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SOURCE EMISSIONS SURVEY
OF
ARKANSAS POWER AND LIGHT
WHITE BLUFF STEAM ELECTRIC STATION
UNIT NUMBER 2 STACK
REDFIELD, ARKANSAS
FOR
ENTERGY

JUNE 1995

FILE NUMBER 95-142WB2T5

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INTRODUCTION

METCO Environmental, Dallas, Texas, conducted a source emissions survey of Arkansas Power and Light, White Bluff Steam Electric Station, located in Redfield, Arkansas, for Entergy, on June 21, 1995. The purpose of these tests was to determine the concentrations of particulate matter, carbon monoxide, and total hydrocarbons being emitted to the atmosphere via the Unit Number 2 Stack.

The sampling followed the procedures set forth in the Appendix to the Code of Federal Regulations, Title 40, Chapter I, Part 60, Methods 1, 2, 3A, 3B, 4, 5, 10, and 25A.

SUMMARY OF RESULTS

Unit Number 2 Stack

Run Number	Particulate Matter Emissions (gr/dscf*)	Particulate Matter Emissions (lbs/hr)	Carbon Monoxide Emissions (ppm)	Carbon Monoxide Emissions (lbs/hr)	Total Hydrocarbons Emissions as Propane (ppm)	Total Hydrocarbons Emissions as Propane (lbs/hr)
1	0.0224	326.02	133.7	989.61	< 0.6	< 6.98
2	0.0237	335.29	96.2	693.63	< 0.6	< 6.80
3	0.0207	296.31	183.4	1,334.32	< 0.6	< 6.86
Average	0.0223	319.21	137.8	1,005.85	< 0.6	< 6.88

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

SUMMARY OF RESULTS

Unit Number 2 Stack

Run Number	1	2	3
Date	06/21/95	06/21/95	06/21/95
Time	0836-0957	1038-1201	1239-1401
Stack Flow Rate - ACFM	2,870,134	2,918,478	2,886,385
Stack Flow Rate - DSCFM*	1,696,163	1,652,301	1,667,228
% Water Vapor - % Vol.	11.29	13.16	12.12
% CO_2 - % Vol.	14.4	14.2	14.4
% O_2 - % Vol. (orsat)	5.2	5.4	5.2
% O_2 - % Vol. (monitor)	5.3	5.3	5.4
% Excess Air @ Sampling Point	32	34	32
Stack Temperature -°F	311	327	321
Stack Pressure - "Hg	29.00	28.97	28.98
Percent Isokinetic	97.4	104.4	102.6
Particulate Matter Emissions			
Probe & Filter Catch			
grains/dscf*	0.0095	0.0123	0.0043
grains/cf @ Stack Conditions	0.0056	0.0069	0.0025
lbs/hr	138.31	173.79	61.89
Total Catch			
grains/dscf*	0.0224	0.0237	0.0207
grains/cf @ Stack Conditions	0.0132	0.0134	0.0119
lbs/hr	326.02	335.29	296.31

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

SUMMARY OF RESULTS

Unit Number 2 Stack

Run Number	1	2	3
Carbon Monoxide Emissions - ppm	133.7	96.2	183.4
Carbon Monoxide Emissions - lbs/hr	989.61	693.63	1,334.32
Total Hydrocarbons Emissions as Propane - wet ppm	< 0.5	< 0.5	< 0.5
Total Hydrocarbons Emissions as Propane - dry ppm	< 0.6	< 0.6	< 0.6
Total Hydrocarbons Emissions as Propane - lbs/hr	< 6.98	< 6.80	< 6.86