

CERTIFIED MAIL

EV 010227

February 27, 2001

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



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BUREAU OF AIR REGULATION

RE: JEA/St. Johns River Power Park (SJRPP)
Conditions of Certification PA 81-13
PSD Permit No. PSD-FL-010(D)
Title V Permit No. 0310045-002-AV
Emissions of Carbon Monoxide (CO)
Compliance Certification

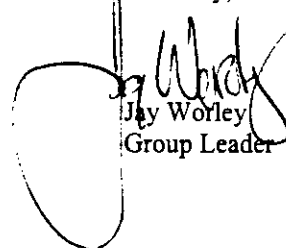
Dear Mr. Oven:

Pursuant to Specific Condition I.A.2.h. of the COC permit, Specific Condition 3.B. of the PSD permit, and Specific Condition D.69 of the Title V permit, 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-firing emissions (1997-2000 EPA Method 10). The 1997-2000 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

Enclosure: CO 2000 Compliance Certification

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

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**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
2000 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.

EPA Method 10 was obtained for Unit 1 firing coal only in 1996 and in 1997. These data indicated an average CO emission rate of 0.138 lb/mmBtu (see Table CO-1). The most comprehensive 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.

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 CO-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.

For the Year 2000, the average CO emission rate was 0.1073 lb/mmBtu for Units 1 and 2. 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 23, 2001



SEAL

Table CO-1. Summary of Test Data through the Year 2000 for CO Using EPA Method 10

Fuel	Date	Unit	CO (lb/mmBtu)
Coal	11/27/96	1	0.089
	1/30/1997-2/3/97	1	0.187
		Average:	0.138
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
	6/1/00	1	0.043
	6/2/00	2	0.027
	10/18/00	1	0.068
	12/18/00	2	0.291
		Average Unit 1:	
	Average Unit 2:		0.0940
	Average Both Units:		0.0981
	Average 1997:		0.0773
	Average 1998:		0.1045
	Average 1999:		0.1035
	Average 2000:		0.1073

Note: CEM Data when firing coal only observed CO emission rates in 1997 of 0.303 lb/mmBtu for Unit 1 and 0.122 lb/mmBtu for Unit 2. The average was 0.213 lb/mmBtu.