

TABLE V. RELATIVE ACCURACY TEST AUDIT
Southern Power
Stanton Energy Center Combined Cycle Unit 26 (AS)
6/22/2006
Pounds per Million Btu (O2 F Factor)

USE	TEST	START TIME Military	STOP TIME Military	Reference Method Nitrogen Oxides Emissions (O2 F factor) (Lbs/MMbtu)	Pollutant Monitor Nitrogen Oxides Emissions (O2 F factor) (Lbs/MMbtu)	Difference
y	1	3:15	3:36	0.0104	0.011	-0.001
y	2	3:46	4:07	0.0103	0.010	0.000
y	3	4:20	4:41	0.0104	0.010	0.000
y	4	4:58	5:19	0.0103	0.010	0.000
y	5	5:31	5:52	0.0105	0.011	-0.001
y	6	6:04	6:25	0.0106	0.011	0.000
y	7	6:36	6:57	0.0105	0.010	0.001
y	8	7:08	7:29	0.0105	0.011	-0.001
y	9	7:38	7:59	0.0105	0.010	0.000

$$\text{Average Difference} = \bar{d} = \frac{1}{N} \sum_{i=1}^N d_i = 0.0000$$

$$\text{Reference Method Average} = \bar{RM} = \frac{1}{N} \sum_{i=1}^N RM_i = 0.010$$

$$\text{Pollutant Monitor Average} = PR_{\text{ave}} = \frac{1}{N} \sum_{i=1}^N PR_i = 0.010$$

$$\text{Standard Deviation} = S_d = \sqrt{\frac{1}{N-1} \left\{ \sum_{i=1}^n d_i^2 - n\bar{d}^2 \right\}} = 0.0005$$

$$\text{Confidence Coefficient} = |cc| = t_{0.975} \frac{S_d}{\sqrt{N}} = 0.0004$$

$$\text{Relative Accuracy} = \frac{|\bar{d}| + |cc|}{\bar{RM}} \times 100 = 3.74$$

Allowable = 10

TABLE V. RELATIVE ACCURACY TEST AUDIT
Southern Power
Stanton Energy Center Combined Cycle Unit 25 (AN)
6/22/2006
Pounds per Million Btu (O₂ F Factor)

USE	TEST	START TIME Military	STOP TIME Military	Reference Method Nitrogen Oxides Emissions (O ₂ F factor) (Lbs/MMbtu)	Pollutant Monitor Nitrogen Oxides Emissions (O ₂ F factor) (Lbs/MMbtu)	Difference
y	1	3:15	3:36	0.0102	0.010	0.000
y	2	3:46	4:07	0.0102	0.010	0.000
y	3	4:20	4:41	0.0101	0.010	0.000
y	4	4:58	5:19	0.0098	0.010	0.000
y	5	5:31	5:52	0.0098	0.010	0.000
y	6	6:04	6:25	0.0100	0.010	0.000
y	7	6:36	6:57	0.0099	0.010	0.000
y	8	7:08	7:29	0.0104	0.010	0.000
y	9	7:38	7:59	0.0100	0.010	0.000

$$\text{Average Difference} = \bar{d} = \frac{1}{N} \sum_{i=1}^N d_i = 0.0000$$

$$\text{Reference Method Average} = \bar{RM} = \frac{1}{N} \sum_{i=1}^N RM_i = 0.0100$$

$$\text{Pollutant Monitor Average} = PR_{ave} = \frac{1}{N} \sum_{i=1}^N PR_i = 0.0100$$

$$\text{Standard Deviation} = S_d = \sqrt{\frac{1}{N-1} \left\{ \sum_{i=1}^n d_i^2 - n\bar{d}^2 \right\}} = 0.0002$$

$$\text{Confidence Coefficient} = |cc| = t_{0.975} \frac{S_d}{\sqrt{N}} = 0.0001$$

$$\text{Relative Accuracy} = \frac{|\bar{d}| + |cc|}{\bar{RM}} \times 100 = 1.78.$$

Allowable = 10