0430008	ATLAS-TRANSOIL INC	Broward	489.2	2966.6	-73.0	13.6	74.3	281	35	1285.1	NO
0111026	HUMANE SOCIETY OF BROWARD COUNTY	Broward	583.2	2881.7	21.0	-71.3	74.3	164	1	1286.6	NO
0510015	SOUTHERN GARDENS CITRUS	Hendry	487.6	2957.6	-74.6	4.6	74.7	274	263	1294.8	NO
0510015	SOUTHERN GARDENS CITRUS PROCESSING CORP.	Hendry	487.6	2957.6	-74.6	4.6	74.7	274	167	1294.8	NO
0112141	FLORIDA SILICA SAND COMPANY INC	Broward	584.2	2881.2	22.0	-71.8	75.1	163	3	1301.9	NO
0112149	FRED HUNTER'S MEMORIAL SERVICES, INC	Broward	578.6	2878.5	16.4	-74.5	76.3	168	0	1325.7	NO
0112095	WEEKLEY ASPHALT PAVING, INC	Broward	567.8	2872.9	5.6	-80.1	80.3	176	89	1405.9	NO
1110050	HAISLEY-HOBBS FUNERAL HOME	St. Lucie	563.7	3034.4	1.5	81.4	81.4	1	2	1428.1	NO
1110059	YATES FUNERAL HOME	St. Lucie	565.9	3034.6	3.7	81.6	81.7	3	0	1434.1	NO
1110060	FLORIDA GAS TRANSMISSION	St. Lucie	557.2	3035.8	-5.0	82.8	82.9	357	664	1458.6	NO
1110003	<b>FT PIERCE UTILITIES AUTHORITY</b>	<b>St. Lucie</b>	<b>566.8</b>	<b>3036.3</b>	4.6	83.3	<b>83.4</b>	<b>3</b>	<b>1,215</b>	<b>1468.5</b>	<b>YES</b>
1110046	ATLANTIC COAST RECYCLING, INC	St. Lucie	562.7	3036.5	0.5	83.5	83.5	0	1	1470.4	NO
1110029	MARCONA OCEAN INDUSTRIES	St. Lucie	566.1	3037.7	3.9	84.7	84.8	3	11	1495.8	NO
0250624	GENERAL ASPHALT CO, INC	Miami-Dade	569.7	2868.3	7.5	-84.7	85.0	175	81	1500.2	NO
1110042	ST LUCIE COUNTY INTL AIRPORT	St. Lucie	561.9	3040.0	-0.3	87.0	87.0	360	0	1540.0	NO
7770250	RINKER MATERIALS CORPORATION		562.8	2866.0	0.6	-87.0	87.0	180	33	1540.0	NO
0250486	ATLAS METAL PRODUCTS	Miami-Dade	578.5	2867.2	16.3	-85.8	87.3	169	1	1546.7	NO
0250600	MIAMI DADE WATER AND SEWER DEPT	Miami-Dade	584.5	2867.0	22.3	-86.0	88.9	165	230	1577.2	NO
0250020	<b>TARMAC AMERICA CO.</b>	<b>Miami-Dade</b>	<b>562.9</b>	<b>2861.7</b>	0.7	-91.3	<b>91.3</b>	<b>180</b>	<b>3,473</b>	<b>1626.1</b>	<b>YES</b>
0250608	110TH AVENUE INVESTMENTS, INC.	Miami-Dade	577.0	2861.8	14.8	-91.2	92.4	171	6	1647.9	NO
0250022	U S FOUNDRY MANUFACTURING CORP.	Miami-Dade	567.3	2859.8	5.1	-93.2	93.3	177	11	1666.8	NO

Table 5FDEP8-1. Summary of NO<sub>x</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses.

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum NO <sub>x</sub> Emissions	Q <sub>x</sub> (TPY) Emission Threshold <sup>b,c</sup>	Include in Modeling Analysis <sup>b</sup> ?
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)	(TPY)	(Dist - RMA) x 20	
0250488	BENADA ALUMINUM OF FLORIDA	Miami-Dade	567.4	2859.4	5.2	-93.6	93.7	177	1	1674.9	NO
0250492	INDUSTRIAL METAL SPRAYING	Miami-Dade	568.4	2859.2	6.2	-93.8	94.0	176	1	1680.1	NO
0250361	MIAMI DADE ANIMAL SERVICES	Miami-Dade	567.6	2858.1	5.4	-94.9	95.1	177	0	1701.7	NO
<b>0250348</b>	<b>MIAMI DADE RRF</b>	<b>Miami-Dade</b>	<b>563.8</b>	<b>2857.6</b>	1.6	-95.4	<b>95.4</b>	<b>179</b>	<b>2,644</b>	<b>1707.9</b>	<b>YES</b>
0210031	CALUMET FLORIDA, INC.	Collier	509.6	2873.2	-52.6	-79.8	95.6	213	241	1711.5	NO
0510011	HENDRY CORRECTIONAL INSTITUTION	Hendry	476.1	2909.9	-86.1	-43.1	96.3	243	2	1725.3	NO
0610080	AMERICAN POWER TECH	Indian River	550.7	3051.1	-11.5	98.1	98.8	353	87	1775.6	NO
0610021	OCEAN SPRAY CRANBERRIES	Indian River	550.6	3051.3	-11.6	98.3	99.0	353	30	1779.4	NO

Note NA = Not applicable, ND = No data, RMA = Radius of the modeling area for the project

<sup>a</sup> FPL West County Energy Center's East and North Coordinates (km)-

562.2 2953.0

<sup>b</sup> The modeling area distance for the project is estimated to be

10 km

<sup>c</sup> Based on the North Carolina Screening Threshold method, a background facility is included in the modeling analysis if the facility is beyond the modeling area and its emission rate is greater than the product of (Distance-RMA) x 20.

<sup>d</sup> "Modeling Area" is the area in which the Project is predicted to have a significant impact. EPA recommends that all sources within this area be modeled.

"Screening Area" is the area that is 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area

"Beyond Screening Area out to 100 km" is the area beyond the screening area and out to 120 km in which only large sources are included in the modeling

Table 5FDEP8-2. Summary of the SO<sub>2</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC *				Maximum SO <sub>2</sub> Emissions (TPY)	Q. (TPY) Emission Threshold <sup>b,c</sup> (Dist - RMA) x 20	Include in Modeling Analysis ?
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)			
<b>Modeling Area<sup>d</sup></b>											
	FPL West County Energy Center	Palm Beach	562.2	2953.0	0.0	0.0	0.0	NA		SIA	YES
<b>Screening Area<sup>d</sup></b>											
990349	South Florida Water Mgmt. District - Pump Stn S-5A	Palm Beach	562.6	2951.3	0.4	-1.7	1.7	167	4.2	SIA	YES
0990530	HUBBARD CONSTRUCTION COMPANY	Palm Beach	562.1	2955.6	-0.1	2.6	2.6	359	48	SIA	YES
990620	South Florida Water Mgmt. District - Pump Stn S-319	Palm Beach	566.3	2951.5	4.1	-1.5	4.4	110	4.9	SIA	YES
990621	South Florida Water Mgmt. District - Pump Stn S-362	Palm Beach	565.3	2946.1	3.1	-6.9	7.6	156	4.9	SIA	YES
990016	Atlantlic Sugar Association	Palm Beach	552.9	2945.2	-9.3	-7.8	12.1	230	954	43	YES
990549	South Florida Water Mgmt. District - Pump Stn G-310	Palm Beach	554.2	2940.5	-8.0	-12.5	14.8	213	4.2	97	NO
990021	Pratt & Whitney (United Technologies)	Palm Beach	562.0	2976.0	-0.2	23.0	23.0	360	504	260	YES
990019	Osceola Farms	Palm Beach	544.2	2968.0	-18.0	15.0	23.4	0	1,467	269	YES
990234	Solid Waste Authority of PBC	Palm Beach	585.8	2960.5	23.6	7.5	24.8	72	1,533	295	YES
990350	South Florida Water Mgmt. District - Pump Stn S-6	Palm Beach	556.2	2927.8	-6.0	-25.2	25.9	193	4.2	318	NO
990026	Sugar Cane Growers	Palm Beach	534.9	2953.3	-27.3	0.3	27.3	271	2,555	346	YES
990594	El Paso Belle Glade Generating Station	Palm Beach	533.5	2954.1	-28.7	1.1	28.7	272	69	374	NO
990061	U.S. Sugar -Bryant	Palm Beach	537.8	2969.1	-24.4	16.1	29.2	303	2,698	385	YES
990568	Lake Worth Generating Station	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	54	440	NO
990045	Lake Worth Utilities	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	7,415	440	YES
990550	South Florida Water Mgmt. District - Pump Stn G-335	Palm Beach	552.6	2922.0	-9.6	-31.0	32.5	197	4.2	449	NO
990042	FPL -Riviera Beach	Palm Beach	594.2	2960.6	32.0	7.6	32.9	77	73,475	458	YES
990086	Glades Correctional Institute	Palm Beach	523.4	2955.2	-38.8	2.2	38.9	273	98	577	NO
990332	New Hope Power Partnership (Okeelanta)	Palm Beach	524.1	2940.0	-38.1	-13.0	40.3	251	403	605	NO
990005	Okeelanta	Palm Beach	525.0	2937.4	-37.2	-15.6	40.3	247	39	607	NO
990614	South Florida Water Mgmt. District - Pump Stn G-370	Palm Beach	540.9	2918.5	-21.3	-34.5	40.5	212	5	611	NO
990630	South Florida Materials Corp.	Palm Beach	540.9	2918.5	-21.3	-34.5	40.5	212	50	611	NO
850102	Bechtel Indiantown	Martin	545.6	2991.5	-16.6	38.5	41.9	337	2,629	639	YES
850001	FPL -Martin	Martin	543.1	2992.9	-19.1	39.9	44.2	334	22,982	685	YES
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	21.1	-45.0	49.7	155	87	794	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	20.9	-45.1	49.7	155	166	794	NO
0112120	North Broward Resource Recovery	Broward	583.6	2907.6	21.4	-45.4	50.2	155	896	804	YES
990615	South Florida Water Mgmt. District - Pump Stn G-372	Palm Beach	519.3	2923.6	-42.9	-29.4	52.0	236	5	840	NO
0112515	Enron/Pompano Energy Center	Broward	583.7	2905.5	21.5	-47.5	52.1	156	166	843	NO
850021	Stuart Contracting	Martin	575.2	3006.8	13.0	53.8	55.3	14	100	907	NO
510003	US Sugar Clewiston	Hendry	506.1	2956.9	-56.1	3.90	56.2	274	7,806	925	YES

Table SFDEP8-2. Summary of the SO<sub>2</sub> Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum SO <sub>2</sub> Emissions (TPY)	Q, (TPY) Emission Threshold <sup>b,c</sup> (Dist - RMA) x 20	Include in Modeling Analysis ?
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)			
<u>Beyond Screening Area out to 100 km <sup>d</sup></u>											
1110103	CPV Cana, LTD.	St. Lucie	550.9	3018.1	-11.3	65.1	66.1	350	76	1,121	NO
0112410	South Florida Water Mgmt. District - Pump Stn S-9/S-9A	Broward	555.9	2882.2	-6.3	-70.8	71.1	185	1,119	1,222	NO
0112119	South Broward Resource Recovery	Broward	579.6	2883.3	17.4	-69.7	71.8	166	1,318	1,237	YES
0110037	FPL -Lauderdale	Broward	580.1	2883.3	17.9	-69.7	72.0	166	47,858	1,239	YES
0110036	FPL -Port Everglades	Broward	587.4	2885.3	25.2	-67.7	72.2	160	170,215	1,245	YES
510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-74.6	4.6	74.7	274	409	1,295	NO
1110003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	4.6	83.3	83.4	3	1,497	1,469	YES
0250020	Tarmac	Dade	562.9	2861.7	0.7	-91.3	91.3	180	2,792	1,626	YES
0250348	Miami-Dade RRF/Montenay	Dade	563.8	2857.6	1.6	-95.4	95.4	179	857	1,708	NO

Note: NA = Not applicable, ND = No data, RMA = Radius of the modeling area for the project

<sup>a</sup> FPL West County Energy Center's East and North Coordinates (km)-

562.2 2953.0

<sup>b</sup> The modeling area distance for the project is estimated to be

10 km.

<sup>c</sup> Based on the North Carolina Screening Threshold method, a background facility is included in the modeling analysis if the facility is beyond the modeling area and its emission rate is greater than the product of (Distance-RMA) x 20.

<sup>d</sup> "Modeling Area" is the area in which the Project is predicted to have a significant impact. EPA recommends that all sources within this area be modeled.

"Screening Area" is the area that is 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area.

"Beyond Screening Area out to 100 km" is the area beyond the screening area and out to 120 km in which only large sources are included in the modeling.

Table SFDEP8-3 Summary of the Stack, Operating, and NO<sub>x</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analysis

AIRS Number	Facility	Units	EU #	ISCSTJ ID Name	Relative Location *		Stack Parameters						Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II		
					X	Y	Height		Diameter		Temperature		Velocity					
					(m)	(m)	(ft)	(m)	(ft)	(m)	(°F)	(K)	(ft/s)	(m/s)			TPY	g/s
0990349	SFWMD Pump Station S-5A		9															
	Diesel Engine 1		11	SSADE1	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
	Diesel Engine 2		12	SSADE2	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
	Diesel Engine 3		13	SSADE3	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
	Diesel Engine 4		14	SSADE4	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
	Diesel Engine 5		1	SSADE5	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
	Diesel Engine 6		1	SSADE6	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	41.6	1.20	CON	Yes
0990530	Hubbard Construction Company																	
	Hot mix asphalt plant (175 TPH)		4	HUBB1	-60	2,560	25.0	7.6	3.1	0.9	327.7	437.4	92.0	28.04	29.5	2.97	CON	Yes
0990620	SFWMD Pump Station S-319		1															
	2005 HP Internal Combustion Engine 1		3	S319C1	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	49.7	1.43	CON	Yes
	2005 HP Internal Combustion Engine 2		4	S319C2	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	49.7	1.43	CON	Yes
	2005 HP Internal Combustion Engine 3		5	S319C3	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	49.7	1.43	CON	Yes
	1210 HP Diesel Engine 1		0	S319DE1	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	49.7	1.43	CON	Yes
	1210 HP Diesel Engine 2		2	S319DE2	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	49.7	1.43	CON	Yes
0990621	SFWMD Pump Station S-362		3															
	1303 HP Diesel Engine 1		5	S362DE1	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	49.7	1.43	CON	Yes
	1303 HP Diesel Engine 2		6	S362DE2	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	49.7	1.43	CON	Yes
	1303 HP Diesel Engine 3		0	S362DE3	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	49.7	1.43	CON	Yes
	839 HP Diesel Engine 1		0	S362DE4	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	49.7	1.43	CON	Yes
	839 HP Diesel Engine 2		0	S362DE5	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	49.7	1.43	CON	Yes
0990016	ATLANTIC SUGAR ASSOCIATION *																	
	BOILER #1		1	ATLSUG1	-9,300	-7,800	89.9	27.4	6.0	1.8	160.1	344.3	59.0	17.97	550.4	31.75	NO	No
	BOILER #2		2	ATLSUG2	-9,300	-7,800	89.9	27.4	6.0	1.8	170.0	349.8	76.6	23.36	550.4	31.75	NO	No
	BOILER #3		3	ATLSUG3	-9,300	-7,800	89.9	27.4	6.0	1.8	160.1	344.3	70.7	21.56	512.5	14.74	NO	No
	BOILER #4		4	ATLSUG4	-9,300	-7,800	89.9	27.4	6.0	1.8	150.0	338.7	82.5	25.16	542.0	15.59	NO	No
	BOILER #5*		5	ATLSUG5	-9,300	-7,800	89.9	27.4	5.5	1.7	150.0	338.7	63.1	19.24	69.4	2.00	CON	Yes
	BOILER #5 PSD Baseline		5	ATLSUG5B	-9,300	-7,800	89.9	27.4	5.5	1.7	150.5	339.0	51.5	15.70	-14.8	-0.74	EXP	Yes
0990549	SFWMD Pump Station G-310		0															
	1535 HP Diesel Engine 1		0	G310DE1	-8,000	-12,500	53.0	16.2	1.5	0.5	650.0	616.5	139.1	42.39	62.3	1.79	CON	Yes
	1535 HP Diesel Engine 2		1	G310DE2	-8,000	-12,500	53.0	16.2	1.5	0.5	650.0	616.5	139.1	42.39	62.3	1.79	CON	Yes
	751 HP Diesel Engine 1		2	G310DE3	-8,000	-12,500	53.0	16.2	1.2	0.4	650.0	616.5	112.5	34.28	62.3	1.79	CON	Yes
	751 HP Diesel Engine 2		3	G310DE4	-8,000	-12,500	53.0	16.2	1.2	0.4	650.0	616.5	112.5	34.28	62.3	1.79	CON	Yes
0990021	United Technologies Corporation/Pratt & Whitney																	
	Air compressor/heater (ACHR-2-B2), slave jet engine		1	UTECH1	-200	23,000	50.0	15.2	3.0	0.9	1000.0	810.9	471.6	143.73	572.3	16.48	CON	Yes
	Boiler (BO-12-E6) w/heat input of 42 MMBTUH in Test Area E		16	UTECH16	-200	23,000	15.0	4.6	2.5	0.8	499.7	533.0	22.7	6.92	26.3	0.76	NO	No
	2 boilers (BO-1-MBH, BO-2-BMH), 54 MMBTUH each		22	UTECH22	-200	23,000	66.0	20.1	7.6	2.3	749.7	671.9	33.4	10.19	63.7	1.83	CON	Yes
	Two furnaces (FU-3-MHT, FU-4-MHT), 6 MMBTUH each		40	UTECH40	-200	23,000	48.9	14.9	3.9	1.2	77.1	298.2	0.1	0.04	5.1	0.15	CON	Yes
	Water evaporator (EV-1-MW) w/heat input of 0.2 MMBTUH		45	UTECH45	-200	23,000	12.1	3.7	0.7	0.2	77.1	298.2	8.5	2.60	0.1	0.00	CON	Yes
	Miscellaneous air and fuel heaters fired with natural gas		59	UTECH59	-200	23,000	20.0	6.1	1.6	0.5	500.1	533.2	16.1	4.90	31.8	0.91	CON	Yes
	Boiler (BO-14-E8) w/heat input of 7 MMBTUH		66	UTECH66	-200	23,000	24.0	7.3	1.3	0.4	464.7	513.6	108.8	33.17	4.5	0.13	CON	Yes
	Boiler (BO-3-MDL) w/heat input of 1 MMBTUH		67	UTECH67	-200	23,000	24.0	7.3	1.0	0.3	464.7	513.6	1.0	0.32	0.6	0.02	CON	Yes
	Emergency electrical generating facility		68	UTECH68	-200	23,000	12.1	3.7	0.7	0.2	1199.9	922.0	496.7	151.40	233.5	6.72	NO	No
	Ten existing jet engine test stands located in Test Area A-10 Test Stand		69	UTECH69	-200	23,000	18.0	5.5	12.1	3.7	299.9	422.0	0.3	0.08	813.6	23.43	NO	No
				UTECHA10	-200	23,000	19.0	5.8	13.7	4.2	280.0	410.9	350.0	106.68	39.0	1.12	NO	No

Table 5FDEP8-3. Summary of the Stack, Operating, and NO<sub>x</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	EU #	ISCST3 ID Name	Relative Location *		Height		Stack Parameters				Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II				
					X (m)	Y (m)	(ft)	(m)	Temperature		Velocity		TPY	g/s						
									Diameter (ft)	(m)	(°F)	(K)					(ft/s)	(m/s)		
0990019	OSCEOLA FARMS *	BOILER #2 PSD Baseline	2	OSBLR2B	-18,000.0	15,000.0	72.2	22.0	5.0	1.5	155.9	342.0	46.7	14.22	-37.6	-1.88	EXP	Yes		
		BOILER #3 PSD Baseline	3	OSBLR3B	-18,000.0	15,000.0	72.2	22.0	6.3	1.9	155.9	342.0	36.8	11.23	-16.9	-0.84	EXP	Yes		
		BOILER #4 PSD Baseline	4	OSBLR4B	-18,000.0	15,000.0	90.0	27.4	6.0	1.8	153.6	340.7	56.8	17.31	-79.7	-2.29	EXP	Yes		
		BOILER #5 East PSD Baseline	5	OSBLR5EB	-18,000.0	15,000.0	90.0	27.4	5.0	1.5	153.8	340.8	54.2	16.52	-39.3	-1.13	EXP	Yes		
		BOILER #5 West PSD Baseline	5	OSBLR5WB	-18,000.0	15,000.0	90.0	27.4	5.0	1.5	153.1	340.4	47.7	14.54	-39.3	-1.13	EXP	Yes		
		BOILER #6 PSD Baseline	6	OSBLR6B	-18,000.0	15,000.0	90.0	27.4	6.3	1.9	155.0	341.5	56.0	17.07	-39.9	-2.00	EXP	Yes		
		BOILER #2	2	OSBLR2	-18,000.0	15,000.0	89.9	27.4	5.0	1.5	154.1	341.0	51.9	15.82	241.9	8.19	CON	Yes		
		BOILER #3	22	OSBLR3	-18,000.0	15,000.0	89.9	27.4	6.3	1.9	155.9	342.0	55.3	16.86	124.0	8.19	CON	Yes		
		BOILER #4	23	OSBLR4	-18,000.0	15,000.0	89.9	27.4	6.0	1.8	153.6	340.7	54.7	16.67	123.3	11.76	CON	Yes		
		BOILER #5 East PSD	5	OSBLR5E	-18,000.0	15,000.0	90.0	27.4	5.0	1.5	153.8	340.8	60.6	18.48	57.2	1.64	CON	Yes		
		BOILER #5 West PSD	5	OSBLR5W	-18,000.0	15,000.0	90.0	27.4	5.0	1.5	154.1	341.0	60.6	18.48	57.2	1.64	CON	Yes		
		BOILER #6	0	OSBLR6	-18,000.0	15,000.0	89.9	27.4	6.2	1.9	154.1	341.0	59.7	18.19	150.9	0.00	CON	Yes		
		0990234	Solid Waste Authority of PBC	412.5MMBTU/HR RDF BOILER NO.1 (324,000 lb/hr STEAM)	1	SWAPB1	23,600	7,470	250.0	76.2	6.7	2.0	449.7	505.2	81.7	24.90	867.2	24.98	NO	No
				412.5MMBTU/HR RDF BOILER NO.2 (324,000 lb/hr steam)	2	SWAPB2	23,600	7,470	250.0	76.2	6.7	2.0	449.7	505.2	81.7	24.90	867.2	24.98	NO	No
Landfill Gas Coll Sys class I	3			SWAPB3	23,600	7,470	23.0	7.0	0.7	0.2	1399.7	1033.0	80.2	24.44	15.8	0.46	NO	No		
Landfill Gas Coll Sys class III	4			SWAPB4	23,600	7,470	23.0	7.0	0.5	0.2	1399.7	1033.0	152.8	46.57	15.8	0.46	NO	No		
0990026	SUGAR CANE GROWERS *	BOILER #1	1	SUGCN1	-27,300	300	150.0	45.7	7.0	2.1	161.0	344.8	50.6	15.43	830.6	18.94	CON	Yes		
		BOILER #2	2	SUGCN2	-27,300	300	150.0	45.7	7.0	2.1	155.0	341.5	60.3	18.38	830.6	18.94	CON	Yes		
		BOILER #3	4	SUGCN3	-27,300	300	180.0	54.9	6.9	2.1	152.0	339.8	50.3	15.34	569.7	12.99	CON	Yes		
		BOILER #4	4	SUGCN4	-27,300	300	180.0	54.9	9.5	2.9	160.0	344.3	63.1	19.24	1424.1	32.47	CON	Yes		
		BOILER #5	5	SUGCN5	-27,300	300	150.0	45.7	7.0	2.1	156.0	342.0	88.3	26.92	1092.1	24.90	CON	Yes		
		BOILER #8	8	SUGCN8	-27,300	300	155.0	47.3	9.5	2.9	156.0	342.0	45.8	13.96	679.7	15.50	CON	Yes		
		BOILER #1 PSD Baseline Off-crop season		SCG1BO	-27,300	300	80.1	24.4	339.0	1.3	150.5	339.0	55.4	16.90	-65.8	-1.50	EXP	Yes		
		BOILER #2 PSD Baseline Off-crop season		SCG2BO	-27,300	300	80.1	24.4	339.0	1.3	150.5	339.0	55.4	16.90	-49.6	-1.13	EXP	Yes		
		BOILER #3 PSD Baseline Off-crop season		SCG3BO	-27,300	300	80.1	24.4	339.0	1.6	150.5	339.0	77.1	23.49	-70.6	-1.61	EXP	Yes		
		BOILER #4 PSD Baseline Off-crop season		SCG4BO	-27,300	300	109.9	33.5	339.0	2.9	150.5	339.0	52.2	15.90	-131.6	-3.00	EXP	Yes		
		BOILER #5 PSD Baseline Off-crop season		SCG5BO	-27,300	300	80.1	24.4	339.0	1.6	150.5	339.0	52.3	15.94	-87.7	-2.00	EXP	Yes		
		BOILER #8 PSD Baseline Off-crop season		SCG8BO	-27,300	300	154.9	47.2	339.0	2.9	150.5	339.0	45.0	13.73	-132.9	-3.03	EXP	Yes		
		BOILER #1 PSD Baseline On-crop season		SCG1BF	-27,300	300	80.1	24.4	339.0	1.3	150.5	339.0	55.4	16.90	-32.5	-0.74	EXP	Yes		
		BOILER #2 PSD Baseline On-crop season		SCG2BF	-27,300	300	80.1	24.4	339.0	1.3	150.5	339.0	55.4	16.90	-24.6	-0.56	EXP	Yes		
		BOILER #3 PSD Baseline On-crop season		SCG3BF	-27,300	300	80.1	24.4	339.0	1.6	150.5	339.0	77.1	23.49	-34.6	-0.79	EXP	Yes		
		BOILER #4 PSD Baseline On-crop season		SCG4BF	-27,300	300	109.9	33.5	339.0	2.9	150.5	339.0	52.2	15.90	-64.9	-1.48	EXP	Yes		
		BOILER #5 PSD Baseline On-crop season		SCG5BF	-27,300	300	80.1	24.4	339.0	1.6	150.5	339.0	52.3	15.94	-43.4	-0.99	EXP	Yes		
		BOILER #8 PSD Baseline On-crop season		SCG8BF	-27,300	300	154.9	47.2	339.0	2.9	150.5	339.0	45.0	13.73	-65.4	-1.49	EXP	Yes		
0990061	U.S. Sugar, Bryant *	BOILERS #1, 2, & 3		USBRY123	-24,400	16,120	65.0	19.8	5.4	1.6	160.0	344.3	113.5	34.60	2277.2	65.49	NO	No		
		BOILER #5	0	USBRY5	-24,400	16,120	45.7	13.9	9.5	2.9	162.1	345.4	48.6	14.80	384.2	20.37	NO	No		
		DIESEL ELECTRIC GENERATOR #1	7	USBRY7	-24,400	16,120	28.0	8.5	1.2	0.4	475.0	519.3	40.0	12.19	233.0	7.54	NO	No		
		DIESEL ELECTRIC GENERATOR #2	8	USBRY8	-24,400	16,120	28.0	8.5	1.2	0.4	475.0	519.3	42.0	12.80	233.0	7.99	NO	No		
0990045	Lake Worth Utilities *	Diesel Peaking Units # 1-5		LAKWTH15	30,600	-9,300	17.0	5.2	1.8	0.6	667.0	625.9	121.7	37.09	2184.6	62.87	NO	No		
		GAS TURBINE # 1	6	LAKWTH6	30,600	-9,300	46.0	14.0	16.0	4.9	837.0	720.4	81.5	24.84	1715.0	49.39	NO	No		
		STEAM GENERATING #1	7	LAKWTH7	30,600	-9,300	60.0	18.3	5.0	1.5	300.0	422.0	34.5	10.52	0.0	0.00	NO	No		
		STEAM GENERATOR #3	9	LAKWTH8	30,600	-9,300	113.0	34.4	7.0	2.1	293.0	418.2	51.4	15.67	712.0	20.54	NO	No		
		STEAM GENERATOR #4	10	LAKWTH9	30,600	-9,300	115.0	35.1	7.5	2.3	293.0	418.2	55.8	17.01	0.0	0.00	NO	No		
		COMBINED CYCLE UNIT (GT-2/S-5)	11	LAKWTH10	30,600	-9,300	75.0	22.9	10.0	3.0	404.0	479.8	87.5	26.67	1252.0	36.04	NO	No		

Table SFDEP8-3 Summary of the Stack, Operating, and NO<sub>x</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	EU #	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters						Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II			
					X (m)	Y (m)	Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)			TPY	g/s	
0990042	FP&L Riviera <sup>a</sup>	Units 3 & 4		RIVU34	32,000	7,600	298.0	90.8	16.0	4.9	263.0	401.5	62.0	18.90	16565.2	476.53	NO	No	
0990332	New Hope Power Partnership	COGEN Units 1, 2, & 3 <sup>d</sup>	123	OKCOGEN	-38,110	-12,990	199.0	60.7	10.0	3.0	352.0	450.9	67.7	20.63	1498.0	43.14	CON	Yes	
0990005	Okcelanta Corporation Sugar Mill <sup>b</sup>	BOILER #4 PSD Baseline	3	OKBLR4B	-37,200	-15,600	75.1	22.9	7.5	2.3	139.7	333.0	24.1	7.36	-27.3	-1.36	EXP	Yes	
		BOILER #5 PSD Baseline	4	OKBLR5B	-37,200	-15,600	75.1	22.9	7.5	2.3	139.7	333.0	39.6	12.07	-37.8	-1.89	EXP	Yes	
		BOILER #6 PSD Baseline	5	OKBLR6B	-37,200	-15,600	75.1	22.9	7.5	2.3	141.5	334.0	28.7	8.74	-31.9	-1.59	EXP	Yes	
		BOILER #10 PSD Baseline	9	OKBLR10B	-37,200	-15,600	75.1	22.9	7.5	2.3	141.5	334.0	34.0	10.35	-36.0	-1.80	EXP	Yes	
		BOILER #11 PSD Baseline	10	OKBLR11B	-37,200	-15,600	75.1	22.9	7.5	2.3	155.9	342.0	32.4	9.89	-46.0	-2.30	EXP	Yes	
		BOILER #12 PSD Baseline	12	OKBLR12B	-37,200	-15,600	75.1	22.9	7.5	2.3	134.3	330.0	26.9	8.20	-57.7	-2.88	EXP	Yes	
		BOILER #14 PSD Baseline	14	OKBLR14B	-37,200	-15,600	75.1	22.9	7.5	2.3	139.7	333.0	27.2	8.30	-63.6	-3.18	EXP	Yes	
		BOILER #15 PSD Baseline	15	OKBLR15B	-37,200	-15,600	75.1	22.9	7.5	2.3	137.9	332.0	33.5	10.20	-50.5	-2.52	EXP	Yes	
		BOILER #16	16	OKBLR16	-37,200	-15,600	75.0	22.9	5.0	1.5	410.0	483.2	75.0	22.86	97.2	2.80	CON	Yes	
0850102	Bechtel Indiantown	Pulverized Coal Main Boiler	1	INDTWN1	-16,600	38,500	495.0	150.9	16.0	4.9	140.0	333.2	100.1	30.50	2549.0	73.33	CON	Yes	
		(2) Auxiliary Boilers	3	INDTWN3	-16,600	38,500	210.0	64.0	5.0	1.5	350.0	449.8	87.6	26.70	34.0	0.98	CON	Yes	
0850001	FP&L Martin	Units 1 & 2		MART12	-19,100	39,900	499.0	152.1	26.2	8.0	298.0	420.9	69.0	21.03	22732.0	653.94	NO	No	
		Units 3 & 4		MART34	-19,100	39,900	213.0	64.9	20.0	6.1	280.0	410.9	61.0	18.59	12432.0	357.63	CON	Yes	
		2 Simple Cycle CTs		MARTCTs	-19,100	39,900	60.0	18.3	22.0	6.7	1076.1	853.2	123.5	37.63	393.7	11.33	CON	Yes	
		Aux Boiler		MARTAUx	-19,100	39,900	60.0	18.3	3.6	1.1	504.1	535.4	50.0	15.24	21.4	0.61	CON	Yes	
		Unit 8		MART8	-19,100	39,900	120.0	36.6	19.0	5.8	256.0	397.6	73.5	22.40	677.6	19.49	CON	Yes	
0112120	Wheelabrator North Broward <sup>a</sup>	UNIT #1,807 TPD MSW INCINERATOR	1	WHEELN1	21,700	-45,400	195.0	59.4	7.5	2.3	299.7	421.9	209.2	63.76	686.8	209.33	NO	No	
		UNIT #2,807 TPD MSW INCINERATOR	2	WHEELN2	21,700	-45,400	195.0	59.4	7.5	2.3	299.7	421.9	209.2	63.76	686.8	209.33	NO	No	
		UNIT #3,807 TPD MSW INCINERATOR	3	WHEELN3	21,700	-45,400	195.0	59.4	7.5	2.3	299.7	421.9	209.2	63.76	686.8	209.33	NO	No	
510003	US Sugar - Clewiston	Boiler 8		USSBLR8	-56,100	3,900	199.1	60.7	13.0	4.0	330.5	439.0	50.2	15.31	744.4	21.44	CON	Yes	
		Granular Carbon Furnace		S12	-56,100	3,900	29.9	9.1	2.0	0.6	160.1	344.3	22.6	6.90	13.1	0.38	CON	Yes	
		<u>PSD Baseline (Crop season only)<sup>b</sup></u>																	
		Unit 1 PSD Baseline		USSBRL1B	-56,100	3,900	75.8	23.1	6.1	1.9	159.5	344.0	99.1	30.20	-93.7	-6.27	EXP	Yes	
		Unit 2 PSD Baseline		USSBRL2B	-56,100	3,900	75.8	23.1	6.1	1.9	157.7	343.0	117.1	35.70	-94.0	-6.29	EXP	Yes	
		Boiler 3 Baseline		USSBLR3B	-56,100	3,900	89.9	27.4	7.5	2.3	155.9	342.0	48.2	14.70	-45.1	-3.03	EXP	Yes	
		Units 4 PSD Baseline		USSBLR4B	-56,100	3,900	149.9	45.7	8.2	2.5	160.1	344.3	83.3	25.40	-127.9	-8.76	EXP	Yes	
		Units 5 PSD Baseline		USSBLR5B	-56,100	3,900	75.8	23.1	6.1	1.9	429.5	494.0	145.3	44.30	-20.9	-1.54	EXP	Yes	
		Units 6 PSD Baseline		USSBLR6B	-56,100	3,900	75.8	23.1	6.1	1.9	429.5	494.0	145.3	44.30	-18.0	-1.34	EXP	Yes	
		<u>Off-crop season future<sup>c</sup></u>																	
		Unit 1		USSBRL1F	-56,100	3,900	213.1	64.9	8.0	2.4	148.0	337.6	62.3	19.00	142.4	4.10	CON	Yes	
		Unit 2		USSBRL2F	-56,100	3,900	213.1	64.9	8.0	2.4	150.0	338.7	62.3	18.99	142.4	4.10	CON	Yes	
		Unit 4		USSBLR4F	-56,100	3,900	150.0	45.7	8.2	2.5	0.0	0.0	0.0	0.00	0.0	0.00	CON	Yes	
		Unit 7		USSBLR7F	-56,100	3,900	225.1	68.6	8.5	2.6	0.0	0.0	0.0	0.00	0.0	0.00	CON	Yes	
		<u>On-crop season future<sup>b</sup></u>																	
Unit 1		USSBRL1N	-56,100	3,900	213.1	64.9	8.0	2.4	148.0	337.6	67.6	20.61	313.7	9.03	CON	Yes			
Unit 2		USSBRL2N	-56,100	3,900	213.1	64.9	8.0	2.4	150.0	338.7	66.6	20.30	288.7	8.31	CON	Yes			
Unit 4		USSBLR4N	-56,100	3,900	150.0	45.7	8.2	2.5	150.0	338.7	80.5	24.54	378.2	10.89	CON	Yes			
Unit 7		USSBLR7N	-56,100	3,900	225.1	68.6	8.5	2.6	327.0	437.0	86.1	26.25	476.0	13.71	CON	Yes			



Table 4FDEP8-3. Summary of the Stack, Operating, and NO<sub>x</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	EU #	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters						Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II			
					X (m)	Y (m)	Height (ft)	Diameter (ft)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	TPY	g/s					
0112110	South Broward RRF <sup>*</sup>	UNIT #1, 863 TPD MSW INCINERATOR	1	SBROW1	17,400	-69,700	195.0	59.4	13.0	4.0	225.7	380.8	59.1	18.01	793.7	22.86	CON	Yes	
		UNIT #2, 863 TPD MSW INCINERATOR	2	SBROW2	17,400	-69,700	195.0	59.4	13.0	4.0	225.7	380.8	59.1	18.01	793.7	22.86	CON	Yes	
		UNIT #3, 863 TPD MSW INCINERATOR	3	SBROW3	17,400	-69,700	195.0	59.4	13.0	4.0	225.7	380.8	59.1	18.01	793.7	22.86	CON	Yes	
0110037	Florida Power & Light--Lauderdale <sup>†</sup>	Bank of 12 Combustion Turbines (Nos. 1 to 12)	3	FPLCT3	17,900	-69,700	45.0	13.7	7.8	2.4	859.7	733.0	375.0	114.30	5161.4	148.65	NO	No	
		Bank of 12 Combustion Turbines (No. 13 to 24)	15	FPLCT15	17,900	-69,700	44.0	13.4	15.6	4.8	859.7	733.0	93.3	28.44	5161.4	148.65	NO	No	
		CCCT with HRSG (CT 4A) (Phase II Acid Rain Unit)	35	FPLCT35	17,900	-69,700	150.0	45.7	18.0	5.5	329.8	438.6	158.7	48.37	3065.0	88.27	CON	Yes	
		CCCT with HRSG (CT 4B) (Phase II Acid Rain Unit)	36	FPLCT36	17,900	-69,700	150.0	45.7	18.0	5.5	329.7	438.6	158.7	48.37	3065.0	88.27	CON	Yes	
		CCCT with HRSG (CT 5A) (Phase II Acid Rain Unit)	37	FPLCT37	17,900	-69,700	150.0	45.7	18.0	5.5	329.7	438.6	158.7	48.37	3065.0	88.27	CON	Yes	
		CCCT with HRSG (CT 5B) (Phase II Acid Rain Unit)	38	FPLCT38	17,900	-69,700	150.0	45.7	18.0	5.5	329.7	438.6	158.7	48.37	3065.0	88.27	CON	Yes	
		Units 4 & 5 Baseline		FPL45B	17,900	-69,700	150.9	46.0	14.0	4.3	299.9	422.0	48.0	14.63	0.0	0.00	EXP	No	
0110036	FP&L--Port Everglades <sup>*</sup>	232 NW FFSG #1 w/Low Excess Air Burners&Multi-Cyclones	1	FPPE1	25,200	-67,700	344.0	104.9	14.0	4.3	274.7	408.0	60.0	18.29	5729.0	165.00	NO	No	
		232 NW FFSG #2 w/Low Excess Air Burners&Multi-Cyclones	2	FPPE2	25,200	-67,700	344.0	104.9	14.0	4.3	289.7	416.3	16.0	4.88	5729.0	165.00	NO	No	
		401 NW FFSG #3 w/Low Excess Air Burners&Multi-Cyclones	3	FPPE3	25,200	-67,700	344.0	104.9	18.1	5.5	274.7	408.0	63.0	19.20	16609.0	478.34	NO	No	
		401 NW FFSG #4 w/Low Excess Air Burners&Multi-Cyclones	4	FPPE4	25,200	-67,700	344.0	104.9	18.1	5.5	274.7	408.0	63.0	19.20	16609.0	478.34	NO	No	
		Gas Turbines Electric Generating Unit #1-12	5	FPPE5	25,200	-67,700	44.0	13.4	15.6	4.8	769.7	683.0	35.0	10.67	6633.0	191.03	NO	No	
1110003	Ft. Pierce Utilities Authority <sup>*</sup>	2.75 MW West Diesel #1	1	FTPRC1	4,600	83,300	23.0	7.0	3.0	0.9	949.7	783.0	39.0	11.89	392.4	11.30	NO	No	
		2.75 MW East Diesel #2	2	FTPRC2	4,600	83,300	23.0	7.0	3.0	0.9	949.7	783.0	39.0	11.89	392.4	11.30	NO	No	
		23.4 MW Combined Cycle GT with 3 2 MW HRSG-Unit # 9	3	FTPRC3	4,600	83,300	68.0	20.7	11.2	3.4	425.7	491.9	59.8	18.23	592.7	17.07	NO	No	
		16.5 MW Boiler Unit #6	4	FTPRC4	4,600	83,300	148.0	45.1	5.0	1.5	324.7	435.8	36.0	10.97	5.7	0.16	NO	No	
		33.0 MW Boiler Unit #7 (Phase II Acid Rain Unit)	7	FTPRC7	4,600	83,300	147.0	44.8	7.1	2.2	307.7	426.3	61.1	18.62	457.1	13.16	NO	No	
		56.1 MW Boiler Unit #8 (Phase II Acid Rain Unit)	8	FTPRC8	4,600	83,300	150.0	45.7	8.0	2.4	333.7	440.8	83.6	25.48	167.2	4.82	NO	No	
		General Purpose Internal Combustion Engines	10	FTPRC10	4,600	83,300	150.0	45.7	8.0	2.4	333.7	440.8	83.6	25.48	83.6	2.41	NO	No	
0250020	Tammac-Pennsuko Cement <sup>*</sup>	KILN #2 (Restart 1990)	4	TARM4	700	-91,300	200.0	61.0	8.0	2.4	299.7	421.9	29.9	9.10	867.2	24.98	CON	Yes	
		KILN #3	6	TARM6	700	-91,300	200.0	61.0	15.0	4.6	350.3	450.0	36.2	11.04	2594.0	74.71	CON	Yes	
		125 ton per hour slag dryer	20	TARM20	700	-91,300	30.0	9.1	4.0	1.2	299.7	421.9	59.0	17.98	12.8	0.37	CON	Yes	
		KILN #3 Baseline		TARM3B	700	-91,300	200.0	61.0	15.0	4.6	350.3	450.0	36.2	11.04	-2112.3	-60.83	EXP	Yes	
0250348	Miami-Dade RRF/Monteray <sup>*</sup>	Boilers #1-4	14	MDADE14	1,630	-95,380	250.0	76.2	12.0	3.7	270.1	405.4	52.0	15.86	2459.6	70.84	CON	Yes	
		Boilers #1-4 Baseline	14	MDADE14B	1,630	-95,380	149.9	45.7	9.0	2.7	370.1	461.0	99.5	30.34	749.0	-21.57	EXP	Yes	

<sup>a</sup> Location relative to FPL West County Energy Center

<sup>†</sup> Facilities or sources that operate only during the October 1 through April 30 crop season.

<sup>\*</sup> Sugar mill sources that operate only during the May 1 through September 30 off-crop season (assumes 150 days)

<sup>†</sup> Sugar mill sources that operate all year

<sup>\*</sup> Large source (>1,000 TPY) outside the screening area that are included in the modeling analysis

Note: EXP = PSD expending source

CON = PSD consuming source.

NO = Source does not affect PSD increment

ND = No data available

Table 6-3 Summary of the PM Facilities Considered for Inclusion in the PSD Class II Air Modeling Analyses (Revised July 13, 2005)

AIRS Number	Facility	County	UTM Coordinates		Relative to FPL WCEC <sup>a</sup>				Maximum PM Emissions (TPY)	Q. (TPY) Emission Threshold <sup>b,c</sup> (Dist - SID) x 20	Include in Modeling Analysis <sup>d</sup>
			East (km)	North (km)	X (km)	Y (km)	Distance (km)	Direction (deg)			
<b>Modeling Area <sup>d</sup></b>											
	FPL West County Energy Center	Palm Beach	562.2	2953.0	0.0	0.0	0.0	NA		SIA	YES
<b>Screening Area <sup>d</sup></b>											
990349	South Florida Water Mgmt. District - Pump Stn S-5A	Palm Beach	562.6	2951.3	0.4	-1.7	1.7	167	3.3	SIA	YES
0990530	HUBBARD CONSTRUCTION COMPANY	Palm Beach	562.1	2955.6	-0.1	2.6	2.6	359	1.2	SIA	YES
990620	South Florida Water Mgmt. District - Pump Stn S-319	Palm Beach	566.3	2951.5	4.1	-1.5	4.4	110	0.5	SIA	YES
990621	South Florida Water Mgmt. District - Pump Stn S-362	Palm Beach	565.3	2946.1	3.1	-6.9	7.6	156	0.8	SIA	YES
990016	Atlantic Sugar Association	Palm Beach	552.9	2945.2	-9.3	-7.8	12.1	230	684	43	YES
990549	South Florida Water Mgmt. District - Pump Stn G-310	Palm Beach	554.2	2940.5	-8.0	-12.5	14.8	213	7.3	97	NO
990021	Pratt & Whitney (United Technologies)	Palm Beach	562.0	2976.0	-0.2	23.0	23.0	360	121	260	NO
990019	Osceola Farms	Palm Beach	544.2	2968.0	-18.0	15.0	23.4	0	700	269	YES
990234	Palm Beach Resource Recovery	Palm Beach	585.8	2960.2	23.6	7.2	24.7	73	26	293	NO
990350	South Florida Water Mgmt. District - Pump Stn S-6	Palm Beach	556.2	2927.8	-6.0	-25.2	25.9	193	7.2	315	NO
990026	Sugar Cane Growers	Palm Beach	534.9	2953.3	-27.3	0.3	27.3	271	1,032	346	YES
990061	U.S. Sugar - Bryant	Palm Beach	537.8	2969.1	-24.4	16.1	29.2	303	979	385	YES
0990594	El Paso Belle Glade Generating Station	Palm Beach	533.5	2954.1	-28.7	1.1	28.7	272	181	374	NO
500042	FPL -Riviera Beach	Palm Beach	594.2	2960.6	32.0	7.6	32.9	77	1,670	458	YES
990565	Lake Worth Generating Station	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	42	440	NO
500045	Lake Worth Utilities	Palm Beach	592.8	2943.7	30.6	-9.3	32.0	107	326	440	NO
990550	South Florida Water Mgmt. District - Pump Stn G-335	Palm Beach	552.6	2922.0	-9.6	-31.0	32.5	197	7.3	449	NO
990086	Glades Correctional Institute	Palm Beach	523.4	2955.2	-38.8	2.2	38.9	273	30	577	NO
990332	New Hope Power Partnership (Okeelanta)	Palm Beach	524.1	2940.0	-38.1	-13.0	40.3	251	285	605	NO
990005	Okeelanta	Palm Beach	525.0	2937.4	-37.2	-15.6	40.3	247	22	607	NO
990614	South Florida Water Mgmt. District - Pump Stn G-370	Palm Beach	540.9	2918.5	-21.3	-34.5	40.5	212	10	611	NO
850102	Bechtel Indiantown	Martin	545.6	2991.5	-16.6	38.5	41.9	337	270	639	NO
850001	FPL -Martin	Martin	543.1	2992.9	-19.1	39.9	44.2	334	7,985	685	YES
0112545	El Paso Broward Energy Center	Broward	583.3	2908.0	21.1	-45.0	49.7	155	227	794	NO
0112534	Enron/Deerfield Beach Energy Center	Broward	583.1	2907.9	20.9	-45.1	49.7	155	55	794	NO
112120	North Broward Resource Recovery	Broward	583.6	2907.6	21.4	-45.4	50.2	155	100	804	NO
990615	South Florida Water Mgmt. District - Pump Stn G-372	Palm Beach	519.3	2923.6	-42.9	-29.4	52.0	236	10	840	NO
510001	Everglades Sugar	Hendry	509.6	2954.2	-52.6	1.2	52.6	271	41	852	NO
850021	Stuart Contracting	Martin	575.2	3006.8	13.0	53.8	55.3	14	ND	907	NO
0112515	Enron/Pompano Energy Center	Broward	583.7	2905.5	21.5	-47.5	52.1	156	41	843	NO
<b>Beyond Screening Area out to 100 km <sup>d</sup></b>											
510003	US Sugar Clewiston	Hendry	506.1	2956.9	-56.1	3.90	56.2	274	2,190	925	YES
1110103	CPV Cana, LTD	St. Lucie	550.9	3018.1	-11.3	65.1	66.1	350	48	1,121	NO
62119	South Broward Resource Recovery	Broward	579.6	2883.3	17.4	-69.7	71.8	166	106	1,237	NO
60037	FPL -Lauderdale	Broward	580.1	2883.3	17.9	-69.7	72.0	166	100	1,239	NO
60036	FPL -Port Everglades	Broward	587.4	2885.3	25.2	-67.7	72.2	160	3,794	1,245	YES
510015	Southern Gardens Citrus	Hendry	487.6	2957.6	-74.6	4.6	74.7	274	97	1,295	NO
560003	Fort Pierce Utilities	St. Lucie	566.8	3036.3	4.6	83.3	83.4	3	16	1,469	NO
130020	Tarmac	Dade	562.9	2861.7	0.7	-91.3	91.3	180	910	1,626	NO
0250348	Miami-Dade RRF/Montenay	Dade	563.3	2857.6	1.6	-95.4	95.4	179	116	1,708	NO

Note NA = Not applicable, ND = No data, SID = Significant impact distance for the project

<sup>a</sup> FPL West County Energy Center's East and North Coordinates (km)

562.2 2953.0

<sup>b</sup> The significant impact distance for the project is estimated to be

10 km

<sup>c</sup> Based on the North Carolina Screening Threshold method, a background facility is included in the modeling analysis if the facility is beyond the modeling area and its emission rate is greater than the product of (Distance-SID) x 20

<sup>d</sup> "Modeling Area" is the area in which the Project is predicted to have a significant impact. EPA recommends that all sources within this area be modeled.  
"Screening Area" is the area that is 50 km beyond the modeling area. EPA recommends that sources be modeled that are expected to have a significant impact in the modeling area.  
"Beyond Screening Area out to 120 km" is the area beyond the screening area and out to 120 km in which only large sources are included in the modeling.

Table SFDEP8-4. Summary of the Stack, Operating, and SO<sub>x</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II
				X (m)	Y (m)	Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	lb/hr	g/s		
0990349	SFWMD Pump Station S-5A	Diesel Engine 1	S5ADE1	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
		Diesel Engine 2	S5ADE2	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
		Diesel Engine 3	S5ADE3	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
		Diesel Engine 4	S5ADE4	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
		Diesel Engine 5	S5ADE5	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
		Diesel Engine 6	S5ADE6	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.65	0.20	CON	Yes
0990530	HUBBARD CONSTRUCTION COMPANY	Hot mix asphalt plant (175 TPF)	HUBB1	-60	2,560	25.0	7.6	3.1	0.9	327.7	437.4	92.0	28.04	10.87	3.31	CON	Yes
0990620	SFWMD Pump Station S-319	2005 HP Internal Combustion Engine 1	S319IC1	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.51	0.16	CON	Yes
		2005 HP Internal Combustion Engine 2	S319IC2	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.51	0.16	CON	Yes
		2005 HP Internal Combustion Engine 3	S319IC3	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.51	0.16	CON	Yes
		1210 HP Diesel Engine 1	S319DE1	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.46	0.14	CON	Yes
		1210 HP Diesel Engine 2	S319DE2	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.46	0.14	CON	Yes
0990621	SFWMD Pump Station S-362	1303 HP Diesel Engine 1	S362DE1	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.49	0.15	CON	Yes
		1303 HP Diesel Engine 2	S362DE2	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.49	0.15	CON	Yes
		1303 HP Diesel Engine 3	S362DE3	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.49	0.15	CON	Yes
		839 HP Diesel Engine 1	S362DE4	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.32	0.10	CON	Yes
		839 HP Diesel Engine 2	S362DE5	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.32	0.10	CON	Yes
0990016	Atlantic Sugar Association <sup>b</sup>	Unit 1	ASA1	-9,300	-7,800	89.9	27.4	6.0	1.8	163.1	146.0	59.0	17.97	129.2	16.28	CON	Yes
		Unit 2	ASA2	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	150.0	76.6	23.36	129.2	16.28	CON	Yes
		Unit 3	ASA3	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	150.0	70.7	21.56	127.1	16.02	CON	Yes
		Unit 4	ASA4	-9,300	-7,800	89.9	27.4	6.0	1.8	159.5	144.0	82.5	25.16	128.7	16.21	CON	Yes
		Unit 5 PSD	ASA5	-9,300	-7,800	89.9	27.4	5.5	1.7	150.5	139.0	63.1	19.24	66.7	8.41	CON	Yes
		Unit 1 PSD Baseline	ASA1B	-9,300	-7,800	62.0	18.9	6.3	1.9	451.1	506.0	41.7	12.70	-136.8	-17.24	EXP	Yes
		Unit 2 PSD Baseline	ASA2B	-9,300	-7,800	62.0	18.9	6.3	1.9	460.1	511.0	35.8	10.90	-178.6	-22.50	EXP	Yes
		Unit 3 PSD Baseline	ASA3B	-9,300	-7,800	71.9	21.9	6.0	1.8	479.9	522.0	57.4	17.50	-134.0	-16.38	EXP	Yes
		Unit 4 PSD Baseline	ASA4B	-9,300	-7,800	60.0	18.3	6.0	1.8	159.5	144.0	49.2	15.00	-85.4	-10.76	EXP	Yes
		990021	Parr & Whitney (United Technologies)	Heater	PRATARCH	-200	23,000	50.0	15.2	3.0	0.9	1000.0	810.9	471.6	143.73	111.0	13.99
Boiler BO-12	PRATBO12			-200	23,000	15.0	4.6	2.5	0.8	500.0	533.2	22.7	6.92	4.0	0.51	CON	Yes
A-10 Test Stand	PRATA10			-200	23,000	19.0	5.8	13.7	4.2	280.0	410.9	350.0	106.68	4.4	0.55	No	No
990019	Osceola Farms <sup>b</sup>	Unit 1 PSD Baseline	OSBLR1B	-18,000	15,000	72.2	22.0	5.0	1.5	155.9	342.0	59.6	18.18	-40.2	-5.07	EXP	Yes
		Unit 2 PSD Baseline	OSBLR2B	-18,000	15,000	72.2	22.0	5.0	1.5	155.9	341.0	59.4	18.10	-129.5	-16.32	EXP	Yes
		Unit 3 PSD Baseline	OSBLR3B	-18,000	15,000	72.2	22.0	6.3	1.9	155.9	341.0	47.6	14.50	-57.6	-7.26	EXP	Yes
		Unit 4 PSD Baseline	OSBLR4B	-18,000	15,000	72.2	22.0	6.0	1.8	155.9	341.0	61.7	18.80	-108.0	-13.61	EXP	Yes
		Unit 2 PSD	OSBLR2	-18,000	15,000	89.9	27.4	5.0	1.5	155.9	341.0	51.9	15.82	135.9	17.12	CON	Yes
		Unit 3 PSD	OSBLR3	-18,000	15,000	89.9	27.4	6.3	1.9	155.9	342.0	55.3	16.86	244.0	30.74	CON	Yes
		Unit 4 PSD	OSBLR4	-18,000	15,000	89.9	27.4	6.0	1.8	155.9	340.7	54.7	16.67	100.8	12.70	CON	Yes
		Unit 5a	OSBLR5A	-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	60.6	18.48	50.2	6.33	CON	Yes
		Unit 5b	OSBLR5B	-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	60.6	18.48	50.2	6.33	CON	Yes
		Unit 6 PSD	OSBLR6	-18,000	15,000	89.9	27.4	6.2	1.9	155.9	341.0	59.7	18.19	265.0	33.39	CON	Yes

Table 5FDEP8-4. Summary of the Stack, Operating, and SO<sub>2</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

A/R Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP,CON)	Modeled in Class II		
				X (m)	Y (m)	Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	lb/hr	g/s				
0990234	Solid Waste Authority of PBC	412.5MMBTU/HR RDF BOILER NO 1	SWAPB1	23,600	7,470	250.0	76.2	6.7	2.0	449.7	505.2	81.7	24.90	45.8	5.77	CON	Yes		
		412.5MMBTU/HR RDF BOILER NO 2	SWAPB2	23,600	7,470	250.0	76.2	6.7	2.0	449.7	505.2	81.7	24.90	45.8	5.77	CON	Yes		
990026	Sugar Cane Growers <sup>c</sup>	Unit 1	SUGCN1	-27,300	300	150.0	45.7	7.0	2.1	161.0	344.8	50.6	15.43	327.0	41.20	CON	Yes		
		Unit 2	SUGCN2	-27,300	300	150.0	45.7	7.0	2.1	155.0	341.5	60.3	18.38	327.0	41.20	CON	Yes		
		Unit 3	SUGCN3	-27,300	300	180.0	54.9	6.9	2.1	152.0	339.8	50.3	15.34	128.6	16.20	CON	Yes		
		Unit 4	SUGCN4	-27,300	300	180.0	54.9	9.5	2.9	160.0	344.3	63.1	19.24	303.2	38.20	CON	Yes		
		Unit 5	SUGCN5	-27,300	300	150.0	45.7	7.0	2.1	156.0	342.0	88.3	26.92	221.4	27.90	CON	Yes		
		Unit 6	SUGCN6	-27,300	300	154.8	47.2	9.5	2.9	156.0	342.0	45.6	13.96	156.5	23.50	CON	Yes		
		<u>On-Crop Season</u>																	
		Unit 1 PSD Baseline	SUGCN1BO	-27,300	300	79.1	24.1	5.5	1.7	395.0	474.8	52.3	15.94	-236.5	-29.80	EXP	Yes		
		Unit 2 PSD Baseline	SUGCN2BO	-27,300	300	79.1	24.1	5.5	1.7	405.1	480.4	58.7	17.88	-236.5	-29.80	EXP	Yes		
		Unit 3 PSD Baseline	SUGCN3BO	-27,300	300	79.1	24.1	5.5	1.7	470.0	516.5	54.1	16.50	-177.6	-22.40	EXP	Yes		
		Unit 4 PSD Baseline	SUGCN4BO	-27,300	300	86.0	26.2	5.3	1.6	149.1	338.2	32.4	9.88	-205.6	-25.90	EXP	Yes		
		Unit 5 PSD Baseline	SUGCN5BO	-27,300	300	79.1	24.1	6.7	2.0	490.0	527.6	93.2	28.42	-315.1	-39.70	EXP	Yes		
		Unit 6 PSD Baseline	SUGCN6BO	-27,300	300	40.0	12.2	5.0	1.5	630.1	605.4	21.4	6.53	-147.6	-18.60	EXP	Yes		
		Unit 7 PSD Baseline	SUGCN7BO	-27,300	300	40.0	12.2	5.0	1.5	630.4	605.6	56.4	17.20	-354.0	-44.60	EXP	Yes		
		<u>Off-Crop Season</u>																	
		Unit 1 PSD Baseline	SUGCN1BF	-27,300	300	79.1	24.1	5.5	1.7	395.0	474.8	52.3	15.94	-150.0	-18.90	EXP	Yes		
		Unit 2 PSD Baseline	SUGCN2BF	-27,300	300	79.1	24.1	5.5	1.7	405.1	480.4	58.7	17.88	-150.0	-18.90	EXP	Yes		
		Unit 3 PSD Baseline	SUGCN3BF	-27,300	300	79.1	24.1	5.5	1.7	470.0	516.5	54.1	16.50	-112.7	-14.20	EXP	Yes		
		Unit 4 PSD Baseline	SUGCN4BF	-27,300	300	86.0	26.2	5.3	1.6	149.1	338.2	32.4	9.88	-205.6	-25.90	EXP	Yes		
		Unit 5 PSD Baseline	SUGCN5BF	-27,300	300	79.1	24.1	6.7	2.0	490.0	527.6	93.2	28.42	0.00	0.00	EXP	Yes		
		Unit 6 PSD Baseline	SUGCN6BF	-27,300	300	40.0	12.2	5.0	1.5	630.1	605.4	21.4	6.53	0.00	0.00	EXP	Yes		
		Unit 7 PSD Baseline	SUGCN7BF	-27,300	300	40.0	12.2	5.0	1.5	630.4	605.6	56.4	17.20	-121.4	-15.30	EXP	Yes		
990061	US Sugar-Bryant <sup>b</sup>	Unit 1,2&3	USBRY123	-24,400	16,100	65.0	19.8	5.4	1.6	160.0	342.0	113.5	34.60	1275.2	160.68	CON	Yes		
		Unit 5	USBRY5	-24,400	16,100	150.0	45.7	9.5	2.9	142.0	345.0	48.4	14.77	87.5	62.40	CON	Yes		
		Unit 1 PSD Baseline	USBRY1B	-24,400	16,100	65.0	19.8	5.5	1.7	429.5	494.0	145.3	44.30	-289.7	-36.50	EXP	Yes		
		Unit 2&3 PSD Baseline	USBRY23B	-24,400	16,100	65.0	19.8	5.5	1.7	159.5	344.0	124.3	37.90	-579.4	-73.00	EXP	Yes		
0990368	Lake Worth Utilities	Unit 3	LAKWTHU3	30,600	-9,300	65.0	34.4	7.0	2.1	292.7	418.0	51.5	15.70	799.2	100.70	NO	No		
		Unit 4	LAKWTHU4	30,600	-9,300	65.0	35.1	7.5	2.3	293.1	418.2	55.8	17.00	1030.6	129.85	NO	No		
		Unit 5	LAKWTHU5	30,600	-9,300	65.0	22.9	10.0	3.1	406.1	481.0	91.2	27.80	114.0	14.37	NO	No		
		HRSO	LAKWTHHR	30,600	-9,300	65.0	45.7	18.0	5.5	220.0	377.6	45.1	13.74	101.5	12.79	CON	Yes		
500042	FPL - Riviera Beach	Units 3 and 4 at 2.5% S Fuel Oil	RIVU34	32,000	7,600	297.9	90.8	16.0	4.9	263.0	401.5	62.0	18.90	16775.0	2113.65	NO	No		
0850102	Bechtel Indiantown PSD		BECHTIND	-16,600	38,500	65.0	150.9	16.0	4.9		333.2	100.1	30.50	600.3	75.64	CON	Yes		
850001	FPL - Martin	Units 1&2	MART12	-19,100	39,900	498.9	152.1	26.2	8.0	298.0	420.9	69.0	21.03	13839.6	1743.79	CON	Yes		
		Aux Btr	MARTAUX	-19,100	39,900	60.0	18.3	3.6	1.1	504.1	535.4	50.0	15.24	102.4	12.90	CON	Yes		
		Diesel Gens	MARTGEN	-19,100	39,900	24.9	7.6	1.0	0.3	955.0	785.9	130.0	39.62	4.0	0.51	CON	Yes		
		Units 3&4	MART34	-19,100	39,900	212.9	64.9	20.0	6.1	280.0	410.9	62.0	18.90	3733.3	470.40	CON	Yes		
		Unit 8	MART8	-19,100	39,900	120.0	36.6	19.0	5.8	296.3	420.0	73.5	22.40	412.4	51.96	CON	Yes		
0110120	North Broward RRF PSD		NBCRRF	21,400	-45,400	65.0	58.5	13.0	4.0	226.1	381.0	59.1	18.01	281.0	35.40	CON	Yes		

Table 3FDEP8-4 Summary of the Stack, Operating, and SO<sub>2</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AJSR Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? <sup>c</sup> (EXP/CON)	Modeled in Class II	
				X (m)	Y (m)	Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	lb/hr	g/s			
510003	US Sugar - Clewiston <sup>d</sup>	Boiler 8	USSBLR8	-56.100	3.900	199.0	60.7	13.0	4.0	330.5	439.0	50.2	15.31	24.3	22.10	CON	Yes	
		<i>PSD Baseline (On-crop season only)<sup>b</sup></i>																
		Unit 1 PSD Baseline	USSBLR1B	-56.100	3.900	75.8	23.1	6.1	1.9	159.5	344.0	99.1	30.20	-462.0	-58.21	EXP	Yes	
		Unit 2 PSD Baseline	USSBLR2B	-56.100	3.900	75.8	23.1	6.1	1.9	157.7	343.0	117.1	35.70	-462.0	-58.21	EXP	Yes	
		Unit 3 PSD Baseline	USSBLR3B	-56.100	3.900	89.9	27.4	7.5	2.3	155.9	342.0	48.2	14.70	-263.5	-33.20	EXP	Yes	
		East Pellet Plant PSD Baseline	EPELLET	-56.100	3.900	40.0	12.2	5.0	1.5	164.9	347.0	28.0	8.54	-81.7	-10.30	EXP	Yes	
		West Pellet Plant PSD Baseline	WPELLET	-56.100	3.900	51.5	15.7	5.0	1.5	164.9	347.0	28.0	8.54	-81.7	-10.30	EXP	Yes	
		<i>Off-crop season future (May-September)</i>																
		Boiler 1	USSBLR1F	-56.100	3.900	213.0	64.9	8.0	2.4	148.0	337.6	62.3	19.00	595.1	74.98	CON	Yes	
		Boiler 2	USSBLR2F	-56.100	3.900	213.0	64.9	8.0	2.4	150.0	338.7	62.3	18.99	588.3	74.12	CON	Yes	
		Boiler 4	USSBLR4F	-56.100	3.900	150.0	45.7	8.2	2.5	0.0	0.0	0.0	0.00	0.0	4.54	CON	Yes	
		Boiler 7	USSBLR7F	-56.100	3.900	225.0	68.6	8.5	2.6	0.0	0.0	0.0	0.00	0.0	15.81	CON	Yes	
		<i>On-crop season future (October-April)<sup>b</sup></i>																
		Boiler 1	USSBLR1N	-56.100	3.900	213.0	64.9	8.0	2.4	148.0	337.6	67.6	20.61	123.9	41.23	CON	Yes	
		Boiler 2	USSBLR2N	-56.100	3.900	213.0	64.9	8.0	2.4	150.0	338.7	66.6	20.30	111.8	37.22	CON	Yes	
		Boiler 4	USSBLR4N	-56.100	3.900	150.0	45.7	8.2	2.5	150.0	338.7	80.5	24.54	95.0	0.00	CON	Yes	
		Boiler 7	USSBLR7N	-56.100	3.900	225.0	68.6	8.5	2.6	327.0	437.0	86.1	26.25	22.1	15.81	CON	Yes	
Granular Carbon Furnace	S12	-56.100	3.900	30.0	9.1	2.0	0.6	160.0	344.3	22.8	6.95	0.64	0.08	CON	Yes			
0112119	South Broward RRF PSD <sup>d</sup>		SBCRRF	17.400	-69.700	194.9	59.4	13.0	4.0	226.1	381.0	59.1	18.01	300.9	37.91	CON	Yes	
0110037	FPL - Lauderdale <sup>d</sup>	CTs 1-4 PSD	LAUDU45	17.900	-69.700	149.9	45.7	18.0	5.5	330.0	438.7	47.9	14.60	2152.0	271.15	CON	Yes	
		GT 1-12 (0.5% fuel oil)	LDGT1_12	17.900	-69.700	44.9	13.7	7.8	2.4	860.1	733.2	375.0	114.31	4387.3	552.80	NO	No	
		GT 13-24 (0.5% fuel oil)	LDGT13_24	17.900	-69.700	44.0	13.4	15.6	4.8	860.1	733.2	93.3	28.43	4387.3	552.80	NO	No	
		4&5 PSD Baseline	FTLAU45B	17.900	-69.700	150.9	46.0	14.0	4.3	299.9	422.0	48.0	14.63	-3627.0	-457.00	EXP	Yes	
0060036	FPL - Port Everglades <sup>d</sup>	Unit 1	EVERG1	25.200	-67.700	343.0	104.5	14.0	4.3	289.0	415.9	87.6	26.72	6325.0	796.95	NO	No	
		Unit 2	EVERG2	25.200	-67.700	343.0	104.5	14.0	4.3	289.0	415.9	87.6	26.72	6325.0	796.95	NO	No	
		Unit 3	EVERG3	25.200	-67.700	343.0	104.5	18.1	5.5	287.0	414.8	78.3	23.88	11000.0	1386.00	NO	No	
		Unit 4	EVERG4	25.200	-67.700	343.0	104.5	18.1	5.5	287.0	414.8	78.3	23.88	11000.0	1386.00	NO	No	
		12 CTs, Simple Cycle	EVERCTS	25.200	-67.700	44.0	13.4	15.6	4.8	860.1	733.2	93.3	28.43	4211.9	530.70	NO	No	
		1110003	Fort Pierce Utilities <sup>d</sup>	Units 6&7	FTPIER67	4.600	53.300	149.9	45.7	7.2	2.2	275.1	408.2	41.0	12.50	618.0	77.87	NO
0250020	Tarmac <sup>d</sup>	Kiln 1 PSD Baseline	TARMC1	700	-91.300	200.1	61.0	8.0	2.4	377.3	465.0	42.1	12.84	-45.3	-5.71	EXP	Yes	
		Kiln 2 PSD Baseline	TARMC2B	700	-91.300	200.1	61.0	8.0	2.4	377.3	465.0	42.1	12.84	-45.3	-5.71	EXP	Yes	
		Kiln 3 PSD Baseline	TARMC3B	700	-91.300	200.1	61.0	15.0	4.6	389.9	472.0	35.4	10.78	-21.9	-2.76	EXP	Yes	
		Kiln 2 PSD	TARMC2P	700	-91.300	200.1	61.0	8.0	2.4	299.9	422.0	29.9	9.10	195.0	24.57	CON	Yes	
		Kiln 3 PSD	TARMC3P	700	-91.300	200.1	61.0	15.0	4.6	350.3	450.0	36.2	11.04	408.2	51.43	CON	Yes	

<sup>a</sup> Location relative to FPL West County Energy Center

<sup>b</sup> Facilities or sources that operate only during the October 1 through April 30 crop season.

<sup>c</sup> Represents worst-case emissions for May 1 through September 31 off-crop season operation, and October 1 - April 30 for on-crop season.

<sup>d</sup> Large source (>1,000 TPY) outside the screening area that are included in the modeling analysis

Note: EXP = PSD expending source  
CON = PSD consuming source.  
NO = Source does not affect PSD increment  
ND = No data available.

Source: Golder, 2005

Table D-1 Summary of the Stack, Operating, and PM<sub>10</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location *		Height		Diameter		Temperature		Velocity		Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II		
				X (m)	Y (m)	(ft)	(m)	(ft)	(m)	(°F)	(K)	(ft/s)	(m/s)	lb/hr	g/s				
0990349	South Florida Water Mgmt	District - Pump Sta S-5A																	
		Diesel Engine 1	SSADE1	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
		Diesel Engine 2	SSADE2	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
		Diesel Engine 3	SSADE3	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
		Diesel Engine 4	SSADE4	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
		Diesel Engine 5	SSADE5	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
		Diesel Engine 6	SSADE6	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.13	0.02	CON	Yes		
0990530	HUBBARD CONSTRUCTION COMPANY	Hot mix asphalt plant (175 TPH)	HUBB1	-60	2,600	25.0	7.6	3.1	0.9	327.7	437.4	92.0	28.04	2.74	0.35	CON	Yes		
0990620	South Florida Water Mgmt.	District - Pump Sta S-319																	
		2005 HP Internal Combustion Engine 1	S319IC1	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.02	0.003	CON	Yes		
		2005 HP Internal Combustion Engine 2	S319IC2	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.02	0.003	CON	Yes		
		2005 HP Internal Combustion Engine 3	S319IC3	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.02	0.003	CON	Yes		
		1210 HP Diesel Engine 1	S319DE1	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.02	0.003	CON	Yes		
		1210 HP Diesel Engine 2	S319DE2	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.02	0.003	CON	Yes		
0990621	South Florida Water Mgmt.	District - Pump Sta S-362																	
		1303 HP Diesel Engine 1	S362DE1	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.04	0.0045	CON	Yes		
		1303 HP Diesel Engine 2	S362DE2	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.04	0.0045	CON	Yes		
		1303 HP Diesel Engine 3	S362DE3	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.04	0.0045	CON	Yes		
		839 HP Diesel Engine 1	S362DE4	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.04	0.0045	CON	Yes		
		839 HP Diesel Engine 2	S362DE5	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.04	0.0045	CON	Yes		
0990016	Atlantic Sugar Association <sup>b</sup>	Unit 1	ASA1	-9,300	-7,800	89.9	27.4	6.0	1.8	163.1	346.0	59.0	17.97	83.97	10.58	CON	Yes		
		Unit 2	ASA2	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	350.0	76.6	23.36	83.97	10.58	CON	Yes		
		Unit 3	ASA3	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	350.0	70.7	21.56	78.02	9.83	CON	Yes		
		Unit 4	ASA4	-9,300	-7,800	89.9	27.4	6.0	1.8	159.5	344.0	82.5	25.16	79.76	10.05	CON	Yes		
		Unit 5 PSD	ASA5	-9,300	-7,800	89.9	27.4	5.5	1.7	150.5	339.0	63.1	19.24	35.71	4.50	CON	Yes		
		Unit 1 PSD Baseline	ASA1B	-9,300	-7,800	62.0	18.9	6.3	1.9	451.1	506.0	41.7	12.70	-116.98	-14.74	EXP	Yes		
		Unit 2 PSD Baseline	ASA2B	-9,300	-7,800	62.0	18.9	6.3	1.9	460.1	511.0	35.8	10.90	-141.98	-17.89	EXP	Yes		
		Unit 3 PSD Baseline	ASA3B	-9,300	-7,800	71.9	21.0	6.0	1.8	479.9	522.0	57.4	17.50	-73.97	-9.32	EXP	Yes		
		Unit 4 PSD Baseline	ASA4B	-9,300	-7,800	60.0	18.3	6.0	1.8	159.5	344.0	49.2	15.00	-73.41	-9.25	EXP	Yes		
		990019	Osceola Farms <sup>b</sup>	Unit 1 PSD Baseline	OSBLR1B	-18,000	15,000	72.2	22.0	5.0	1.5	155.9	342.0	59.6	18.18	-116.98	-14.74	EXP	Yes
				Unit 2 PSD Baseline	OSBLR2B	-18,000	15,000	72.2	22.0	5.0	1.5	155.9	341.0	59.4	18.10	-141.98	-17.89	EXP	Yes
				Unit 3 PSD Baseline	OSBLR3B	-18,000	15,000	72.2	22.0	6.3	1.9	155.9	341.0	47.6	14.50	-73.97	-9.32	EXP	Yes
Unit 4 PSD Baseline	OSBLR4B			-18,000	15,000	72.2	22.0	6.0	1.8	155.9	341.0	61.7	18.80	-73.41	-9.25	EXP	Yes		
Unit 2 PSD	OSBLR2			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	341.0	51.9	15.82	56.03	7.06	CON	Yes		
Unit 3 PSD	OSBLR3			-18,000	15,000	89.9	27.4	6.3	1.9	155.9	342.0	55.3	16.86	58.41	7.36	CON	Yes		
Unit 4 PSD	OSBLR4			-18,000	15,000	89.9	27.4	6.0	1.8	155.9	340.7	54.7	16.67	44.40	5.59	CON	Yes		
Unit 5a	OSBLR5A			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	61.0	18.60	22.20	2.80	CON	Yes		
Unit 5b	OSBLR5B			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	61.0	18.60	23.20	2.92	CON	Yes		
Unit 6 PSD	OSBLR6			-18,000	15,000	89.9	27.4	6.2	1.9	155.9	341.0	59.7	18.19	56.90	7.17	CON	Yes		
990026	Sugar Cane Growers <sup>b</sup>			Unit 1	SUGCN1	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	58.7	17.90	77.70	9.79	CON	Yes
		Unit 2	SUGCN2	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	70.2	21.40	77.70	9.79	CON	Yes		
		Unit 3	SUGCN3	-27,300	300	180.0	54.9	6.9	2.1	150.0	338.7	54.9	16.74	53.30	6.72	CON	Yes		
		Unit 4	SUGCN4	-27,300	300	180.0	54.9	9.5	2.9	150.0	338.7	63.2	19.27	106.50	13.42	CON	Yes		
		Unit 5	SUGCN5	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	92.2	28.11	102.10	12.86	CON	Yes		
		Unit 6	SUGCN6	-27,300	300	155.0	47.3	9.5	2.9	150.0	338.7	49.8	15.18	70.30	8.86	CON	Yes		

Table D-1. Summary of the Stack, Operating, and PM<sub>10</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II		
				X (m)	Y (m)	Height (ft) (m)		Diameter (ft) (m)		Temperature (°F) (K)		Velocity (ft/s) (m/s)		lb/hr	g/s				
990061	US Sugar-Bryant <sup>b</sup>	Unit 1,2&3	USBRY123	-24,400	16,100	65.0	19.8	5.4	1.6	160.0	344.3	113.5	34.60	346.51	43.66	CON	Yes		
		Unit 5	USBRY5	-24,400	16,100	150.0	45.7	9.5	2.9	142.0	334.3	-8.4	14.77	87.50	11.03	CON	Yes		
		Unit 1 PSD Baseline	USBRY1B	-24,400	16,100	65.0	19.8	5.5	1.7	429.5	494.0	145.3	44.30	-653.97	-82.40	EXP	Yes		
		Unit 2&3 PSD Baseline	USBRY23B	-24,400	16,100	65.0	19.8	5.5	1.7	159.5	344.0	124.3	37.90	-95.56	-12.04	EXP	Yes		
500042	FPL - Riviera Beach	Units 3 and 4 at 2.5% S Fuel Oil	RJVU34	32,000	7,600	297.9	90.8	16.0	4.9	263.0	401.5	62.0	18.90	762.54	96.08	CON	Yes		
550001	FPL - Martin	Units 1&2	MART12	-19,100	39,900	495.9	152.1	26.2	8.0	298.0	420.9	69.0	21.03	1730.16	218.00	CON	Yes		
		Aux Blr	MARTAUX	-19,100	39,900	60.0	18.3	3.6	1.1	504.1	535.4	50.0	15.24	0.10	0.01	CON	Yes		
		Diesel Gens	MARTGEN	-19,100	39,900	24.9	7.6	1.0	0.3	955.0	785.9	-130.0	39.62	1.72	0.22	CON	Yes		
		Units 3&4	MART34	-19,100	39,900	212.9	64.9	20.0	6.1	280.0	410.9	62.0	18.90	242.40	30.54	CON	Yes		
		Unit 5	MART5	-19,100	39,900	120.0	36.6	19.0	5.8	256.0	397.6	44.6	13.59	120.40	15.17	CON	Yes		
510003	US Sugar - Clewiston <sup>c</sup>	Boiler 8	USSBLR8	-56,100	3,900	199.0	60.7	13.0	4.0	330.5	439.0	50.2	15.31	24.30	3.06	CON	Yes		
		<u>PSD Baseline (On-crop season only)<sup>b</sup></u>																	
		Unit 1 PSD Baseline	USSBRL1B	-56,100	3,900	75.8	23.1	6.1	1.9	159.5	344.0	99.1	30.20	-59.37	-7.48	EXP	Yes		
		Unit 2 PSD Baseline	USSBLR2B	-56,100	3,900	75.8	23.1	6.1	1.9	157.7	343.0	117.1	35.70	-55.87	-7.04	EXP	Yes		
		Unit 3 PSD Baseline	USSBLR3B	-56,100	3,900	212.9	64.9	8.0	2.4	134.3	330.0	46.6	14.20	-25.50	-3.59	EXP	Yes		
		East Pellet Plant PSD Baseline	EPELLET	-56,100	3,900	40.0	12.2	5.0	1.5	164.9	347.0	28.0	8.54	-13.41	-1.69	EXP	Yes		
		West Pellet Plant PSD Baseline	WPELLET	-56,100	3,900	51.5	15.7	5.0	1.5	164.9	347.0	28.0	8.54	-6.51	-0.82	EXP	Yes		
		Units 5&6 PSD Baseline	USSBLR56B	-56,100	3,900	75.8	23.1	6.1	1.9	429.5	494.0	145.3	44.30	-420.00	-52.92	EXP	Yes		
		<u>Off-crop season future (May-September)<sup>b</sup></u>																	
		Boiler 1	USSBLR1F	-56,100	3,900	213.0	64.9	8.0	2.4	148.0	337.6	62.3	19.00	106.35	13.40	CON	Yes		
		Boiler 2	USSBLR2F	-56,100	3,900	213.0	64.9	8.0	2.4	150.0	338.7	62.3	18.99	96.83	12.20	CON	Yes		
		Boiler 4	USSBLR4F	-56,100	3,900	150.0	45.7	8.2	2.5	0.0	0.0	0.0	0.00	0.00	0.00	CON	Yes		
		Boiler 7	USSBLR7F	-56,100	3,900	225.0	68.6	8.5	2.6	0.0	0.0	0.0	0.00	0.00	0.00	CON	Yes		
		<u>On-crop season future (October-April)<sup>b</sup></u>																	
		Boiler 1	USSBLR1N	-56,100	3,900	213.0	64.9	8.0	2.4	148.0	337.6	67.6	20.61	123.90	15.61	CON	Yes		
		Boiler 2	USSBLR2N	-56,100	3,900	213.0	64.9	8.0	2.4	150.0	338.7	66.6	20.30	111.80	14.09	CON	Yes		
		Boiler 4	USSBLR4N	-56,100	3,900	150.0	45.7	8.2	2.5	150.0	338.7	80.5	24.54	95.00	11.97	CON	Yes		
		Boiler 7	USSBLR7N	-56,100	3,900	225.0	68.6	8.5	2.6	327.0	437.0	86.1	26.25	22.10	2.78	CON	Yes		
		<u>Refinery Sources</u>																	
		S-1	S1	-56,100	3,900	65.0	19.8	0.5	0.2	68.0	293.2	0.033	0.01	0.06	0.01	CON	Yes		
		S-2	S2	-56,100	3,900	65.0	19.8	0.5	0.2	90.0	305.4	0.033	0.01	0.06	0.01	CON	Yes		
		S-3	S3	-56,100	3,900	65.0	19.8	0.5	0.2	90.0	305.4	0.033	0.01	0.06	0.01	CON	Yes		
S-4	S4	-56,100	3,900	60.0	18.3	1.9	0.6	125.0	324.8	0.033	0.01	0.21	0.03	CON	Yes				
S-5	S5	-56,100	3,900	72.0	21.9	1.0	0.3	125.0	324.8	0.033	0.01	0.06	0.01	CON	Yes				
S-6	S6	-56,100	3,900	72.0	21.9	1.9	0.6	125.0	324.8	0.033	0.01	0.19	0.02	CON	Yes				
S-7	S7	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-8	S8	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-9	S9	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-10	S10	-56,100	3,900	75.0	22.9	7.3	2.2	115.0	319.3	0.033	0.01	1.43	0.18	CON	Yes				
S-11	S11	-56,100	3,900	10.0	3.0	4.8	1.5	115.0	319.3	0.033	0.01	1.63	0.21	CON	Yes				
S-12	S12	-56,100	3,900	30.0	9.1	2.0	0.6	160.0	344.3	22.8	6.95	0.63	0.08	CON	Yes				

Table D-1 Summary of the Stack, Operating, and PM<sub>10</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analysis

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II
				X (m)	Y (m)	Height (ft) (m)		Diameter (ft) (m)		Temperature (°F) (K)		Velocity (ft/s) (m/s)		lb/hr	g/s		
0060036	FPL - Port Everglades <sup>d</sup>	Unit 1	EVERG1	25,200	-67,700	343.9	104.9	14.0	4.3	274.7	408.0	60.0	18.29	240.00	30.24	CON	Yes
		Unit 2	EVERG2	25,200	-67,700	343.9	104.9	14.0	4.3	289.1	416.0	16.0	4.68	240.00	30.24	CON	Yes
		Unit 3	EVERG3	25,200	-67,700	343.9	104.9	18.1	5.5	274.7	408.0	63.0	19.20	418.00	52.67	CON	Yes
		Unit 4	EVERG4	25,200	-67,700	343.9	104.9	18.1	5.5	274.7	408.0	63.0	19.20	418.00	52.67	CON	Yes
		12 CTs, Simple Cycle	EVERCTS	25,200	-67,700	44.0	13.4	15.6	4.8	769.7	683.0	35.0	10.67	726.00	91.46	CON	Yes

<sup>a</sup> Location relative to FPL West County Energy Center

<sup>b</sup> Facilities or sources that operate only during the October 1 through April 30 crop season

<sup>c</sup> Sugar mill sources that operate only during the May 1 through September 30 off-crop season (assumes 150 days)

<sup>d</sup> Large source (>1,000 TPY) outside the screening area that are included in the modeling analysis

Note: EXP = PSD expanding source  
 CON = PSD consuming source  
 NO = Source does not affect PSD increment  
 ND = No data available

Source: Golder, 2005



Table D-1. Summary of the Stack, Operating, and PM<sub>10</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analysis (Revised July 13, 2005)

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II		
				X (m)	Y (m)	Height		Diameter		Temperature		Velocity		lb/hr	g/s				
						(ft)	(m)	(ft)	(m)	(°F)	(K)	(ft/s)	(m/s)						
0990349	South Florida Water Mgmt	District - Pump Stn 5-5A																	
		Diesel Engine 1	S5ADE1	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
		Diesel Engine 2	S5ADE2	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
		Diesel Engine 3	S5ADE3	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
		Diesel Engine 4	S5ADE4	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
		Diesel Engine 5	S5ADE5	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
		Diesel Engine 6	S5ADE6	400	-1,700	60.4	18.4	1.3	0.4	775.0	685.9	184.4	17.97	0.62	0.08	CON	Yes		
0990530	HUBBARD CONSTRUCTION COMPANY	Hot mix asphalt plant (175 TPH)	HUBB1	-60	2,600	25.0	7.6	3.1	0.9	327.7	437.4	92.0	28.04	2.74	0.35	CON	Yes		
0990620	South Florida Water Mgmt	District - Pump Stn 5-319																	
		2005 HP Internal Combustion Engine 1	S319IC1	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.57	0.072	CON	Yes		
		2005 HP Internal Combustion Engine 2	S319IC2	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.57	0.072	CON	Yes		
		2005 HP Internal Combustion Engine 3	S319IC3	4,100	-1,500	58.6	17.9	1.8	0.6	650.0	616.5	121.6	37.06	0.57	0.072	CON	Yes		
		1210 HP Diesel Engine 1	S319DE1	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.52	0.065	CON	Yes		
		1210 HP Diesel Engine 2	S319DE2	4,100	-1,500	58.6	17.9	1.5	0.5	650.0	616.5	110.0	33.53	0.52	0.065	CON	Yes		
0990621	South Florida Water Mgmt	District - Pump Stn 5-362																	
		1303 HP Diesel Engine 1	S362DE1	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.56	0.071	CON	Yes		
		1303 HP Diesel Engine 2	S362DE2	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.56	0.071	CON	Yes		
		1303 HP Diesel Engine 3	S362DE3	3,100	-6,900	60.1	18.3	1.8	0.6	650.0	616.5	118.1	35.98	0.56	0.071	CON	Yes		
		R39 HP Diesel Engine 1	S362DE4	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.36	0.045	CON	Yes		
		R39 HP Diesel Engine 2	S362DE5	3,100	-6,900	60.1	18.3	1.5	0.5	650.0	616.5	96.0	29.26	0.36	0.045	CON	Yes		
0990016	Atlantic Sugar Association <sup>b</sup>	Unit 1	ASA1	-9,300	-7,800	89.9	27.4	6.0	1.8	163.1	346.0	59.0	17.97	83.97	10.58	CON	Yes		
		Unit 2	ASA2	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	350.0	76.6	23.36	83.97	10.58	CON	Yes		
		Unit 3	ASA3	-9,300	-7,800	89.9	27.4	6.0	1.8	170.3	350.0	70.7	21.56	78.02	9.83	CON	Yes		
		Unit 4	ASA4	-9,300	-7,800	89.9	27.4	6.0	1.8	159.5	344.0	82.5	25.16	79.76	10.05	CON	Yes		
		Unit 5 PSD	ASA5	-9,300	-7,800	89.9	27.4	5.5	1.7	150.5	339.0	63.1	19.24	35.71	4.50	CON	Yes		
		Unit 1 PSD Baseline	ASA1B	-9,300	-7,800	62.0	18.9	6.3	1.9	451.1	506.0	41.7	12.70	-116.98	-14.74	EXP	Yes		
		Unit 2 PSD Baseline	ASA2B	-9,300	-7,800	62.0	18.9	6.3	1.9	460.1	511.0	35.8	10.90	-141.98	-17.89	EXP	Yes		
		Unit 3 PSD Baseline	ASA3B	-9,300	-7,800	71.9	21.9	6.0	1.8	479.9	522.0	57.4	17.50	-73.97	-9.32	EXP	Yes		
		Unit 4 PSD Baseline	ASA4B	-9,300	-7,800	60.0	18.3	6.0	1.8	159.5	344.0	49.2	15.00	-73.41	-9.25	EXP	Yes		
		990019	Osceola Farms <sup>b</sup>	Unit 1 PSD Baseline	OSBLR1B	-18,000	15,000	72.2	22.0	5.0	1.5	155.9	342.0	59.6	18.18	-116.98	-14.74	EXP	Yes
Unit 2 PSD Baseline	OSBLR2B			-18,000	15,000	72.2	22.0	5.0	1.5	155.9	341.0	59.4	18.10	-141.98	-17.89	EXP	Yes		
Unit 3 PSD Baseline	OSBLR3B			-18,000	15,000	72.2	22.0	6.3	1.9	155.9	341.0	47.6	14.50	-73.97	-9.32	EXP	Yes		
Unit 4 PSD Baseline	OSBLR4B			-18,000	15,000	72.2	22.0	6.0	1.8	155.9	341.0	61.7	18.80	-73.41	-9.25	EXP	Yes		
Unit 2 PSD	OSBLR2			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	341.0	51.9	15.82	56.03	7.06	CON	Yes		
Unit 3 PSD	OSBLR3			-18,000	15,000	89.9	27.4	6.3	1.9	155.9	342.0	55.3	16.86	58.41	7.36	CON	Yes		
Unit 4 PSD	OSBLR4			-18,000	15,000	89.9	27.4	6.0	1.8	155.9	340.7	54.7	16.67	44.40	5.59	CON	Yes		
Unit 5a	OSBLR5A			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	61.0	18.60	22.20	2.80	CON	Yes		
Unit 5b	OSBLR5B			-18,000	15,000	89.9	27.4	5.0	1.5	155.9	340.7	61.0	18.60	23.20	2.92	CON	Yes		
Unit 6 PSD	OSBLR6			-18,000	15,000	89.9	27.4	6.2	1.9	155.9	341.0	59.7	18.19	56.90	7.17	CON	Yes		
990026	Sugar Cane Growers <sup>b</sup>			Unit 1	SUGCN1	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	58.7	17.90	77.70	9.79	CON	Yes
				Unit 2	SUGCN2	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	70.2	21.40	77.70	9.79	CON	Yes
				Unit 3	SUGCN3	-27,300	300	180.0	54.9	6.9	2.1	150.0	338.7	54.9	16.74	53.30	6.72	CON	Yes
		Unit 4	SUGCN4	-27,300	300	180.0	54.9	9.5	2.9	150.0	338.7	63.2	19.27	106.50	13.42	CON	Yes		
		Unit 5	SUGCN5	-27,300	300	150.0	45.7	7.0	2.1	150.0	338.7	92.2	28.11	102.10	12.86	CON	Yes		
		Unit 6	SUGCN6	-27,300	300	155.0	47.3	9.5	2.9	150.0	338.7	49.8	15.18	70.30	8.86	CON	Yes		
990061	US Sugar-Bryant <sup>b</sup>	Unit 1, 2 & 3	USBRY123	-24,400	16,100	65.0	19.8	5.4	1.6	160.0	344.3	113.5	34.60	346.51	43.66	CON	Yes		
		Unit 5	USBRY5	-24,400	16,100	150.0	45.7	9.5	2.9	142.0	334.3	48.4	14.77	87.50	11.03	CON	Yes		
		Unit 1 PSD Baseline	USBRY1B	-24,400	16,100	65.0	19.8	5.5	1.7	429.5	494.0	145.3	44.30	-653.97	-82.40	EXP	Yes		
		Unit 2 & 3 PSD Baseline	USBRY23B	-24,400	16,100	65.0	19.8	5.5	1.7	159.5	344.0	124.3	37.90	-95.56	-12.04	EXP	Yes		

Table D-1 Summary of the Stack, Operating, and PM<sub>10</sub> Emissions for the Background Facilities Included in the PSD Class II Air Modeling Analyses (Revised July 13, 2005)

AIRS Number	Facility	Units	ISCST3 ID Name	Relative Location <sup>a</sup>		Stack Parameters								Emission Rate		PSD Source? (EXP/CON)	Modeled in Class II		
				X (m)	Y (m)	Height (ft)	Height (m)	Diameter (ft)	Diameter (m)	Temperature (°F)	Temperature (K)	Velocity (ft/s)	Velocity (m/s)	lb/hr	g/s				
500042	FPL - Riviera Beach	Units 3 and 4 at 2.5% S Fuel Oil	RIVU34	32,000	7,600	297.9	90.8	16.0	4.9	263.0	401.5	62.0	18.90	762.54	96.08	CON	Yes		
850001	FPL - Martin	Units 1&2	MART12	-19,100	39,900	498.9	152.1	26.2	8.0	298.0	420.9	69.0	21.03	1730.16	218.00	CON	Yes		
		Aux Blr	MARTAU3	-19,100	39,900	60.0	18.3	3.6	1.1	504.1	535.4	50.0	15.24	0.10	0.01	CON	Yes		
		Diesel Gens	MARTGEN	-19,100	39,900	24.9	7.6	1.0	0.3	955.0	785.9	130.0	39.62	1.72	0.22	CON	Yes		
		Units 3&4	MART34	-19,100	39,900	212.9	64.9	20.0	6.1	280.0	410.9	62.0	18.90	242.40	30.54	CON	Yes		
		Unit 8	MART8	-19,100	39,900	120.0	36.6	19.0	5.8	256.0	397.6	44.6	13.59	120.40	15.17	CON	Yes		
510003	US Sugar - Clewiston <sup>d</sup>	Boiler 8	USSBLR8	-56,100	3,900	199.0	60.7	13.0	4.0	330.5	439.0	50.2	15.31	24.30	3.06	CON	Yes		
		<i>PSD Baseline (On-crop season only)<sup>b</sup></i>																	
		Unit 1 PSD Baseline	USSBLR1B	-56,100	3,900	75.8	23.1	6.1	1.9	159.5	344.0	99.1	30.20	-59.37	-7.48	EXP	Yes		
		Unit 2 PSD Baseline	USSBLR2B	-56,100	3,900	75.8	23.1	6.1	1.9	157.7	343.0	117.1	35.70	-55.87	-7.04	EXP	Yes		
		Unit 3 PSD Baseline	USSBLR3B	-56,100	3,900	212.9	64.9	8.0	2.4	134.3	330.0	46.6	14.20	-28.50	-3.59	EXP	Yes		
		East Pellet Plant PSD Baseline	EPELLET	-56,100	3,900	40.0	12.2	5.0	1.5	164.9	347.0	28.0	8.54	-13.41	-1.69	EXP	Yes		
		West Pellet Plant PSD Baseline	WPELLET	-56,100	3,900	51.5	15.7	5.0	1.5	164.9	347.0	28.0	8.54	-6.51	-0.82	EXP	Yes		
		Units 5&6 PSD Baseline	USSBLR56B	-56,100	3,900	75.8	23.1	6.1	1.9	429.5	494.0	145.3	44.30	-420.00	-52.92	EXP	Yes		
		<i>Off-crop season future (May - September)<sup>c</sup></i>																	
		Boiler 1	USSBLR1F	-56,100	3,900	213.0	64.9	8.0	2.4	148.0	337.6	62.3	19.00	106.35	13.40	CON	Yes		
		Boiler 2	USSBLR2F	-56,100	3,900	213.0	64.9	8.0	2.4	150.0	338.7	62.3	18.99	96.83	12.20	CON	Yes		
		Boiler 4	USSBLR4F	-56,100	3,900	150.0	45.7	8.2	2.5	0.0	0.0	0.0	0.00	0.00	0.00	CON	Yes		
		Boiler 7	USSBLR7F	-56,100	3,900	225.0	68.6	8.5	2.6	0.0	0.0	0.0	0.00	0.00	0.00	CON	Yes		
		<i>On-crop season future (October - April)<sup>b</sup></i>																	
		Boiler 1	USSBLR1N	-56,100	3,900	213.0	64.9	8.0	2.4	148.0	337.6	67.6	20.61	123.90	15.61	CON	Yes		
		Boiler 2	USSBLR2N	-56,100	3,900	213.0	64.9	8.0	2.4	150.0	338.7	66.6	20.30	111.80	14.09	CON	Yes		
		Boiler 4	USSBLR4N	-56,100	3,900	150.0	45.7	8.2	2.5	150.0	338.7	80.5	24.54	95.00	11.97	CON	Yes		
		Boiler 7	USSBLR7N	-56,100	3,900	225.0	68.6	8.5	2.6	327.0	437.0	86.1	26.25	22.10	2.78	CON	Yes		
		<i>Refinery Sources</i>																	
		S-1	S1	-56,100	3,900	65.0	19.8	0.5	0.2	68.0	293.2	0.033	0.01	0.06	0.01	CON	Yes		
		S-2	S2	-56,100	3,900	65.0	19.8	0.5	0.2	90.0	305.4	0.033	0.01	0.06	0.01	CON	Yes		
		S-3	S3	-56,100	3,900	65.0	19.8	0.5	0.2	90.0	305.4	0.033	0.01	0.06	0.01	CON	Yes		
		S-4	S4	-56,100	3,900	60.0	18.3	1.9	0.6	125.0	324.8	0.033	0.01	0.21	0.03	CON	Yes		
S-5	S5	-56,100	3,900	72.0	21.9	1.0	0.3	125.0	324.8	0.033	0.01	0.06	0.01	CON	Yes				
S-6	S6	-56,100	3,900	72.0	21.9	1.9	0.6	125.0	324.8	0.033	0.01	0.19	0.02	CON	Yes				
S-7	S7	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-8	S8	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-9	S9	-56,100	3,900	130.0	39.6	1.4	0.4	110.0	316.5	0.033	0.01	0.06	0.01	CON	Yes				
S-10	S10	-56,100	3,900	75.0	22.9	7.3	2.2	115.0	319.3	0.033	0.01	1.43	0.18	CON	Yes				
S-11	S11	-56,100	3,900	10.0	3.0	4.8	1.5	115.0	319.3	0.033	0.01	1.63	0.21	CON	Yes				
S-12	S12	-56,100	3,900	30.0	9.1	2.0	0.6	160.0	344.3	22.8	6.95	0.63	0.08	CON	Yes				
0060036	FPL - Port Everglades <sup>d</sup>	Unit 1	EVERG1	25,200	-67,700	343.9	104.9	14.0	4.3	274.7	408.0	60.0	18.29	240.00	30.24	CON	Yes		
		Unit 2	EVERG2	25,200	-67,700	343.9	104.9	14.0	4.3	289.1	416.0	16.0	4.88	240.00	30.24	CON	Yes		
		Unit 3	EVERG3	25,200	-67,700	343.9	104.9	18.1	5.5	274.7	408.0	63.0	19.20	418.00	52.67	CON	Yes		
		Unit 4	EVERG4	25,200	-67,700	343.9	104.9	18.1	5.5	274.7	408.0	63.0	19.20	418.00	52.67	CON	Yes		
		12 CTS, Simple Cycle	EVERCTS	25,200	-67,700	44.0	13.4	15.6	4.8	769.7	683.0	35.0	10.67	726.00	91.48	CON	Yes		

<sup>a</sup> Location relative to FPL West County Energy Center

<sup>b</sup> Facilities or sources that operate only during the October 1 through April 30 crop season.

<sup>c</sup> Sugar mill sources that operate only during the May 1 through September 30 off-crop season (assumes 150 days)

<sup>d</sup> Large source (>1,000 TPY) outside the screening area that are included in the modeling analysis

Note: EXP = PSD expanding source.

CON = PSD consuming source.

NO = Source does not affect PSD increment.

ND = No data available.

Table 5FDEP8-5. Maximum Predicted PM<sub>10</sub>, NO<sub>2</sub> and SO<sub>2</sub> Impacts For Comparison to the PSD Class II Increments-  
GE 7FB CTs - 2,200 MW Scenario

Pollutant, Averaging Time, and Rank	Modeled Concentration <sup>a,c</sup> (µg/m <sup>3</sup> )	Receptor Location		Time Period (YYMMDDHH)	PSD Class II Increment (µg/m <sup>3</sup> )
		x (m)	y (m)		
<b>PM<sub>10</sub></b>					
24-Hour, HSH	5.9	372	410	87021624	30
	6.4	366	17	88020624	
	6.6	365	-32	89030824	
	5.2	366	17	90111824	
	5.8	365	-32	91031024	
Annual Arithmetic Mean	0.63	372	410	87123124	17
	0.81	372	410	88123124	
	0.71	372	410	89123124	
	0.69	-1,700	1,900	90123124	
	0.67	372	410	91123124	
<b>SO<sub>2</sub></b>					
3-Hour, HSH	85.8	-9,000	3,000	87102106	512
	110.2	-5,500	6,500	88072206	
	89.7	300	1,900	89030806	
	97.5	-7,500	6,000	90011003	
	95.1	-6,500	6,000	91011803	
24-Hour, HSH	24.1	400	1,900	87101324	91
	27.1	300	1,900	88020624	
	31.6	200	2,000	89030824	
	28.3	300	1,900	90111124	
	25.6	200	2,000	91112524	
Annual Arithmetic Mean	3.98	-750	3,000	87123124	20
	4.39	-750	2,500	88123124	
	4.39	-500	3,000	89123124	
	4.01	-750	2,500	90123124	
	4.25	-500	2,750	91123124	
<b>NO<sub>2</sub><sup>b</sup></b>					
Annual Arithmetic Mean	7.73	0	-1,500	87123124	25
	8.50	0	-1,700	88123124	
	8.23	100	-1,500	89123124	
	9.15	0	-1,700	90123124	
	8.60	0	-1,500	91123124	

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport.

<sup>b</sup> Using the recommended EPA NO<sub>x</sub> to NO<sub>2</sub> conversion factor of 0.75.

<sup>c</sup> Project was modeled at 60% load, 59 °F, natural gas-firing for PM<sub>10</sub>, at 100% load, 95 °F, natural gas-firing for SO<sub>2</sub>, and at 75% load, 59 °F, oil-firing for NO<sub>x</sub>.

Table 5FDEP8-6. Maximum Predicted PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub> Impacts For Comparison to the PSD Class II Increments-  
G-Class CTs - 2,200 MW Scenario

Pollutant, Averaging Time, and Rank	Modeled Concentration <sup>a,c</sup> (µg/m <sup>3</sup> )	Receptor Location		Time Period (YYMMDDHH)	Allowable PSD Class II Increment (µg/m <sup>3</sup> )
		x (m)	y (m)		
<b>PM<sub>10</sub></b>					
24-Hour, HSH	9.3	371	361	87101324	30
	7.7	364	-81	88020624	
	8.0	364	-81	89120324	
	5.4	364	-81	90111824	
	9.0	377	753	91021424	
Annual Arithmetic Mean	0.26	371	361	87123124	17
	0.58	370	312	88123124	
	0.40	371	361	89123124	
	0.38	-2,000	2,500	90123124	
	0.40	370	312	91123124	
<b>SO<sub>2</sub></b>					
3-Hour, HSH	85.8	-9,000	3,000	87102106	512
	110.2	-5,500	6,500	88072206	
	89.7	300	1,900	89030806	
	97.5	-7,500	6,000	90011003	
	95.1	-6,500	6,000	91011803	
24-Hour, HSH	24.1	400	1,900	87101324	91
	27.1	300	1,900	88020624	
	31.6	200	2,000	89030824	
	28.3	300	1,900	90111124	
	25.6	200	2,000	91112524	
Annual Arithmetic Mean	3.95	-750	3,000	87123124	20
	4.34	-750	2,500	88123124	
	4.34	-500	3,000	89123124	
	3.95	-750	2,500	90123124	
	4.21	-500	2,750	91123124	
<b>NO<sub>2</sub><sup>b</sup></b>					
Annual Arithmetic Mean	7.69	0	-1,500	87123124	25
	8.44	0	-1,700	88123124	
	8.18	100	-1,500	89123124	
	9.10	0	-1,700	90123124	
	8.56	0	-1,500	91123124	

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport.

<sup>b</sup> Using the recommended EPA NO<sub>x</sub> to NO<sub>2</sub> conversion factor of 0.75

<sup>c</sup> Project was modeled at 75% load, 59 °F, oil-firing for PM<sub>10</sub>, at 100% load, 95 °F, natural gas-firing for SO<sub>2</sub>, and at 75% load, 59 °F, oil-firing for NO<sub>x</sub>.

Table 5FDEP8-7. Maximum Predicted PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub> Impacts For Comparison to the PSD Class II Increments-  
GE 7FB CTs - 3,300 MW Scenario

Pollutant, Averaging Time, and Rank	Modeled Concentration <sup>a,c</sup> (µg/m <sup>3</sup> )	Receptor Location		Time Period (YYMMDDHH)	PSD Class II Increment (µg/m <sup>3</sup> )
		x (m)	y (m)		
<b>PM<sub>10</sub></b>					
24-Hour, HSH	6.3	372	410	87021624	30
	6.5	359	-424	88120224	
	6.7	359	-424	89030824	
	5.2	359	-424	90111824	
	6.1	359	-424	91031024	
Annual Arithmetic Mean	0.68	366	17	87123124	17
	0.88	366	17	88123124	
	0.77	366	17	89123124	
	0.84	-1,600	1,600	90123124	
	0.75	366	17	91123124	
<b>SO<sub>2</sub></b>					
3-Hour, HSH	85.8	-9,000	3,000	87102106	512
	110.2	-5,500	6,500	88072206	
	89.7	300	1,900	89030806	
	97.5	-7,500	6,000	90011003	
	95.1	-6,500	6,000	91011803	
24-Hour, HSH	24.1	400	1,900	87101324	91
	27.1	300	1,900	88020624	
	31.6	200	2,000	89030824	
	28.3	300	1,900	90111124	
	25.6	200	2,000	91112524	
Annual Arithmetic Mean	4.00	-750	3,000	87123124	20
	4.43	-750	2,500	88123124	
	4.43	-500	3,000	89123124	
	4.06	-750	2,500	90123124	
	4.30	-500	2,750	91123124	
<b>NO<sub>2</sub><sup>b</sup></b>					
Annual Arithmetic Mean	7.78	0	-1,500	87123124	25
	8.54	0	-1,700	88123124	
	8.27	100	-1,500	89123124	
	9.19	0	-1,700	90123124	
	8.63	0	-1,500	91123124	

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport.

<sup>b</sup> Using the recommended EPA NO<sub>x</sub> to NO<sub>2</sub> conversion factor of 0.75.

<sup>c</sup> Project was modeled at 75% load, 59 °F, oil-firing for PM<sub>10</sub>, at 100% load, 95 °F, natural gas-firing for SO<sub>2</sub>, and at 75% load, 59 °F, oil-firing for NO<sub>x</sub>.

Table 5FDEP8-8. Maximum Predicted PM<sub>10</sub>, NO<sub>2</sub>, and SO<sub>2</sub> Impacts For Comparison to the PSD Class II Increments-  
G-Class CTs - 3,300 MW Scenano

Pollutant, Averagmg Time, and Rank	Modeled Concentration <sup>a,c</sup> (µg/m <sup>3</sup> )	Receptor Location		Time Period (YYMMDDHH)	PSD Class II Increment (µg/m <sup>3</sup> )
		x (m)	y (m)		
<u>PM<sub>10</sub></u>					
24-Hour, HSH	9.3	371	361	87101324	30
	7.8	364	-81	88120224	
	8.1	359	-473	89120324	
	5.7	359	-473	90011324	
	9.7	376	704	91030324	
Annual Arithmetic Mean	0.33	365	-32	87123124	17
	0.64	364	-81	88123124	
	0.47	364	-81	89123124	
	0.57	-2,250	2,000	90123124	
	0.47	370	312	91123124	
<u>SO<sub>2</sub></u>					
3-Hour, HSH	85.8	-9,000	3,000	87102106	512
	110.2	-5,500	6,500	88072206	
	89.7	300	1,900	89030806	
	97.5	-7,500	6,000	90011003	
	95.1	-6,500	6,000	91011803	
24-Hour, HSH	24.1	400	1,900	87101324	91
	27.1	300	1,900	88020624	
	31.6	200	2,000	89030824	
	28.3	300	1,900	90111124	
	25.6	200	2,000	91112524	
Annual Arithmetic Mean	3.96	-750	3,000	87123124	20
	4.36	-750	2,500	88123124	
	4.37	-500	3,000	89123124	
	3.98	-750	2,500	90123124	
	4.23	-500	2,750	91123124	
<u>NO<sub>2</sub><sup>b</sup></u>					
Annual Arithmetic Mean	7.71	0	-1,500	87123124	25
	8.46	0	-1,700	88123124	
	8.20	100	-1,500	89123124	
	9.12	0	-1,700	90123124	
	8.57	0	-1,500	91123124	

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport

<sup>b</sup> Using the recommended EPA NO<sub>x</sub> to NO<sub>2</sub> conversion factor of 0.75.

<sup>c</sup> Project was modeled at 75% load, 59 °F, oil-firing for PM<sub>10</sub>, at 100% load, 95 °F, natural gas-firing for SO<sub>2</sub>, and at 75% load, 59 °F, oil-firing for NO<sub>x</sub>.

Table 5FDEP8-9. Summary of Maximum Predicted PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>2</sub> Impacts  
For Comparison to the PSD Class II Increments - 3,300 MW Scenario

Combustion Turbine	Pollutant	Averaging Time, and Rank	Modeled Concentration <sup>a</sup> (µg/m <sup>3</sup> )	PSD Class II	
				Increment (µg/m <sup>3</sup> )	% of Increment
G-Class CTs	PM <sub>10</sub>	24-Hour, HSH	9.7	30	32%
		Annual Arithmetic Mean	0.64	17	4%
	SO <sub>2</sub>	3-Hour, HSH	110.2	512	22%
		24-Hour, HSH Annual Arithmetic Mean	31.6 4.4	91 20	35% 22%
NO <sub>2</sub>	Annual Arithmetic Mean	9.1	25	36%	
GE 7FB CTs	PM <sub>10</sub>	24-Hour, HSH	6.7	30	22%
		Annual Arithmetic Mean	0.88	17	5%
	SO <sub>2</sub>	3-Hour, HSH	110.2	512	22%
		24-Hour, HSH Annual Arithmetic Mean	31.6 4.4	91 20	35% 22%
NO <sub>2</sub>	Annual Arithmetic Mean	9.2	25	37%	

Note: HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport.

Table 5FDEP8-10. Summary of Maximum Predicted PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>2</sub> Impacts  
For Comparison to the PSD Class II Increments - 2,200 MW Scenario

Combustion Turbine	Pollutant	Averaging Time, and Rank	Modeled Concentration <sup>a</sup> (µg/m <sup>3</sup> )	PSD Class II	
				Increment (µg/m <sup>3</sup> )	% of Increment
G-Class CTs	PM <sub>10</sub>	24-Hour, HSH	9.3	30	31%
		Annual Arithmetic Mean	0.58	17	3%
	SO <sub>2</sub>	3-Hour, HSH	110.2	512	22%
		24-Hour, HSH	31.6	91	35%
		Annual Arithmetic Mean	4.3	20	22%
	NO <sub>2</sub>	Annual Arithmetic Mean	9.10	25	36%
GE 7FB CTs	PM <sub>10</sub>	24-Hour, HSH	6.6	30	22%
		Annual Arithmetic Mean	0.81	17	5%
	SO <sub>2</sub>	3-Hour, HSH	110.2	512	22%
		24-Hour, HSH	31.6	91	35%
		Annual Arithmetic Mean	4.4	20	22%
	NO <sub>2</sub>	Annual Arithmetic Mean	9.15	25	37%

Note: HSH = Highest, Second-Highest

<sup>a</sup> Based on five years of surface and upper air meteorological data for 1987 to 1991 from the National Weather Service station at West Palm Beach International Airport.



**ATTACHMENT 5FDEP-13**

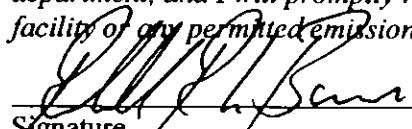
**REVISED PSD APPLICATION FORM PAGES –  
AUXILIARY BOILERS, PROCESS HEATERS, AND  
EMERGENCY GENERATORS**

**APPLICATION FORM  
SIGNATURE PAGES**

APPLICATION INFORMATION

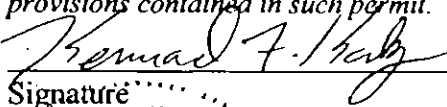
Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : Randall R. LaBauve, Vice President
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Florida Power & Light Company Street Address: 700 Universe Blvd. City: Juno Beach State: FL Zip Code: 33408
3. Owner/Authorized Representative Telephone Numbers... Telephone: (561) 691-7001 ext. Fax: (561) 691-7070
4. Owner/Authorized Representative Email Address:
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>  Signature  Date <u>Aug 9, 2005</u>

# APPLICATION INFORMATION

## Professional Engineer Certification

1. Professional Engineer Name: <b>Kennard F. Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>6241 NW 23<sup>rd</sup> Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 336-5600</b> ext. <b>516</b> Fax: <b>(352) 336-6603</b>
4. Professional Engineer Email Address: <b>kkosky@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>   Signature _____ Date <u>8/10/05</u>

\* Attach any exception to certification statement.

\*\* Board of Professional Engineers Certificate of Authorization #00001670

**EMISSION UNIT INFORMATION—  
AUXILIARY BOILER**

## EMISSIONS UNIT INFORMATION

Section [5] of [7]  
Auxiliary Boiler

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** - Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:  
**Auxiliary steam boiler for start-up requirements of "G" class CT option.**

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: C	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

10. Generator Nameplate Rating: \_\_\_\_\_ MW

11. Emissions Unit Comment:  
**This emission unit is only applicable to the "G"-class CT option. Auxiliary boilers are not included in the GE7FA or GE7FB CT options. One boiler will be installed for each "G"-class unit.**

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

**Good Combustion Practice – Natural Gas-fired.**

2. Control Device or Method Code(s): **NA**



**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate: <b>85,000 (lb steam) / hr</b>
3. Maximum Heat Input Rate: <b>99.77 million Btu/hr</b>
4. Maximum Incineration Rate:             pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day                                 days/week <b>52 weeks/year</b> <b>500 hours/year</b>
6. Operating Capacity/Schedule Comment:  <b>Maximum heat input is 99.77 MMBtu/hr. Requirements of 40 CFR 60, Subpart Db are not applicable.</b>

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**C. EMISSION POINT (STACK/VENT) INFORMATION**

(Optional for unregulated emissions units.)

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>See PSD Report</b>		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>60 feet</b>	7. Exit Diameter: <b>2.75 feet</b>	
8. Exit Temperature: <b>296 °F</b>	9. Actual Volumetric Flow Rate: <b>29,325 acfm</b>	10. Water Vapor: <b>18 %</b>	
11. Maximum Dry Standard Flow Rate: <b>16,759 dscfm</b>		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>Based on Nebraska Boiler Data (2005), values are typical.</b>			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type):  <b>Natural Gas Combustion</b>		
2. Source Classification Code (SCC):		3. SCC Units: <b>1,000 cubic feet</b>
4. Maximum Hourly Rate: <b>94.6</b>	5. Maximum Annual Rate: <b>47,284</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>1,055</b>
10. Segment Comment: <b>Maximum annual rate based on 500 hr/yr of operation.</b>		

**Segment Description and Rate:** Segment \_\_\_\_ of \_\_\_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
Carbon Monoxide - CO

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>18.4 lb/hour                      4.6 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.184 lb/MMBtu</b>  Reference: <b>Nebraska Boiler (2005)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>18.4 lb/hr = 0.184 lb/MMBtu x 99.77</b> <b>4.6 TPY = 18.4 lb/hr x 500 hr/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
 Carbon Monoxide - CO

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>400 ppmvd</b>	4. Equivalent Allowable Emissions: <b>18.4 lb/hour      4.6 tons/year</b>
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>40 CFR 63, Subpart DDDD.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [2] of [5]  
 Nitrogen Oxides - NO<sub>x</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>9.98 lb/hour                      2.5 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.100 lb/MMBtu</b>  Reference: <b>Nebraska Boiler (2005)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>9.98 lb/hr = 0.100 lb/MMBtu x 99.77</b> <b>2.5 TPY = 9.98 lb/hr x 500 hr/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [2] of [5]  
Nitrogen Oxides - NO<sub>x</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.100 lb/MMBtu</b>	4. Equivalent Allowable Emissions: <b>9.98 lb/hour      2.5 tons/year</b>
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [3] of [5]  
 Sulfur Dioxide - SO<sub>2</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: <b>SO<sub>2</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.54 lb/hour                      0.135 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>2 (grain S / 100 scf-gas)</b>  Reference:		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [3] of [5]  
 Sulfur Dioxide - SO<sub>2</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

Allowable Emissions Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
 Particulate Matter - PM/PM<sub>10</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>PM/PM<sub>10</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.180 lb/hour      0.045 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to      tons/year			
6. Emission Factor: <b>0.002 lb/MMBtu</b>  Reference: <b>Nebraska Boiler (2005)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>0.180 lb/hr = 0.002 lb/MMBtu x 99.77</b> <b>0.045 TPY = 0.180 lb/hr x 500 hr/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
Particulate Matter - PM/PM<sub>10</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [5] of [5]  
 Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.520 lb/hour                      0.13 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.005</b>  Reference: <b>Nebraska Boiler (2005)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>0.520 lb/hr = 0.005 lb/MMBtu x 99.77</b> <b>0.13 TPY = 0.520 lb/hr x 500 hr/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
 Auxiliary Boiler

**POLLUTANT DETAIL INFORMATION**

Page [5] of [5]  
 Volatile Organic Compounds - VOC

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]

Auxiliary Boiler

**G. VISIBLE EMISSIONS INFORMATION**

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions: <b>100 %</b> Maximum Period of Excess Opacity Allowed: <b>60 min/hour</b>	
4. Method of Compliance:	
5. Visible Emissions Comment:  <b>General VE in Rule 62-296.320, F.A.C. Excess emissions for startup, shutdown, and malfunctions in Rule 62-210.700, F.A.C.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [5] of [7]  
Auxiliary Boiler

**H. CONTINUOUS MONITOR INFORMATION**

**Complete if this emissions unit is or would be subject to continuous monitoring.**

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	



# EMISSIONS UNIT INFORMATION

Section [5] of [7]

Auxiliary Boiler

## I. EMISSIONS UNIT ADDITIONAL INFORMATION

### Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

## EMISSIONS UNIT INFORMATION

Section [5] of [7]

Auxiliary Boiler

### Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

## EMISSIONS UNIT INFORMATION

Section [5] of [7]

Auxiliary Boiler

### Additional Requirements Comment

The National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD is applicable to industrial, commercial, or institutional boilers or process heaters. Subpart DDDDD defines boiler and process heaters as follows in 40 CFR 63.7575:

*"Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition."*

*"Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to heat transfer material for use in a process material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units for comfort heat or space heat, food preparation for on-site consumption, or autoclaves."*

FPL proposes to install one auxiliary boiler rated at 99.77 MMBtu/hr to produce steam during startup of the CTs. The auxiliary boiler will be used only for startup and be limited to 500 hours per year of operation.

The auxiliary boiler will be subject to the Boiler MACT under the "Limited use Gaseous Fuel" subcategory, which is defined as follows in 40 CFR 63.7575:

*"Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu/hr input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent."*

New or reconstructed limited use gaseous fuel boilers and process heaters must meet a carbon monoxide emission limit of 400 ppm by volume on a dry basis corrected to 3-percent oxygen based on a 3-run average. The auxiliary boiler proposed for the Project will meet these requirements.

**EMISSION UNIT INFORMATION –  
EMERGENCY GENERATORS**

## EMISSIONS UNIT INFORMATION

Section [6] of [7]  
Emergency Generators

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** - Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]

Emergency Generators

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:  
**Six - 2,250-kW Emergency Generators. Diesel fuel-fired, internal combustion engines.**

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: C	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:  
**Two Emergency Generators will be installed for each 1,100-MW, combined-cycle unit.**

**EMISSIONS UNIT INFORMATION**

Section **[6]** of **[7]**

**Emergency Generators**

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

**Good Combustion Practice – Diesel fuel-fired.**

2. Control Device or Method Code(s): **NA**

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: <b>21.01</b> million Btu/hr
4. Maximum Incineration Rate:           pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day   days/week <b>52 weeks/year</b> <b>160 hours/year</b>
6. Operating Capacity/Schedule Comment:  <b>Maximum heat input for one unit: 126.05 MMBtu/hr total for six units.</b>  The emergency generators will be subject 40 CFR 63 Subpart ZZZZ, the Reciprocating Internal Combustion Engine (RICE) MACT Rule since they will be located at a major source of HAP emissions and will have a site rating of greater than 500 hp. The emergency generators will only be subject to the notification requirements of the RICE MACT (i.e., no emissions limitations will apply) since it would qualify for one of the following rule exemptions:  Emergency Generator - Any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of the emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situations.  Limited Use - Any stationary RICE that operates less than 100 hours per year.



**EMISSIONS UNIT INFORMATION**Section [6] of [7]  
Emergency Generators**C. EMISSION POINT (STACK/VENT) INFORMATION**  
(Optional for unregulated emissions units.)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>See PSD Report</b>		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: feet		7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>See PSD Report, Appendix A.</b>			

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type):  Diesel fuel combustion		
2. Source Classification Code (SCC):		3. SCC Units: 1000 gallons
4. Maximum Hourly Rate: 0.156	5. Maximum Annual Rate: 24.9	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135.1
10. Segment Comment: Maximum annual rate based on 160 hr / yr operation.		

**Segment Description and Rate:** Segment \_\_\_\_ of \_\_\_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
Carbon Monoxide - CO

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>2.3 lb/hour                      0.18 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.32 g/hp-hr</b>  Reference: <b>Caterpillar, 2004</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
Carbon Monoxide - CO

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Diesel fuel combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [2] of [5]  
Nitrogen Oxides - NO<sub>x</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>61.7 lb/hour                      4.93 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>8.74 g/ph-hr</b>  Reference: <b>Caterpillar, 2004</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [2] of [5]  
Nitrogen Oxides - NO<sub>x</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Diesel fuel combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [3] of [5]  
Sulfur Dioxide - SO<sub>2</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>SO<sub>2</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.005 lb/hour      0.0004 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.0015% S fuel oil</b>  Reference:		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			



**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [3] of [5]  
Sulfur Dioxide - SO<sub>2</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Diesel fuel combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
Particulate Matter - PM/PM<sub>10</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>PM/PM<sub>10</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.6 lb/hour                      0.04 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.078 g/hp-hr</b>  Reference: <b>Caterpillar, 2004</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
Particulate Matter - PM/PM<sub>10</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Diesel fuel combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**POLLUTANT DETAIL INFORMATION**

Page [5] of [5]  
Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>1.0 lb/hour                      0.08 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>0.14 g/hp-hr</b>  Reference: <b>Caterpillar, 2004</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

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Emergency Generators

**POLLUTANT DETAIL INFORMATION**

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Volatile Organic Compounds - VOC

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Diesel fuel combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

# EMISSIONS UNIT INFORMATION

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Emergency Generators

## G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions: <b>100 %</b> Maximum Period of Excess Opacity Allowed: <b>60 min/hour</b>	
4. Method of Compliance:	
5. Visible Emissions Comment:  <b>General VE in Rule 62-296.320, F.A.C. Excess emissions for startup, shutdown, and malfunction in Rule 62-210.700, F.A.C.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**H. CONTINUOUS MONITOR INFORMATION**

**Complete if this emissions unit is or would be subject to continuous monitoring.**

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

# EMISSIONS UNIT INFORMATION

Section [6] of [7]  
Emergency Generators

## I. EMISSIONS UNIT ADDITIONAL INFORMATION

### Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable



## EMISSIONS UNIT INFORMATION

Section [6] of [7]  
Emergency Generators

### Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [6] of [7]  
Emergency Generators

**Additional Requirements Comment**

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**EMISSION UNIT INFORMATION –  
NATURAL GAS FUEL HEATERS**

## EMISSIONS UNIT INFORMATION

Section [7] of [7]  
Natural Gas Fuel Heaters

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** - Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:  
**Natural Gas Fuel Heaters**

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: C	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
-------------------------------------	--------------------------------	--------------------------	---	--

9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

10. Generator Nameplate Rating: \_\_\_\_\_ MW

11. Emissions Unit Comment:

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

**Good Combustion Practice – Natural Gas-fired.**

2. Control Device or Method Code(s): **NA**

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 10 million Btu/hr
4. Maximum Incineration Rate:           pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day   7 days/week 52 weeks/year   8760 hours/year
6. Operating Capacity/Schedule Comment:  Maximum heat input of 10 MMBtu/hr per heater; 20 MMBtu/hr equal to 2 units.

**EMISSIONS UNIT INFORMATION**Section [7] of [7]  
Natural Gas Fuel Heaters**C. EMISSION POINT (STACK/VENT) INFORMATION**  
(Optional for unregulated emissions units.)**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>See PSD Report</b>		2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>30 feet</b>	7. Exit Diameter: <b>1 feet</b>	
8. Exit Temperature: <b>500 °F</b>	9. Actual Volumetric Flow Rate: <b>4,950 acfm</b>	10. Water Vapor: <b>%</b>	
11. Maximum Dry Standard Flow Rate: <b>dscfm</b>		12. Nonstack Emission Point Height: <b>feet</b>	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>Based on Hanover Compression Company or equivalent units rated at 10 MMBtu/hr.</b>			



**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type):  <b>Natural Gas Combustion</b>		
2. Source Classification Code (SCC):		3. SCC Units: <b>1000 cuft / min</b>
4. Maximum Hourly Rate: <b>9.5E-3</b>	5. Maximum Annual Rate: <b>83.3</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>1,055</b>
10. Segment Comment: <b>Maximum annual rate based on 1 unit at 8,760 hr/yr of operation.</b>		

**Segment Description and Rate:** Segment \_\_\_\_ of \_\_\_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
 Carbon Monoxide - CO

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.8 lb/hour                      3.5 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>84 lb/MMscf</b>  Reference: <b>AP-42 Table 1.4-1</b>		7. Emissions Method Code: <b>3</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [1] of [5]  
 Carbon Monoxide - CO

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

Page [2] of [5]  
 Nitrogen Oxides - NO<sub>x</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.95 lb/hour                      4.2 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>100 lb/MMscf</b>  Reference: <b>AP-42 Table 1.4-1</b>		7. Emissions Method Code: <b>3</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [2] of [5]  
 Nitrogen Oxides - NO<sub>x</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [3] of [5]  
 Sulfur Dioxide - SO<sub>2</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>SO<sub>2</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.054 lb/hour                      0.24 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>2 grains S / 100 scf</b>  Reference:		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

Page [3] of [5]  
 Sulfur Dioxide - SO<sub>2</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
 Particulate Matter - PM/PM<sub>10</sub>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>PM/PM<sub>10</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.02 lb/hour                      0.08 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>1.9 lb/MMscf</b>  Reference: <b>AP-42 Table 1.4-2</b>		7. Emissions Method Code: <b>3</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [4] of [5]  
 Particulate Matter - PM/PM<sub>10</sub>

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
 ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
 Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [5] of [5]  
 Volatile Organic Compounds - VOC

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.5 lb/hour                      0.23 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>5.5 lb/MMscf</b>  Reference: <b>AP-42 Table 1.4-1</b>		7. Emissions Method Code: <b>3</b>	
8. Calculation of Emissions:			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**POLLUTANT DETAIL INFORMATION**

Page [5] of [5]  
Volatile Organic Compounds - VOC

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance: <b>Natural Gas Combustion</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>See PSD Report.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**G. VISIBLE EMISSIONS INFORMATION**

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions: <b>100 %</b> Maximum Period of Excess Opacity Allowed: <b>60 min/hour</b>	
4. Method of Compliance:	
5. Visible Emissions Comment:  <b>General VE in Rule 62-296.320, F.A.C. Excess emissions for startup, shutdown, and malfunction in Rule 62-210.700, F.A.C.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**H. CONTINUOUS MONITOR INFORMATION**

Complete if this emissions unit is or would be subject to continuous monitoring.

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Previously Submitted, Date _____
4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)
5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [7] of [7]  
Natural Gas Fuel Heaters

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input checked="" type="checkbox"/> Attached, Document ID: <b>PSD Report</b> <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for Title V Air Operation Permit Applications**

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable



## EMISSIONS UNIT INFORMATION

Section [7] of [7]

Natural Gas Fuel Heaters

### Additional Requirements Comment

The National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD is applicable to industrial, commercial, or institutional boilers or process heaters. Subpart DDDDD defines boiler and process heaters as follows in 40 CFR 63.7575:

*"Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition."*

*"Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to heat transfer material for use in a process material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units for comfort heat or space heat, food preparation for on-site consumption, or autoclaves."*

FPL proposes to install two 10 MMBtu/hr indirect process heater for the purpose of heating the natural gas supply to the CTs.

New or reconstructed limited use gaseous fuel boilers and process heaters must meet a carbon monoxide emission limit of 400 ppm by volume on a dry basis corrected to 3-percent oxygen based on a 3-run average.

The natural gas heaters are defined as small gaseous fuel units and are not subject to the initial notification or any requirements of the Subpart DDDDD pursuant to 40 CFR 63.7506(c).

**ATTACHMENT 5FDEP-14**

**REVISED PSD APPLICATION FORM PAGES –  
REQUIREMENTS OF 40 CFR 63 SUBPART YYYY**

## FACILITY INFORMATION

### Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input checked="" type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
<p><b>CTs and HRSG Duct Burners are subject to NSPS Subpart KKKK. CTs are potentially subject to 40 CFR Subpart YYY.</b></p>	



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**EMISSIONS UNIT INFORMATION**

Section [1] of [6]  
Unit 1

**POLLUTANT DETAIL INFORMATION**

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Formaldehyde (H095)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>H095</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>See PSD Report lb/hour See PSD Report tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>See PSD Report</b>  Reference: <b>GE, 2005; SW, 2005; MHI, 2005; FPL, 2005; Golder, 2005.</b>		7. Emissions Method Code: <b>2</b>	
8. Calculation of Emissions:  <b>See PSD Report, Section 2.0, and Appendix A.</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See PSD Report, Section 2.0.</b>			

**EMISSIONS UNIT INFORMATION**

Section [1] of [6]  
Unit 1

**POLLUTANT DETAIL INFORMATION**

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Formaldehyde (H095)

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

**Allowable Emissions** Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>91 ppbvd @ 15% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>See PSD lb/hour    See PSD tons/year</b>
5. Method of Compliance: <b>EPA Method 320, 40 CFR Part 63; base load.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Oil firing: See PSD Report, Section 2.0 and Appendix A. CTs potentially subject to 40 CFR Subpart YYYY.</b>	

**Allowable Emissions** Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>91 ppbvd @ 15% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>See PSD lb/hour    See PSD tons/year</b>
5. Method of Compliance: <b>EPA Method 320, 40 CFR Part 63; base load.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Gas firing: See PSD Report, Section 2.0 and Appendix A. CTs potentially subject to 40 CFR Subpart YYYY.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



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**EMISSIONS UNIT INFORMATION**

Section [2] of [6]  
Unit 2

**POLLUTANT DETAIL INFORMATION**

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Formaldehyde (H095)

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: <b>H095</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>See PSD Report lb/hour See PSD Report tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>See PSD Report</b>  Reference: <b>GE, 2005; SW, 2005; MHI, 2005; FPL, 2005; Golder, 2005.</b>		7. Emissions Method Code: <b>2</b>	
8. Calculation of Emissions:  <b>See PSD Report, Section 2.0, and Appendix A.</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>See PSD Report, Section 2.0.</b>			

