EV 000331

March 31, 2000

RECEIVED

APR 0 3 2000

BUREAU OF AIR REGULATION

st. johns river POWER PARK

Mr. Wayne Tutt
Regulatory and Environmental Services Department
Air and Water Quality Division
City Hall at St. James Building
117 W. Duval St., Suite 225
Jacksonville, FL 32202

RE: St. Johns River Power Park (SJRPP)
Permit No. 0310045-001-AV
U#2 Startup Emissions Report

Dear Mr. Tutt,

Pursuant to discussions with your person, below is listed the excess emissions for the SJRPP Unit #2 startup event of March 29-30, 2000. As we discussed, these emissions are representative of a coal-fired unit startup based upon required operational activities.

Startup Key	**H** = Hot (<24 hrs) **W** = Warm (>24<120 hrs) **C** = Cold (>120 hrs)	**SNO** = Short Notice Outage **LTO** = Long Term Outage	Exc. Time in minutes Value is **% OP** OR **lbs/MMBtu SO2/NOx** **BOLD = Daily Duration**

DATE	EVENT/ PARAMETER	FIRE TIME IN	FIRE TIME OUT	EVENT TIME START	EVENT TIME STOP	PARAMETER EXC. TIME	PARAMETER VALUE	COMMENTS
								SO2 = 2 hrs.
								OP = 3 hrs., 30 mins.
03/29/00	Startup/C Opacity	0213	0252	0230	0242	18	80	
		0304	0312					
		0336	0340					
		0356	0403					
		0410	0412					
		0430	0831					Precipitator in-service @0500 (low pwr)
		0844						"F" Pulverizer in-service @ 1836
								"F" Pulverizer out-of-service @ 1944
								OP 18 minutes
03/30/00	SO_2			0000	0100	60	1.656	"F" Pulverizer in-service @ 0015
				0100	0200	60	1.098	"C" FGD Tower in-service @ 0241
								Bypass Damper closed @0247
								SO_2 1 hr.

These excess emissions shall be included on the 40 CFR Part 60, Subpart Da, Air Emissions Data Assessment Report for this facility at the end of the quarter.

Please contact me at (904) 665-8797 if you have any questions or comments.

Sincerely,

Mark K. Loechelt
Environmental Production Assurance Leader

xc: S. Pace, RESD
S. Arif, FDEP
E. Frey, FDEP
H. Oven, FDEP

EV 000323

March 23, 2000

RECEIVED

MAR 28 2000

BUREAU OF AIR REGULATION

st. johns river POWER PARK

Mr. Wayne Tutt
Regulatory and Environmental Services Department
Air and Water Quality Division
City Hall at St. James Building
117 W. Duval St., Suite 225
Jacksonville, FL 32202

RE: St. Johns River Power Park (SJRPP)
Permit No. 0310045-001-AV
U#1 Shutdown/Startup Emissions Report

Dear Mr. Tutt,

Pursuant to discussions with your person, below is listed the excess emissions for the SJRPP Unit #1 shutdown/startup event of March 18-19, 2000. As we discussed, these emissions are representative of a coal-fired unit shutdown based upon required operational activities.

Startup Key	**H** = Hot (<24 hrs) **W** = Warm (>24<120 hrs) **C** = Cold (>120 hrs)		**SNO** = Short Notice Outage **LTO** = Long Term Outage		Exc. Time in minutes Value is **% OP** OR **lbs/MMBtu SO2/NOx** **BOLD = Daily Duration**		
DATE	**EVENT/ PARAMETER**	**FIRE TIME IN**	**OUT**	**EVENT TIME START**	**STOP**	**PARAMETER EXC. TIME**	**VALUE**	**COMMENTS**
								SO2 = 2 hrs. **OP = 3 hrs., 30 mins.**
03/18/00	Shutdwn		2322					
	Opacity	2330		2330	2354	30	80	**OP = 30 mins.**
03/19/00	Startup/H Opacity			0000	0818	504	80	"A" Pulv in-service @ 0725 Precipitators in-service @ 0821 "A" FGD Tower in-service @0835 Bypass damper closed @0841
			1018					
		1033						**Note: Power loss to CEM due Unit trip CEM O/S 1036-1530 PLC error - No data available** "A" Pulv in-service @ 1109 Precipitators in-service @ 01130 "A" FGD Tower in-service @ 1212 Bypass damper closed @ 1216 **OP = 8 hrs., 24 mins.**

These excess emissions shall be included on the 40 CFR Part 60, Subpart Da, Air Emissions Data Assessment Report for this facility at the end of the quarter.

Please contact me at (904) 665-8797 if you have any questions or comments.

Sincerely,

Mark K. Loechelt
Environmental Production Assurance Leader

xc: S. Pace, RESD
S. Arif, FDEP
E. Frey, FDEP
H. Oven, FDEP

EV 000307

RECEIVED

MAR 14 2000

BUREAU OF AIR REGULATION

March 7, 2000

Mr. Wayne Tutt
Regulatory and Environmental Services Department
Air and Water Quality Division
City Hall at St. James Building
117 W. Duval St., Suite 225
Jacksonville, FL 32202

RE: St. Johns River Power Park (SJRPP)
Permit No. 0310045-001-AV
U#2 Shutdown Emissions Report

PSD - FL- 010C

Dear Mr. Tutt,

Pursuant to discussions with your person, below is listed the excess emissions for the SJRPP Unit #2 shutdown event of March 3, 2000. As we discussed, these emissions are representative of a coal-fired unit shutdown based upon required operational activities.

Startup Key	**H** = Hot (<24 hrs) **W** = Warm (>24<120 hrs) **C** = Cold (>120 hrs)	**SNO** = Short Notice Outage **LTO** = Long Term Outage	Exc. Time in minutes Value is **% OP** OR **lbs/MMBtu SO2/NOx** **BOLD = Daily Duration**

DATE	EVENT/ PARAMETER	FIRE TIME IN	FIRE TIME OUT	EVENT TIME START	EVENT TIME STOP	PARAMETER EXC. TIME	PARAMETER VALUE	COMMENTS
03/03/00	Shutdown							Overspeed trip checks
	Opacity			2324	2354	36	80	**OP 36 min.**
								"A" FGD Tower out-of-service @ 2315
								Bypass Damper Opened @ 2315
								Precipitator off-service @2316
								"B" Pulverizer out-of-service @2317
03/04/00	Opacity		0031	0000	0024	30	80	"F" Pulverizer out-of-service @ 0024
								OP 30 min

These excess emissions shall be included on the 40 CFR Part 60, Subpart Da, Air Emissions Data Assessment Report for this facility at the end of the quarter.

Please contact me at (904) 665-8797 if you have any questions or comments.

Sincerely,

Mark K. Loechelt

Mark K. Loechelt
Environmental Production Assurance Leader

xc: S. Pace, RESD
S. Arif, FDEP
E. Frey, FDEP
H. Oven, FDEP

CERTIFIED MAIL

EV 000229

February 29, 2000

Mr. Hamilton Oven, P.E.
Administrator, Power Plant Siting
Florida Dept. of Environmental Protection
2600 Blair Stone Rd.
Mail Station 48
Tallahassee, FL 32399-2400

RE: St. Johns River Power Park (SJRPP)
Jacksonville Electric Authority (JEA)
Conditions of Certification PA 81-13
Emissions of Carbon Monoxide (CO)
Compliance Certification

Dear Mr. Oven:

Pursuant to Specific Condition I.A.2.h. of the above referenced Conditions, the permittee shall maintain and submit to the Department on a semi-annual basis for a period of two years from the date the unit is initially fired with petroleum coke, and then on an annual basis (if the first two years of data show no significant increase in carbon monoxide emissions) for an additional three years, information demonstrating that the operational changes did not result in an emission increase of carbon monoxide. The carbon monoxide emissions shall be based on test results using EPA Method 10. Additionally, quarterly continuous emission monitoring data for carbon monoxide emissions shall be submitted to the Department for a period of two years to show the range of emissions experienced during each quarter.

Please find attached the analysis results, as prepared by Kennard Kosky, P.E. (Golder Associates), comparing baseline emissions when firing coal (1997 CEMS) and for the for the petroleum coke and coal co-fining emissions (1997-1999 EPA Method 10). The 1997-1999 emission rates for CO were similar to the baseline emissions of coal only, which would confirm that significant net increase in emissions did not result from co-firing petroleum coke and coal. Therefore, SJRPP Units 1 & 2 have complied with the above referenced Specific Condition.

Please contact me at (904)665-8729 if you have any questions or require any additional information regarding this request.

Sincerely,

Jay Worley
Group Leader,
Air & Water Quality Production

Enclosure: CO 1999 Compliance Certification

xc: E. Frey, (FDEP)
A. Linero, (FDEP)
W. Tutt, (RESD)
S. Pace, (RESD)

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603

St. Johns River Power Park (SJRPP); Jacksonville Electric Authority
PSD-FL-010(B); PA 81-13; Final Title V Permit 0310045-002-AV
Co-Firing of Petroleum Coke
Emissions of Carbon Monoxide
1999 Compliance Certification

This certification addresses the requirements of Specific Conditions 3.B. of the Prevention of the Significant Deterioration (PSD) permit and Specific Condition D.69. of the Title V permit regarding the increase of emissions when co-firing petroleum coke and coal. As required by Specific Conditions 3.B. and D.69., information must be submitted semi-annually for a period of two years from the date each unit begins co-firing petroleum coke with coal, demonstrating that operational changes did not result in significant emissions increase of Carbon Monoxide (CO). The information must be submitted to the Florida Department of Environmental Protection (FDEP) and City of Jacksonville Regulatory and Environmental Services Department [Air and Water Quality Division (AWQD)]. Additionally, quarterly continuous emission monitoring (CEM) data must be submitted to the FDEP and RESD for a period of two years to show the range of emissions. After two years, if the data show no significant increase in CO emissions, the information must be submitted annually. The CO emissions must be based on test results using EPA Method 10.

In accordance with 40 CFR 52.21 (b)(21)(v) and (b)(33) and 40 CFR 52.21 (b) (33), for an electric steam generating unit the emissions resulting from increased utilization due to electric demand is not included in calculating any emissions increase. Since SJRPP Units 1 and 2 are base load units and their operation is not affected by co-firing petroleum coke and coal, the appropriate comparison is the emissions rates when co-firing petroleum coke with coal and firing coal only.

The initial CO tests conducted during the 1995 initial co-firing of petroleum coke with coal was confounded by the lack of fine tuning the combustion process. Due to this observation, the FDEP included both compliance tests using EPA Method 10 and CEM data in the PSD permit. For the latter, the data taken over two years demonstrated that the CO emissions did not increase.

The most appropriate baseline CO data were determined using CEMs during a period of 1997 when Units 1 and 2 were firing coal. The average CO emission rates during this period were 0.303 lb/mmBtu for Unit 1 and 0.122 lb/mmBtu. The average was 0.213 lb/mmBtu. (See Table 1.)

CO emissions tests using EPA Method 10 were conducted during the two-year period (1997-98) while co-firing petroleum coke with coal. These results are presented in Table 1 and show that the average emissions from the tests were 0.077 lb/mmBtu for 1997 and 0.105 lb/mmBtu for 1998. The tests performed in 1999 averaged 0.1035 lb/mmBtu, which was similar to the results obtained in 1998. Taken together the EPA Method 10 tests performed for coal and co-firing petroleum coke with coal, and the previous CEM comparisons, CO emissions from co-firing petroleum coke with coal are not significantly different from firing coal only. The EPA Method 10 data indicate that there has not been an increase CO emissions as a result of co-firing petroleum coke with coal.

Kennard F. Kosky, P.E.
Principal
Florida Professional Engineer License No. 14996
February 25, 2000

SEAL

Table 1. Summary of Test Data for CO with CEMs and EPA Method 10

Fuel	Date	Unit	CO (lb/mmBtu)
Coal-CEMs	1997	1	0.303
	1997	2	0.122
		Average:	0.213
Coal/Pet Coke	6/4/97	1	0.067
	6/5/97	2	0.114
	11/3/97	1	0.035
	11/4/97	2	0.093
	5/19/98	1	0.278
	5/20/98	2	0.095
	10/12/98	1	0.013
	10/13/98	2	0.032
	6/2/99	1	0.048
	6/3/99	2	0.01
	10/15-18/99	1	0.266
	10/16/99	2	0.09
		Average Unit 1:	0.118
		Average Unit 2:	0.072
		Average Both Units:	0.095
		Average 1997:	0.077
		Average 1998:	0.105
		Average 1999:	0.1035

EV 000218

st. johns river POWER PARK

February 18, 2000

Mr. Wayne Tutt
Regulatory and Environmental Services Department
Air and Water Quality Division
City Hall at St. James Building
117 W. Duval St., Suite 225
Jacksonville, FL 32202

RE: St. Johns River Power Park (SJRPP)
Permit No. 0310045-001-AV
U#1 Startup Emissions Report

PSD-FL-010

Dear Mr. Tutt,

Pursuant to discussions with your person, below is listed the excess emissions for the SJRPP Unit #1 startup event of February 15 – 16, 2000. As we discussed, these emissions are representative of a coal-fired unit startup based upon required operational activities.

Startup Key **H** = Hot (<24 hrs), **W** = Warm (>24<120 hrs), **C** = Cold (>120 hrs); **SNO** = Short Notice Outage, **LTO** = Long Term Outage; Exc. Time in minutes; Value is **% OP** OR **lbs/MMBtu SO2/NOx**; **BOLD = Daily Duration**

DATE	EVENT/ PARAMETER		FIRE TIME IN	FIRE TIME OUT	EVENT TIME START	EVENT TIME STOP	PARAMETER EXC. TIME	PARAMETER VALUE	COMMENTS
02/15/00	Startup/W	Opacity	2034	2128	2036	2118	48	80	
		Opacity	2149	2223	2154	2212	24	80	
		Opacity	2231		2236	2354	84	80	**OP = 2 hrs., 36 mins.**
02/16/00		Opacity			0000	0324	210	80	Precipitators in-service @ 0330
		SO_2			0200	0200		1.216	"A" Pulv in-service @ 0144
		SO_2			0300	0300	60	1.665	**SO2 = 1 hr.**
		SO_2			0400	0400	60	0.907	**SO2 = 1 hr.**
									"A" FGD Tower in-service @ 0340
									Bypass damper closed @ 0340
									SO2 = 2 hrs.
									OP = 3 hrs., 30 mins.

These excess emissions shall be included on the 40 CFR Part 60, Subpart Da, Air Emissions Data Assessment Report for this facility at the end of the quarter.

Please contact me at (904) 665-8797 if you have any questions or comments.

Sincerely,

Mark K. Loechelt

Mark K. Loechelt
Environmental Production Assurance Leader

xc: S. Pace, RESD
S. Arif, FDEP
E. Frey, FDEP
H. Oven, FDEP