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Project No. 0950137-041-AC

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DIVISION OF AIR  
RESOURCE MANAGEMENT

March 22, 2013

Mr. Jonathan K. Holtom, P.E.  
Power Plant Permitting Group Administrator  
Florida Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road, MS-5500  
Tallahassee, FL 32399-2400

Subject: Air Construction Permit Application for the Replacement of the HP/IP Turbine on Unit 2  
OUC Stanton Energy Center  
Facility ID No. 0950137

Dear Mr. Holtom:

Attached please find the finalized application for a construction permit for the Stanton Energy Center.

The subject application project involves the replacement of the existing high pressure and intermediate pressure turbine (HP/IP) blades with a design that provides greater unit operating efficiency.

If you have any questions regarding this application, please contact me at 407-434-3036.

Best Regards,

Michael L. Kyhos  
Project Environmental Engineer  
Orlando Utilities Commission

ORLANDO UTILITIES COMMISSION

**AIR PERMIT APPLICATION**  
**ORLANDO UTILITIES COMMISSION**  
**STANTON ENERGY CENTER**

For the Replacement of the HP/IP Turbine on  
Unit 2

**B&V PROJECT NO. 175407**

PREPARED FOR



Orlando Utilities Commission

MARCH 2013



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## 1.0 Introduction and Project Description

Orlando Utilities Commission (OUC) is proposing to replace the high pressure and intermediate pressure (HP/IP) portions of Stanton Energy Center's (SEC) Unit 2 turbine with improved technology. The turbine replacement will increase the efficiency of Unit 2, providing an increase in power generation capability without increasing fuel consumption or annual generation potential.

The SEC facility is located in Orange County, in the city of Orlando at 5100 South Alafaya Trail. The facility consists primarily of two fossil fuel fired steam electric generating units (Units 1 and 2), an auxiliary boiler, three combined cycle combustion turbines, and solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities.

Unit 2 is a nominal 465 MW coal fired unit that began operating in 1996. The turbine blades on the Unit 2 turbine generator harness the energy of the steam from the boiler and convert it into rotational energy, which in turn generates electricity. The SEC Unit 2 turbine project involves replacing the existing HP/IP turbine blades and utilizing a turbine blade design that features several thermal performance and mechanical design improvements, including better blade materials, maximized aerodynamics, and advanced steam pressure and flow control. The Unit 2 turbine project is expected to increase operating efficiency, resulting in approximately 15.1 MW additional generation capacity without any additional fuel usage or increase in energy output by the boiler. Because there will be no increase in heat input or annual hours of operation, air pollutant emissions from Unit 2 will see no increase after the turbine replacement relative to historical levels.

The remainder of this document provides the permit applicability analysis, supporting calculations, and the appropriate Florida Department of Environment (FDEP) application forms.

## 2.0 NSR/PSD Applicability

On December 31, 2002, the United States Environmental Protection Agency (USEPA) substantially reformed the Prevention of Significant Deterioration (PSD) program, including the manner in which a project's emissions increase is determined. Florida amended its rules, effective February 2006, to address the USEPA PSD reforms.

### 2.1 EMISSIONS ANALYSIS

In terms of PSD applicability, a project at an existing major source will not be subject to PSD review if it does not result in a significant emissions increase. In general, a project's emissions increase is determined as the difference between its baseline actual emissions (BAE) and its future projected actual emissions (PAE). One is also allowed to consider excludable emissions (EE) when making this comparison.

The starting point for this type of analysis at the Stanton Energy Center is the determination of the BAE for Unit 2. For this analysis, the BAE emissions were determined using historical emissions data and the methodology set forth in the current PSD regulations. The historical

emissions data were derived from continuous emissions monitoring system (CEMS) data for SO<sub>2</sub>, NO<sub>x</sub>, CO, and CO<sub>2</sub> and from annual operating reports (AORs) and stack tests for all other pollutants. The BAE period is chosen on a pollutant-by-pollutant basis as the 24-month period within the five year look-back period that has the highest emissions of that pollutant based on historical emissions data. The BAE period can be different for each pollutant. The five year look back period for this air permit application consists of data from January 2008 through December 2012. Table 2-1 illustrates the BAE for this project.

Once the BAE is established, the next step is to determine the EE based on the projected operation of the unit without the project. Essentially, the rules allow one to exclude from the emissions increase calculation those emission increases that would have occurred without the project. As will be discussed shortly, the EE can be considered an adjusted BAE and is subtracted from the PAE to determine the project emission increases. This project conservatively assumes that no adjustments to the baseline are made as Unit 2 would continue to operate as it has historically if the turbine were never replaced. Therefore, the EE are equal to the BAE which were shown in Table 2-1.

Once the BAE (and EE) are established, the next step is to determine the PAE values. In determining the PAE for each unit, one needs to differentiate between the projected increases due to *natural* demand growth versus the demand increases due to the *project*. However, since the project is not expected to increase demand growth upon Unit 2, the increase in operation due to demand growth caused by the project is non-existent (zero). This analysis also conservatively assumes that the unit will have a flat (zero) natural demand growth into the future essentially making the anticipated future annual heat input equal to the unit’s baseline heat input.

**Table 2-1 Baseline Actual Emissions**

POLLUTANT	BAE PERIOD	UNIT 2 BAE (TPY)
NO <sub>x</sub>	Aug 2008 – July 2010	2,609.25
SO <sub>2</sub>	July 2008 – June 2010	2,279.88
CO	Jan 2009 – Dec 2010	856.96
VOC	Aug 2008 – July 2010	16.24
PM	Dec 2009 – Nov 2011	383.17
PM <sub>10</sub>	Dec 2009 – Nov 2011	345.58
PM <sub>2.5</sub>	Dec 2009 – Nov 2011	302.27
H <sub>2</sub> SO <sub>4</sub>	Aug 2008 – July 2010	192.68
CO <sub>2</sub>	Aug 2008 – July 2010	3,316,701
Note: Appendix A contains detailed emissions calculations.		

The remaining step for determining the PAE then is to combine the projected annual heat input (equal to the baseline heat input) with the anticipated future emission factors. Anticipated emission factors in this case are equal to the baseline period average emission factors. Table 2-2 provides the project’s PAE.

Once the BAE (EE) and PAE values are determined, the next step is to perform the calculations to determine the projected emissions increase (PEI) to compare with the PSD Significant Emission Rates (SERs). Table 2-3 combines the data from the previous tables and makes the appropriate comparisons. As illustrated in the table, because the Unit 2 turbine upgrade will not lead to an increase in operation of the unit and/or increased fuel input, the BAE is equal to the PAE, and thus the PEI is non-existent (zero). Therefore, the proposed project will not cause a significant emissions increase, thus nullifying the requirement for major source PSD permitting.

**Table 2-2 Projected Actual Emissions**

POLLUTANT	PAE (TPY)
NO <sub>x</sub>	2,609.25
SO <sub>2</sub>	2,279.88
CO	856.96
VOC	16.24
PM	383.17
PM <sub>10</sub>	345.58
PM <sub>2.5</sub>	302.27
H <sub>2</sub> SO <sub>4</sub>	192.68
CO <sub>2</sub>	3,316,701
Note: Appendix A contains detailed emissions calculations.	

**Table 2-3 Projected Emissions to Baseline Emissions Comparison**

POLLUTANT	BAE (EE) (TPY)	PAE (TPY)	PROJECT EMISSIONS INCREASE (TPY)	PSD SER (TPY)	PSD MAJOR MODIFICATION (YES/NO)
NO <sub>x</sub>	2,609.25	2,609.25	0	40	No
SO <sub>2</sub>	2,279	2,279.88	0	40	No
CO	856.96	856.96	0	100	No
VOC	16.24	16.24	0	40	No
PM	383.17	383.17	0	25	No
PM <sub>10</sub>	345.58	345.58	0	15	No
PM <sub>2.5</sub>	302.27	302.27	0	10	No
H <sub>2</sub> SO <sub>4</sub>	192.68	192.68	0	7	No
CO <sub>2</sub>	3,316,701	3,316,701	0	75,000	No
Notes: Appendix A contains detailed emissions calculations.					

## 2.2 RECORD KEEPING REQUIREMENTS

Prior to beginning actual construction on a proposed project, a facility must record the following information:

- A description of the project;
- Identification of each affected emission unit;
- A description of the applicability test used; including,
  - The BAE;
  - The PAE;
  - The amount of EE;
  - The reason for excluding that amount; and,
  - Any netting calculations, if applicable.

With this application submittal, OUC is fulfilling this above information requirement.

After resuming normal operation following completion of the project, the PSD regulations require the facility to monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by any of the affected emission units. In addition, annual emissions, in tons per year, are required to be calculated at the end of each year following the date that normal operation resumes after completion of the project. These monitoring and emission calculation requirements shall continue for each year of the projection period.

### **2.3 REPORTING REQUIREMENTS**

It is important to note that per the FDEP and USEPA NSR reform rules, the PAE values in Table 2-3 should not be construed to be future annual permit limits. Rather, OUC's obligation going forward is to simply track and report emissions from Unit 2 60 days after the end of each year for the five years following completion of the project to demonstrate that the units did not experience a significant emissions increase over the baseline emissions which would indicate a potential for retroactive PSD permitting. That is, if the post-project actual emissions exceed the BAE by a significant amount *and* differ from (and presumably exceed) the PAE, then the project may be subject to PSD review, unless a legitimate reason is identified in the emissions report, such as the actual electrical demand growth exceeding the projected growth rate and the reported emissions increase is the result of that circumstance alone.



## **Appendix A**

# **Detailed Emissions Calculations**

OUC - SEC

Unit 2 Turbine Replacement Project

Table A1 Projected Emissions Increase Calculations for Unit 2

Market Demand Growth that is independent of project - Percent increase over the 10 years following the date the Unit resumes regular operation.	0.0%	None assumed for power generation
Market Demand Growth that is directly the result of the project - Percent increase over the 10 years following the date the Unit resumes regular operation.	0.0%	
Annual Project Related Capacity Increase (%)	0.0%	
Short-term Project Related Capacity Increase (%)	0.00%	
Pre-Project (Baseline Period) Maximum Permitted Heat Input (Mbtu/h)	4,800	Title V Air Operating Permit Heat Input for Unit 2 (4,800 MMBtu/hr)
Post-Project Maximum Heat Input (Mbtu/hr)	4,800	

	NOx		SO2		CO		VOC		PM		PM10		PM2.5		H2SO4		CO2	
	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy	Blended Fuel MBtu/yr	Emissions tpy
BAL - Average rate in tpy or actual emissions over any consecutive 24-month period within the 5-years immediately preceding actual construction of the project.	3.23E+07	2,609.25	3.23E+07	2,279.88	3.23E+07	856.96	3.23E+07	16.24	3.23E+07	383.17	3.23E+07	345.58	3.23E+07	302.27	3.23E+07	192.68	3.23E+07	3,316,701
PAE - The HI and initial projected emissions in any one 12-month period of the 10 years following the date the Unit resumes regular operation. Post-Project Period Capacity Factor	3.23E+07 76.88%	2,609.25	3.23E+07 76.88%	2,279.88	3.23E+07 76.88%	856.96	3.23E+07 76.88%	16.24	3.23E+07 76.88%	383.17	3.23E+07 76.88%	345.58	3.23E+07 76.88%	302.27	3.23E+07 76.88%	192.68	3.23E+07 76.88%	3,316,701
EE - The excludable HI and emissions that would have been emitted anyway without the modification.	3.23E+07	2,609.25	3.23E+07	2,279.88	3.23E+07	856.96	3.23E+07	16.24	3.23E+07	383.17	3.23E+07	345.58	3.23E+07	302.27	3.23E+07	192.68	3.23E+07	3,316,701
Projected Emission Increase = PAE minus the EE		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0
Significant Emission Level (tpy) Exceed SEL		40 NO		40 NO		100 NO		40 NO		25 NO		15 NO		10 NO		7 NO		75,000 NO

	Baseline Period Average Emissions (lb/Mbtu)	Post-Project Blended Fuel Emission <sup>1</sup> (lb/Mbtu)
NOx	0.1614	0.1614
SO2	0.1411	0.1411
CO	0.0530	0.0530
VOC	0.0010	0.0010
PM	0.0237	0.0237
PM10	0.0214	0.0214
PM2.5	0.0187	0.0187
H2SO4	0.0119	0.0119
CO2	205.20	205.20

1. The turbine blade upgrade is not expected to impact emissions.

OUC - SEC

Unit 2 Turbine Replacement Project

Table A2 BAE NSR Reform Method (Highest 24-months of the Most Recent 5 Years)

	Heat Input		NOx		SO2		CO		VOC		PM		PM10		PM2.5		H2SO4		CO2	
	Unit 2 Monthly Heat Input (mmBtu)	24-Mon Ann Rolling Avg. (mmBtu)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)	Unit 2 Monthly Emissions (tons)	24-Mon Ann Rolling Avg. (tons)
2008 Jan	2,550,485		231.54		223.53		21.85		1.46		23.32		22.53		19.25		17.23		235.93	
2008 Feb	2,353,962		192.88		183.21		23.50		1.69		20.67		18.35		14.07		14.07		241.518	
2008 Mar	1,239,624		113.50		96.81		12.37		0.62		10.88		9.66		8.26		7.41		127.185	
2008 Apr	0		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0	
2008 May	1,540,950		120.13		113.24		15.38		0.78		13.53		12.01		10.25		9.21		158.102	
2008 Jun	2,813,771		217.73		212.31		28.09		1.42		24.71		21.93		18.74		16.82		288.892	
2008 Jul	2,818,196		231.02		233.19		28.13		1.42		24.75		21.97		18.77		16.85		289.142	
2008 Aug	3,018,382		245.81		236.30		30.13		1.52		26.50		23.53		20.10		18.05		309.683	
2008 Sep	3,130,918		258.62		271.17		31.25		1.58		27.49		24.40		20.85		18.72		321.227	
2008 Oct	3,311,387		271.73		273.83		33.05		1.67		29.08		25.81		22.05		19.80		339.739	
2008 Nov	3,088,703		253.80		182.36		30.83		1.56		27.12		24.07		20.57		18.47		316.900	
2008 Dec	2,837,387		234.00		140.44		28.32		1.43		24.91		22.12		18.89		16.87		291.116	
2009 Jan	2,610,989		218.87		132.26		23.14		1.32		23.00		20.44		17.44		15.05		267.889	
2009 Feb	2,502,178		205.13		162.05		19.26		1.26		22.05		19.59		16.72		15.00		256.724	
2009 Mar	2,745,653		227.72		223.41		27.94		1.39		24.16		21.50		18.34		16.46		291.712	
2009 Apr	2,383,659		196.22		149.16		18.03		1.20		21.00		18.66		15.92		14.29		244.570	
2009 May	2,422,545		196.65		96.74		16.41		1.22		21.34		18.97		16.18		14.52		248.954	
2009 Jun	2,507,395		201.01		146.33		19.44		1.26		22.09		19.63		16.75		15.03		257.258	
2009 Jul	2,802,974		223.83		240.19		28.99		1.41		24.70		21.95		18.73		16.81		287.586	
2009 Aug	2,945,484		235.81		240.32		30.57		1.49		25.95		23.06		19.68		17.86		302.207	
2009 Sep	2,789,656		220.11		177.43		29.51		1.41		24.58		21.84		18.64		16.73		286.218	
2009 Oct	1,70,809		14.04		11.50		6.09		0.09		1.50		1.34		1.14		1.02		17.525	
2009 Nov	2,344,777		189.47		166.42		18.64		1.18		20.66		18.36		15.66		14.06		240.574	
2009 Dec	2,930,372	29,100,113	233.85	2,374.62	230.93	2,089.12	104.53	664.97	1.48	14.67	23.82	256.95	22.94	19.58	164.10	17.57	174.23	300,656	2,985,669	
2010 Jan	2,850,912	29,100,127	230.54	2,371.92	269.29	2,109.45	83.07	687.08	1.44	14.66	37.25	261.89	33.50	29.19	199.08	17.94	174.11	296,567	2,985,670	
2010 Feb	2,600,869	29,223,680	206.45	2,377.81	160.61	2,066.10	99.75	899.71	1.29	14.72	33.52	268.31	30.15	23.72	204.38	15.33	174.74	256,848	2,998,336	
2010 Mar	2,930,878	30,089,207	223.83	2,432.87	142.63	2,121.01	63.95	724.49	1.46	15.13	37.77	281.76	33.97	250.88	295.59	215.03	170.67	300,708	3,085,097	
2010 Apr	2,685,967	31,411,890	225.54	2,545.64	208.90	2,225.45	58.59	753.79	1.34	15.80	34.61	299.06	31.13	269.44	27.11	228.58	15.83	187.59	275,520	3,222,857
2010 May	2,961,085	32,121,968	231.11	2,601.14	213.58	2,275.63	64.61	778.40	1.47	16.15	38.18	311.38	34.32	277.59	29.90	238.49	17.46	191.71	303,807	3,295,710
2010 Jun	2,978,697	32,204,421	230.55	2,607.55	220.82	2,279.88	64.99	796.86	1.48	16.18	38.39	316.22	34.52	283.89	30.08	244.07	17.56	192.08	305,615	3,304,172
2010 Jul	3,062,388	32,326,537	234.44	2,609.26	228.87	2,275.71	66.82	816.20	1.52	16.24	39.47	325.58	36.49	290.66	30.92	250.15	18.05	192.68	314,201	3,316,701
2010 Aug	2,657,395	32,146,043	205.57	2,599.13	165.86	2,261.49	57.98	830.13	1.32	16.14	34.25	329.45	30.80	294.29	26.83	253.52	15.67	191.49	272,647	3,296,183
2010 Sep	2,583,498	31,872,313	199.91	2,559.78	101.68	2,166.74	56.37	842.68	1.29	15.89	33.30	332.35	29.94	297.66	26.09	256.13	15.23	189.74	265,068	3,270,104
2010 Oct	429,989	30,431,634	33.22	2,440.52	21.55	2,040.80	9.38	830.85	0.21	15.26	5.54	320.59	4.98	286.65	4.34	247.28	2.53	181.11	44,115	3,122,203
2010 Nov	2,396,423	30,085,494	185.53	2,406.39	168.83	2,033.83	52.29	841.58	1.19	15.08	26.88	322.47	27.78	285.50	24.20	249.09	14.13	178.94	245,873	3,086,779
2010 Dec	2,707,757	30,020,679	210.75	2,394.77	161.06	2,044.14	59.06	858.96	1.35	15.04	34.90	327.46	31.38	293.13	27.34	253.32	15.96	178.44	277,814	3,080,128
2011 Jan	2,493,738	29,962,054	181.74	2,381.30	133.60	2,044.81	66.68	843.73	1.30	15.04	35.99	333.95	32.60	299.21	28.70	258.94	15.40	178.31	255,857	3,074,113
2011 Feb	2,055,023	29,743,476	159.11	2,358.29	86.95	1,991.77	55.22	820.71	1.08	14.94	29.80	337.83	28.98	302.91	23.76	262.47	12.75	177.18	211,870	3,051,685
2011 Mar	2,075,214	29,498,256	158.72	2,323.79	45.17	1,902.65	55.49	805.48	1.09	14.79	29.95	340.71	27.13	305.73	23.88	265.23	12.81	175.36	212,919	3,017,289
2011 Apr	2,225,490	29,329,127	171.75	2,311.56	47.57	1,851.86	59.51	792.72	1.16	14.78	32.11	346.26	29.09	310.94	25.81	270.08	13.74	175.09	228,325	3,009,166
2011 May	2,285,613	29,260,691	176.77	2,301.62	71.97	1,838.47	60.58	778.80	1.19	14.76	32.69	351.94	29.61	316.28	26.07	275.02	13.99	174.82	232,450	3,001,115
2011 Jun	2,351,069	29,172,497	184.37	2,293.30	77.72	1,805.17	62.88	766.52	1.23	14.74	33.63	357.65	30.73	321.81	27.05	280.17	14.52	174.56	241,220	2,993,095
2011 Jul	2,698,599	29,105,288	207.58	2,285.16	87.13	1,728.64	71.35	752.20	1.40	14.73	38.51	364.78	34.88	328.28	30.71	286.16	16.48	174.40	273,703	2,986,199
2011 Aug	2,672,262	28,968,676	206.64	2,270.57	112.42	1,664.69	71.45	735.39	1.40	14.69	38.56	371.97	34.93	334.21	30.75	291.70	16.50	173.62	274,174	2,972,182
2011 Sep	1,932,230	28,940,213	48.42	2,179.73	42.26	1,597.10	24.94	698.11	0.49	14.23	13.46	365.51	12.19	329.39	10.73	287.75	5.76	168.34	95,698	2,876,922
2011 Oct	1,578,106	28,743,862	119.49	2,232.45	66.82	1,624.78	42.20	716.18	0.83	14.60	22.77	376.14	20.63	330.03	18.16	296.26	9.74	172.70	181,912	2,849,115
2011 Nov	2,406,474	28,774,710	184.05	2,229.74	123.16	1,603.13	64.35	708.51	1.26	14.64	34.73	383.17	31.48	345.58	27.69	302.27	14.86	173.10	246,904	2,952,280
2011 Dec	1,102,580	27,860,815	66.92	2,155.88	39.89	1,507.61	29.48	668.99	0.68	14.18	16.91	378.23	14.41	341.31	12.69	298.82	6.81	167.72	113,125	2,858,515
2012 Jan	1,299,125	27,065,121	96.49	2,089.88	45.76	1,395.84	19.63	647.27	0.83	13.88	19.32	369.25	17.74	333.43	15.93	292.20	9.56	163.97	133,291	2,776,877
2012 Feb	1,427,891	26,478,532	110.46	2,041.86	91.89	1,361.53	29.38	633.59	0.86	13.66	20.31	362.65	18.65	327.69	16.74	287.43	10.05	161.33	146,481	2,776,694
2012 Mar	1,721,152	25,673,671	133.23	1,996.60	102.88	1,341.66	22.74	612.98	0.91	13.39	21.64	364.36	19.87	320.64	17.84	281.56	10.72	158.05	176,591	2,654,635
2012 Apr	1,790,794	25,426,284	136.84	1,952.31	92.57	1,283.49	41.83	604.60	0.94	13.19	21.69	348.13	19.92	315.04	17.88	278.94	16.73	155.50	183,734	2,608,742
2012 May	1,905,937	24,898,810	145.73	1,909.82	88.73	1,221.36	35.73	590.16	0.97	12.94	22.69	340.30	20.84	308.30	18.71	271.34	11.22	152.38	185,550	2,554,613
2012 Jun	2,211,971	24,515,447	166.85	1,877.77	92.43	1,156.87	41.49	578.41	1.16	12.77	27.17	334.78	24.96	303.51	22.40	267.50	13.43	150.32	226,948	2,515,279
2012 Jul	2,579,440	24,273,972	199.48	1,860.29	137.45	1,112.16	40.90	565.45	1.28	12.85	30.02	330.05	27.57	299.54	24.75	264.42	14.84	148.71	264,650	2,480,504
2012 Aug	2,413,888	24,152,207	186.32	1,850.67	124.84	1,081.65	61.18	567.05	1.13	12.96	26.67	326.26	24.50	296.39	21.99	262.00	13.18	147.47	247,662	2,478,011
2012 Sep	1,102,295	23,411,586	66.08	1,783.25	42.26	1,091.95	21.90	549.82	0.65	12.24	15.35	317.29	14.0							

## **Appendix B**

### **Application Forms**



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

**RECEIVED**

MAR 25 2013

DIVISION OF AIR RESOURCE MANAGEMENT

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: Orlando Utilities Commission	
2. Site Name: Stanton Energy Center	
3. Facility Identification Number: 0950137	
4. Facility Location... Street Address or Other Locator: 5100 South Alafaya Trail City: Orlando County: Orange Zip Code: 32831	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: Michael Kyhos, Senior Environmental Engineer, Environmental Affairs	
2. Application Contact Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802	
3. Application Contact Telephone Numbers... Telephone: (407) 434 - 3036 ext. Fax: (407) 244 - 8794	
4. Application Contact E-mail Address: mkyhos@ouc.com	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application: 3-25-13	3. PSD Number (if applicable):
2. Project Number(s): 0950137-041-AC	4. Siting Number (if applicable):

## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is being submitted to obtain: (Check one)**

#### **Air Construction Permit**

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

#### **Air Operation Permit**

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

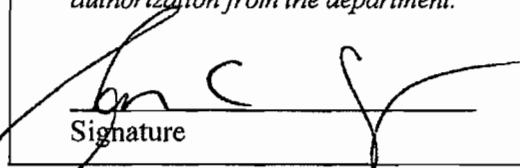
### Application Comment



**APPLICATION INFORMATION**

**Owner/Authorized Representative Statement**

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

1. Owner/Authorized Representative Name : Jan C. Aspuru, VP, Power Resources
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Orlando Utilities Commission Street Address: P.O. Box 3193 City: Orlando State: FL Zip Code: 32802
3. Owner/Authorized Representative Telephone Numbers... Telephone: (407) 434 - 3135 ext. Fax: (407) 275 - 4120
4. Owner/Authorized Representative E-mail Address: jaspuru@ouc.com
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>   Signature  3/21/13 Date



## APPLICATION INFORMATION

### Application Responsible Official Certification

**Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”**

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
5. Application Responsible Official E-mail Address:

## APPLICATION INFORMATION

### 6. Application Responsible Official Certification:


I, the undersigned, am a responsible official of the Title V source 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 applicable requirements identified in this application to which the Title V source 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. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: Larry Todd Newland Registration Number: 64188
2. Professional Engineer Mailing Address... Organization/Firm: Black & Veatch Street Address: 9000 Regency Parkway, Suite 300 City: Cary State: NC Zip Code:27518
3. Professional Engineer Telephone Numbers... Telephone: (919) 462 -7415 ext. Fax: (919) 468 - 9212
4. Professional Engineer E-mail Address: newlandt@bv.com
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>  <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               Signature              (seal)         </div> <div style="text-align: center;"> <u>3-14-2013</u>              Date         </div> </div>

\* Attach any exception to certification statement.



## 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 type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

## FACILITY INFORMATION

### List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
SO2	A	N
CO	A	N
NOX	A	N
PM	A	N
VOC	A	N
PM10	A	N
PB	A	N



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION

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

1.	Facility Plot 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 checked="" type="checkbox"/> Attached, Document ID: <u>Attach A</u> <input type="checkbox"/> Previously Submitted, Date: _____
2.	Process Flow Diagram(s): (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: <u>Attach B</u> <input type="checkbox"/> Previously Submitted, Date: _____
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (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: <u>Attach C</u> <input type="checkbox"/> Previously Submitted, Date: _____

#### Additional Requirements for Air Construction Permit Applications

1.	Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach D</u>
3.	Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach E</u>
4.	List of Exempt Emissions Units: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach F</u> <input type="checkbox"/> Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attach G</u> <input type="checkbox"/> Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable



**FACILITY INFORMATION**

**C. FACILITY ADDITIONAL INFORMATION (CONTINUED)**

**Additional Requirements for FESOP Applications**

- |   |
|---|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

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

- |   |
|---|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (revision application) |
|---|

- |   |
|---|
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements) |
|---|

- |  |
|--|
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input type="checkbox"/> Attached, Document ID: _____<br>Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
|--|

- |  |
|--|
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input type="checkbox"/> Not Applicable |
|--|

- |   |
|---|
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
|---|

- |  |
|--|
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable |
|--|

**FACILITY INFORMATION**

**C. FACILITY ADDITIONAL INFORMATION (CONTINUED)**

**Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program**

1. Acid Rain Program Forms: Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>5/21/2009</u> <input type="checkbox"/> Not Applicable (not an Acid Rain source) Phase II NO <sub>x</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
2. CAIR Part (DEP Form No. 62-210.900(1)(b)): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>5/21/2009</u> <input type="checkbox"/> Not Applicable (not a CAIR source)

**Additional Requirements Comment**

## EMISSIONS UNIT INFORMATION

Section [1] of [1]

### 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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes 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 [1] of [1]

**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:  
Fossil Fuel Fired Steam Electric Generator Unit No. 2 (460 MW gross)

3. Emissions Unit Identification Number: 2

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: 29-MAR-96	7. Emissions Unit Major Group SIC Code: 49
-------------------------------------	--------------------------------	---------------------------------------	---

8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

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

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

**Emissions Unit Control Equipment/Method:** Control 1\_ of 1\_

- |  |
|--|
| 1. Control Equipment/Method Description:<br>Electrostatic Precipitator – High Efficiency |
| 2. Control Device or Method Code:010   |

**Emissions Unit Control Equipment/Method:** Control 2\_ of 2\_

- |   |
|---|
| 1. Control Equipment/Method Description:<br>SCR (Selective Catalytic Reduction) |
| 2. Control Device or Method Code:139  |

**Emissions Unit Control Equipment/Method:** Control 3\_ of 3\_

- |  |
|--|
| 1. Control Equipment/Method Description:<br>Wet Scrubber Flue Gas Desulfurization (WFGD) |
| 2. Control Device or Method Code:013   |

**Emissions Unit Control Equipment/Method:** Control 4\_ of 4\_

- |   |
|---|
| 1. Control Equipment/Method Description:<br>Low NO <sub>x</sub> Burner/Overfire Air |
| 2. Control Device or Method Code:205/204  |

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

**B. EMISSIONS UNIT CAPACITY INFORMATION**

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

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: 4,800 MMBtu/hr
2. Maximum Production Rate: 465 MW
3. Maximum Heat Input Rate: 4,800 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 8,760 hours/year
6. Operating Capacity/Schedule Comment:

**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

**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:		2. Emission Point Type Code: 1	
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:	6. Stack Height: 550 feet	7. Exit Diameter: 19 feet	
8. Exit Temperature: 124°F	9. Actual Volumetric Flow Rate: 1,310,120 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 484 North (km): 3150.5		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) 28° 28' 57" N Longitude (DD/MM/SS) 81° 9' 54" W	
15. Emission Point Comment:			

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

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

**Segment Description and Rate:** Segment 1 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100202		3. SCC Units: Tons Bituminous Coal Burned
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:		

**Segment Description and Rate:** Segment 2 of 5

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100401		3. SCC Units: 1000 Gallons Residual Oil (No. 6) Burned
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 [1] of [1]

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

**Segment Description and Rate:** Segment 3\_ of 5\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100701		3. SCC Units: Million Cubic Feet Process Gas Burned
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:		

**Segment Description and Rate:** Segment 4\_ of 5\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10101302		3. SCC Units: 1000 Gallons Waste Oil Burned
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: Used oil specification: Arsenic 5 PPM, Cadmium 2 PPM, Chromium 10 PPM, Lead 100 PPM, Total Halogens 1000 PPM, PCB 50 ppm.		

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

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

**Segment Description and Rate:** Segment 5\_ of 5\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC): 10100601		3. SCC Units: Million Cubic Feet Gas Burned
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:		

**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:		



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS  
 (Optional for unregulated emissions units.)**

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: CO – Carbon Monoxide		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 643 lb/hour		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.15 lb/mmBtu Reference: Existing Permit Limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

**Complete Subsection F2 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.15 lb/MBtu          643 lb/hr	4. Equivalent Allowable Emissions: lb/hour
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):	

**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):	



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

**Complete Subsection F2 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.17 lb/mmBtu Heat Input	4. Equivalent Allowable Emissions: 816 lb/hour      3574.08 tons/year
5. Method of Compliance: CEMS	
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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**

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

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: PB – Lead – Total (elemental lead and lead compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.64 lb/hour (Permit Limit)	4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: $1.5 \times 10^{-4}$ lb/mmBtu Reference: Existing Permit Limit	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	



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

**Complete Subsection F2 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.5 x 10 <sup>-4</sup> lb/mmBtu	4. Equivalent Allowable Emissions: 0.64 lb/hr
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

**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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
 (Optional for unregulated emissions units.)

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: PM - Particulate Matter - Total		2. Total Percent Efficiency of Control: 99.4	
3. Potential Emissions: 85.7 lb/hour (Permit Limit)		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.02 lb/mmBtu Reference: Existing Permit Limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			

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

**Complete Subsection F2 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.02 lb/mmBtu heat input	4. Equivalent Allowable Emissions: 85.7 lb/hr
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

**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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
 (Optional for unregulated emissions units.)

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: PM10 - Particulate Matter – PM10		2. Total Percent Efficiency of Control: 99.4	
3. Potential Emissions: 85.7 lb/hour		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.02 lb/mmBtu Reference: Existing Permit Limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Assume PM10 emissions are the same as PM.			

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

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**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):	

**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):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
 (Optional for unregulated emissions units.)

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 3463 lb/hr                      5256 tpy		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.85 lb/mmBtu (3hour average) 0.25 lb/mmBtu (30 day rolling average) Reference: Existing Permit Limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                      To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: $(4800 \text{ mmBtu/hr}) \times (0.85 \text{ lb/mmBtu}) = 4080 \text{ lb/hr}$ $(4800 \text{ mmBtu/hr}) \times (0.25 \text{ lb/mmBtu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 5256 \text{ tpy}$			
11. Potential, Fugitive, and Actual Emissions Comment: Assume PM10 emissions are the same as PM.			

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

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1\_ of 3\_\_

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.85 lb/mmBtu (3 hour)	4. Equivalent Allowable Emissions: 4080 lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

**Allowable Emissions** Allowable Emissions 2\_ of 3\_\_

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.67 lb/mmBtu (24 hour)	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Allowable emissions value is an existing permit limit.	

**Allowable Emissions** Allowable Emissions 3\_ of 3\_\_

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.25 lb/mmBtu (30 day rolling average)	4. Equivalent Allowable Emissions: lb/hour                      5256 tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
 (Optional for unregulated emissions units.)

**Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: VOC – Volatile Organic Compounds		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 64 lb/hr		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.015 lb/mmBtu  Reference: Existing Permit Limit		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment: Assume PM10 emissions are the same as PM.			



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

**Complete Subsection F2 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: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.015 lb/mmBtu Heat Input	4. Equivalent Allowable Emissions: 64 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):	

**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 [1] of [1]

**G. VISIBLE EMISSIONS INFORMATION**

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

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

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27% Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**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 [1] of [1]

**H. CONTINUOUS MONITOR INFORMATION**

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

**Continuous Monitoring System:** Continuous Monitor 1\_\_ of 8\_\_

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: MONITOR LABS Model Number: 9850 Serial Number: 593	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor 2\_\_ of 8\_\_

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML41 Serial Number: S/N 131	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	



**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

**H. CONTINUOUS MONITOR INFORMATION (CONTINUED)****Continuous Monitoring System:** Continuous Monitor 5\_\_ of 8\_\_

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: EMRC Model Number: EMRC-DP1 Serial Number: S/N 461	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor 6\_\_ of 8\_\_

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML 9850 Serial Number: S/N 615	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

**H. CONTINUOUS MONITOR INFORMATION (CONTINUED)**

**Continuous Monitoring System:** Continuous Monitor 7\_\_ of 8\_\_

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: 9820 Serial Number: S/N 175	
5. Installation Date:	6. Performance Specification Test Date: 29-JUL-96
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor 8\_\_ of 8\_\_

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Teledyne Monitor Labs Model Number: TML 30 Serial Number: S/N 151	
5. Installation Date:	6. Performance Specification Test Date: 10/21/2008
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

**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: <u>Attach B</u> <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: <u>Attach H</u> <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: <u>Attach I</u> <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 checked="" type="checkbox"/> Attached, Document ID: <u>Attach J</u> <input type="checkbox"/> Previously Submitted, Date _____ <input 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:

Attached, Document ID: \_\_\_\_\_  Not Applicable





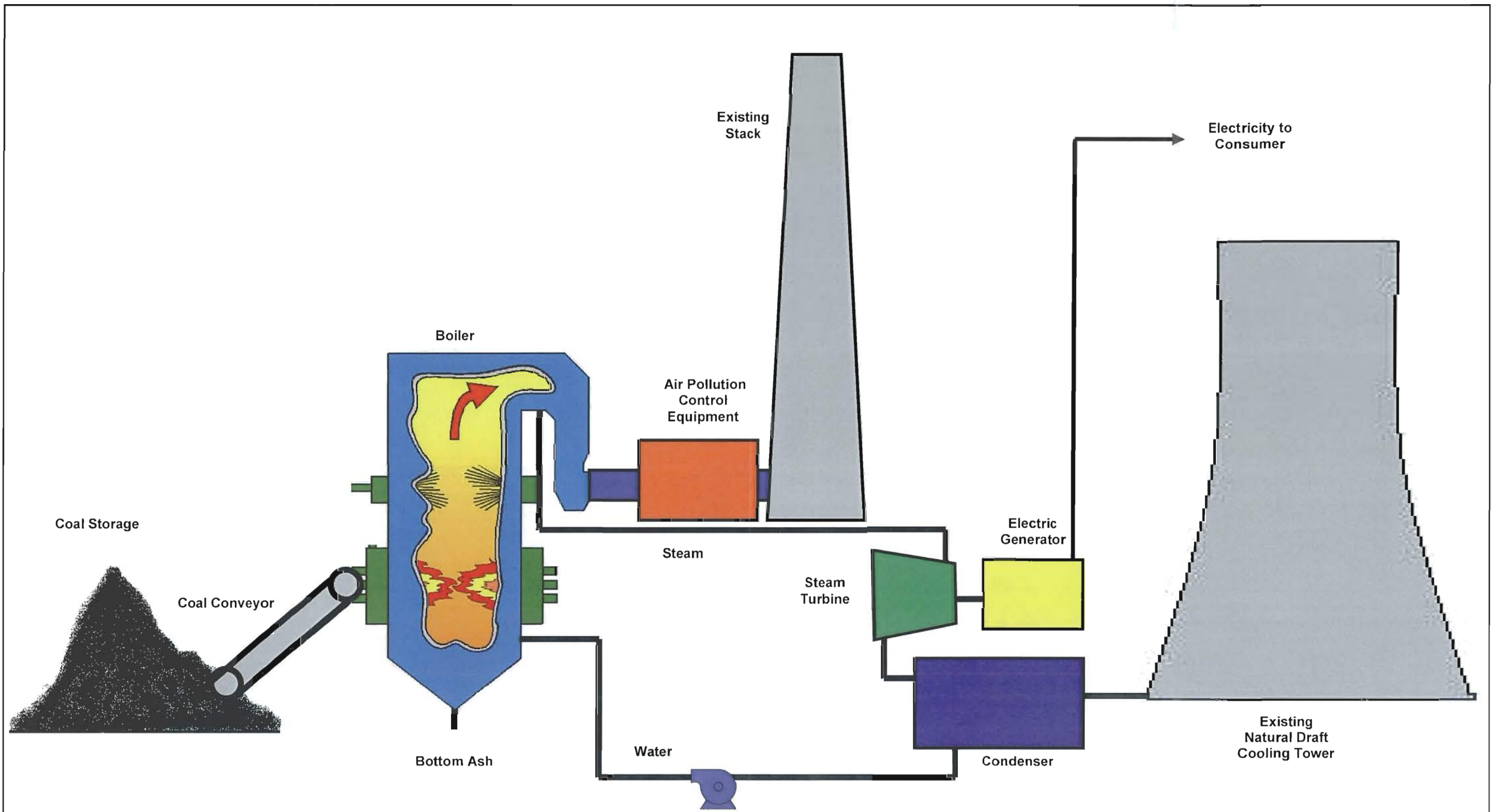
**Attachment A**

**Facility Plot Plan**



## **Attachment B**

### **Process Flow Diagram**



Simplified Process Flow Diagram for a Coal-Fired Power Plant

## **Attachment C**

### **Precautions to Prevent Emissions of Unconfined Particulate Matter**

## **Precautions to Prevent Emissions of Unconfined Particulate Matter**

This project will not create new sources of unconfined particulate matter nor alter OUC's previous commitments to the prevention of unconfined particulate matter.

## **Attachment D**

### **Description of Proposed Construction or Modification**



## **Description of Proposed Construction or Modification**

Orlando Utilities Commission (OUC) is proposing to replace the existing high pressure and intermediate pressure (HP/IP) portions of Stanton Energy Center's (SEC) Unit 2 turbine with improved technology. The turbine replacement will increase the efficiency of Unit 2, providing an increase in power generation capability without increasing fuel consumption or annual generation potential. Additional information can be found in the Section 1.0 of the application support document.

## **Attachment E**

### **Rule Applicability Analysis**

## **Rule Applicability Analysis**

The following rule applicability analysis is limited to the rules associated with the proposed facility changes and does not encompass overall facility rule applicability. Overall facility applicable requirements were identified in the latest Title V permit application.

### **Rule Applicability Analysis for the Facility Changes**

State: Rule 62-4.070 – *Standards for Issuing or Denying Permits.*

State: Rule 62-210.300 – *Permits Required.*

State: Rule 62-212.300 – *General Preconstruction Review Requirements.*

## **Attachment F**

### **List of Exempt Emission Units**

## **List of Exempt Emission Units**

This application does not affect the existing list of exempt emission units at this facility.

## **Attachment G**

### **Fugitive Emissions Identification**

## **Fugitive Emissions Identification**

This project does not contain any new fugitive emissions sources for the facility.

## **Attachment H**

### **Fuel Analysis or Specification**



## **Fuel Analysis or Specification**

The primary fuel for Unit 1 and Unit 2 is coal. This permit application will not change the primary or secondary fuels the units are capable of firing. Secondary fuels for these units include natural gas and landfill gas.

## **Attachment I**

### **Detailed Description of Control Equipment**

## **Detailed Description of Control Equipment**

There is no new control equipment associated with this installation.

**Attachment J**

**Operation and Maintenance Plan**

## **Operation and Maintenance Plan**

The facility equipment will be operated and maintained in accordance with manufacturer's recommendations, operations and maintenance experience, and technical guidance taking into account protection of equipment, safety of personnel and other factors as deemed necessary to maintain compliance with the permitted limits.