

DRAFT

FLORIDA POWER AND LIGHT COMPANY  
 ENGINEERING AND TECHNICAL SERVICES  
 700 UNIVERSE BLVD.  
 JUNO BEACH, FLORIDA 33408

**NOx LBS/MMBTU RELATIVE ACCURACY**

PLANT: SANFORD  
 UNIT: CT 5-C STACK  
 LOAD: NORMAL - 162 MW  
 DATE: 5/25/2005

ANALYZER: TECO 42-CLS  
 SERIAL # 77998-387

RUN	TIME START	TIME END	REFERENCE METHOD (lb/mmBTU)	CEM RESPONSE (lb/mmBTU)	ARITHMETIC DIFFERENCE	DIFFERENCE SQUARED
1	06:06	06:28	0.032	0.025	0.007	0.000049
2	06:30	06:52	0.032	0.025	0.007	0.000049
3	06:54	07:16	0.032	0.025	0.007	0.000049
4	07:26	07:48	0.030	0.025	0.005	0.000025
5	07:50	08:12	0.031	0.025	0.006	0.000036
6	08:14	08:36	0.031	0.025	0.006	0.000036
7	08:50	09:12	0.031	0.025	0.006	0.000036
8	09:14	09:36	0.031	0.026	0.005	0.000025
9	09:38	10:00	0.032	0.025	0.007	0.000049
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			0.031	0.025	0.056	0.000354

\*\*MEAN DIFFERENCE,  $\bar{d}$  (Eq. A-7) 0.006222  
 \*\*STANDARD DEVIATION,  $S_d$  (Eq. A-8) 0.000833  
 \*\*CONFIDENCE COEFFICIENT,  $|CC|$  (Eq. A-9) 0.000641

\*\*PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10) 21.902

OR

\*\*\*RELATIVE ACCURACY + or - 0.015 LB/MMBTU OF THE REFERENCE VALUE 0.006

\*\*CALCULATED BIAS ADJUSTMENT FACTOR, BAF (Eq. A-12) 1.248

\*\*APPLIED BIAS ADJUSTMENT FACTOR, BAF (LOW EMITTER) 1.111

\*\* 40 CFR 75, Appendix A, 7.6.5

\*\*\* 40 CFR 75, Appendix B, 2.3.1.2 (e & f)

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FLORIDA POWER & LIGHT CO.  
SANFORD CT-5C

LOAD: 163 MW  
FUEL: 100 % GAS  
DATE: 5/25/2005  
RUN 1

AVG. ADJUSTED CO ppmvd @ 15% O2	1.33
CORRECTED O2	13.87
CORRECTED CO2	4.23
CORRECTED CO ppmvd	1.52

CALIBRATION ERROR, SYSTEM BIAS AND SYSTEM DRIFT DATA

SPAN SETTING	CAL GASES	TANK VALUE	ANALYZER DIFFERENCE			ANALYZER PRETEST		ANALYZER POSTTEST		% DRIFT	ANALYZER SERIAL #
			VALUE	PPM	% SPAN	VALUE	% SPAN	VALUE	% SPAN		
25	% O2	0.00	0.00	0.0	0.0	0.00	0.0	0.03	0.1	0.1	01420B/701/856
		13.83	13.80	0.0	-0.1	13.80	0.0	13.80	0.0	0.0	
		22.38	22.20	-0.2	-0.7						
10	% CO2	0.00	0.00	0.0	0.0	0.02	0.2	0.05	0.5	0.3	01415c1245
		4.506	4.50	0.0	-0.1	4.50	0.0	4.50	0.0	0.0	
		9.065	9.10	0.0	0.4						
10	PPM CO	0.00	0.00	0.0	0.0	0.00	0.0	0.00	0.0	0.0	30091510951
		2.950	2.95	0.0	0.0	2.95	0.0	2.95	0.0	0.0	
		5.655	5.65	0.0	0.0						

UNCORRECTED REFERENCE DATA

DATE / TIME	O2 %	CO2 %	CO PPM
5/25/2005 6:06	13.83	4.22	1.46
5/25/2005 6:08	13.83	4.22	1.46
5/25/2005 6:10	13.84	4.23	1.49
5/25/2005 6:12	13.84	4.23	1.51
5/25/2005 6:14	13.84	4.23	1.51
5/25/2005 6:16	13.84	4.23	1.53
5/25/2005 6:18	13.84	4.22	1.52
5/25/2005 6:20	13.84	4.22	1.59
5/25/2005 6:22	13.83	4.23	1.54
5/25/2005 6:24	13.83	4.23	1.58
5/25/2005 6:26	13.84	4.23	1.57
5/25/2005 6:28	13.84	4.23	1.55
5/25/2005 6:30	13.84	4.23	1.54
5/25/2005 6:32	13.84	4.23	1.58
5/25/2005 6:34	13.84	4.23	1.58
5/25/2005 6:36	13.84	4.23	1.60
5/25/2005 6:38	13.84	4.23	1.58
5/25/2005 6:40	13.84	4.23	1.60
5/25/2005 6:42	13.84	4.23	1.64
5/25/2005 6:44	13.84	4.23	1.57
5/25/2005 6:46	13.84	4.23	1.58
5/25/2005 6:48	13.84	4.23	1.60
5/25/2005 6:50	13.84	4.23	1.59
5/25/2005 6:52	13.85	4.23	1.65
5/25/2005 6:54	13.85	4.22	1.67
5/25/2005 6:56	13.86	4.22	1.69
5/25/2005 6:58	13.86	4.22	1.69
5/25/2005 7:00	13.85	4.23	1.65
5/25/2005 7:02	13.85	4.22	1.67
5/25/2005 7:04	13.86	4.22	1.66
5/25/2005 7:06	13.86	4.22	1.65

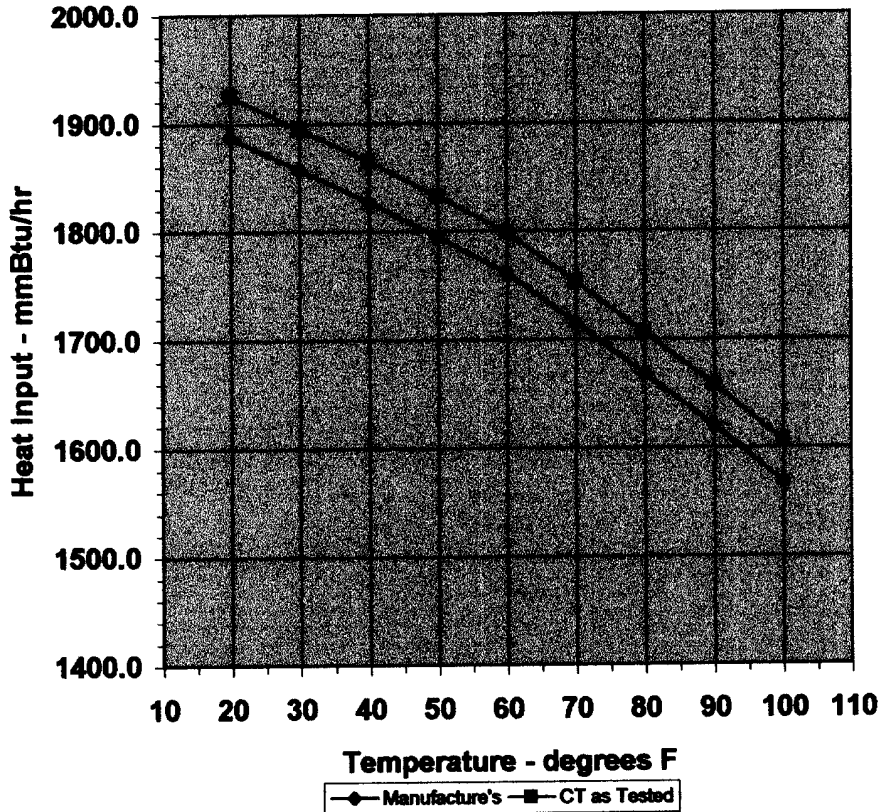
MEAN ANALYZER VALUES

% O2	13.84
% CO2	4.22
Avg. CO ppmvd	1.58

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UNIT: PSR 5C TEST DATE: 5-25-05

### Sanford CT's - Heat Input vs. Ambient Temperature



Series 1 Data = Manufacture's specification

Series 2 Data = CT as Tested

Base Load Data		
Temp.(F)	MF - H.I.	Test - H.I.
20	1887.4	1925.0
30	1856.9	1894.5
40	1827.3	1864.9
50	1794.5	1832.1
60	1761.0	1798.6
70	1715.1	1752.7
80	1667.7	1705.3
90	1619.6	1657.2
100	1568.1	1605.7

Actual Test Conditions	
Ambient temp. (F)	71
Heat Input for test	1755

Tested Capacity (%) 102.2

slope of line 5.15  
 MF Heat Input at ambient temp. 1717.45  
 Difference Test vs. MF -37.55