CUSTOM INSTRUMENTATION SERVICES CORPORATION

CISCO

CERTIFICATION REPORT
UNIT 3A
UNIT 3B
UNIT 3C
CONTINUOUS EMISSION MONITORING SYSTEM

WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA

PREPARED FOR: FLORIDA POWER AND LIGHT COMPANY

PREPARED BY: CUSTOM INSTRUMENTATION SERVICES CORPORATION

REV. 0
DATE: April 26, 2011

COPY NO ____

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Florida Power & Light Company
West County Energy Center

WCPP Project 161354

FEDERAL EXPRESS

April 27, 2011

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AIR REGULATION

Elizabeth Walker
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Div of Air Resource Mgmt
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Enclosed:

CEMS Certification Report

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Florida Power & Light Company
West County Energy Center – Unit 3
Permit No. – PSD-FL-396
DEP File No. – 0990646-002-AC

WCPP Project 161354
WCPP Files 14.0100/32.0440/76.0705
WCPP3-2011-TP-357
April 26, 2011
E-mail, Express Mail

Ms. Elizabeth Walker
Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399-2400

Subject: **Emissions Performance Test Reports – West County Energy Center Unit 3**

Dear Ms. Walker:

On behalf of Florida Power & Light Company (FPL) and its Designated Representative, Sheila M. Wilkinson, the West County Power Partners, LLC (WCPP), EPC Contractor for construction of the new combined cycle generating Unit 3 at the FPL West County Energy Center, is submitting the Emissions Performance Test Reports per the requirements of 40 CFR Part 60 and West County's Air Permit, Records and Reports, #31 (Permit No. PSD-FL-396).

If you have any questions about this notification or the attachment, please contact Terry Apple at (913) 458-7220 or John Rachal at (561) 784-8048.

Very truly yours,

WEST COUNTY POWER PARTNERS, LLC

/For

Mike Perkins
Project Executive

WS:hs

enclosure: 1 hard copy, 1 CD

cc: w/enclosures as indicated:
Dave McNeal, USEPA Air, Pesticides and Toxics Management, w/1 hard copy, 1 CD
Carlos Martinez, USEPA Clean Air Markets Division
Leigh Pell, FDEP Air Resource Management
Lennon Anderson, FDEP Southeast District, w/1 hard copy, 1 CD
Lee Hoefert, FDEP Southeast District
Mike Halpin, FDEP Division of Air Resources Management, Director
Cindy Mulkey, FDEP Siting, Program Administrator
Syed Arif, FDEP, Administrator

Kimberly Ousdahl, ACF/JB
Sheila M. Wilkinson, FPL Designated Representative
Laxmana Tallam, PBC Health Department, w/1 CD
Jim Stormer, PBC Health Department
Tom Tittle, PBC Health Department
Tom Young, FPL Construction Project General Manager
Carine Bullock, FPL Plant General Manager
David Fawcett, FPL West County Environmental Leader, w/1 hard copy, 1 CD
Rachel Godino, FPL Environmental Project Manager
Audrey Rotrock, FPL Environmental Services, w/1 hard copy, 5 CD's
Robert Bennett, FPL Project Engineer
Mike Perkins, WCPP Project Executive
John Rachal, WCPP Senior Project Manger
Greg Hines, WCPP Site Environmental Manager
Terry Apple, WCPP Project Manager/ Project File, w/1 CD
William Stevenson, WCPP Environmental Specialist, w/1 CD

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West County Energy Center – Unit 3
Permit No. – PSD-FL-396
DEP File No. – 0990646-002-AC

WCPP Project 161354
WCPP Files 14.0100/32.0440
WCPP3-2011-TP-358
April 27, 2011

E-mail, Express Mail

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AIR REGULATION

Mr. David McNeal
Air, Pesticides, and Toxics Management Division
USEPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960

Subject: **CEMS Certification Report – West County Energy Center Unit 3**

Dear Mr. McNeal:

On behalf of Florida Power & Light Company (FPL) and its Designated Representative, Sheila M. Wilkinson, the West County Power Partners, LLC (WCPP), EPC Contractor for construction of the new combined cycle generating Unit 3 at the FPL West County Energy Center, is submitting the CEMS Certification Report per the requirements of 40 CFR Part 75.

If you have any questions about this notification or the attachment, please contact Terry Apple at (913) 458-7220 or John Rachal at (561) 784-8048.

Very truly yours,

WEST COUNTY POWER PARTNERS, LLC

Terry R. Apple

for Mike Perkins
Project Executive

WS:hs

enclosure: 1 hard copy, 1 CD

cc: w/enclosures as indicated:
Elizabeth Walker, FDEP Air Resource Management, w/1 hard copy, 1 CD
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CUSTOM INSTRUMENTATION
SERVICES CORPORATION

CERTIFICATION REPORT
UNIT 3A
CONTINUOUS EMISSION MONITORING SYSTEM

WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA

PREPARED FOR: FLORIDA POWER AND LIGHT COMPANY

PREPARED BY: CUSTOM INSTRUMENTATION SERVICES CORPORATION

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TABLE OF CONTENTS

1. INTRODUCTION

The West County Energy Center is a nominal 3,750 megawatt (MW) power plant located in Loxahatchee, Florida. Three nominal 1,250 MW gas-fired combined cycle units use ultralow sulfur (ULS) fuel oil as backup fuel. Each combined cycle unit consists of three nominal 250 MW Model 501G gas turbines with three supplementary-fired heat recovery steam generators (HRSG) and a common 500 MW steam-electric generator. Exhaust gases from each turbine are discharged into the atmosphere through stacks approximately 150 feet above grade. A dedicated CEMS monitors emissions from each unit.

Custom Instrumentation Services Corporation of Centennial, Colorado built the Continuous Emission Monitoring Systems (CEMS). This report provides information on the certification of the CEMS measuring emissions from Unit 3A. Data from the CEMS is recorded and stored on a Data Acquisition System.

The CEMS on the combustion turbines have been designed to meet the monitoring and reporting requirements of Florida Department of Environmental Protection (FDEP) and USEPA as required by 40 CFR 60 and 40 CFR 75. This report presents the results of testing on the NO_x, CO and O_2 analyzers on Unit 3A. The testing was performed to meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4/4a for CO and 40 CFR 75, Appendix A for NO_x and O_2.

Field certification testing on the CEMS occurred in February and March 2011. The tests conducted on the CEMS included Relative Accuracy, Bias Check, Calibration Error, Linearity, Cylinder Gas Audit and Cycle Time. The results of all tests are summarized in Table 1. A printout of the certification results generated by the EPA Emission Collection and Monitoring Plan System (ECMPS) is included in Appendix 2.

Air Hygiene conducted Relative Accuracy Testing for NO_x, CO and O_2. Ten runs were completed Unit 3A. The results of the RA tests are in the Air Hygiene test report. As shown, the Relative Accuracy calculations on the analyzers were within the EPA and FDEP requirements for all parameters. A detailed description of the RA testing is provided in Section 2.1 and in the Air Hygiene test report in Appendix 1.

A bias check evaluation was made on the NO_x lb/mmBtu relative accuracy results as required in 40 CFR 75. Unit 3A did exhibit bias and a bias adjustment factor is required. The bias test results are discussed in Section 2.2. Supporting data is provided in the relative accuracy tables in the Air Hygiene test report.

The calibration error and calibration drift tests occurred over seven consecutive operating days. The results of the analyzer drift tests are summarized in Table 1. As shown, the analyzers operated well within the applicable EPA requirements. An explanation of the drift test is provided in Section 2.3 and supporting documentation is provided in Appendix 3.

Linearity tests on the high range of the NO_x analyzer and on the O_2 analyzer are a requirement of 40 CFR 75. Cycle Time tests on the NO_x analyzer and the O_2 analyzer are

also a requirement of 40 CFR 75. The tests took place on March 18, 2011. Cylinder Gas Audits and a cycle time test on the CO analyzer also took place on March 18, 2011. The results of the tests are summarized in Table 1. As shown, the analyzers operated well within EPA requirements for all parameters. An explanation of the linearity and CGA tests is provided in Section 2.4. Summary tables and audit reports for the linearity and CGA tests are provided in Appendix 4. An explanation of the cycle time test is provided in Section 2.5. Supporting documents for the cycle time tests are provided in Appendix 5.

A formula verification was performed on the Data Acquisition and Handling System. The DAHS passed all the tests required by EPA. The DAHS test is described in Section 3 and supporting documents are provided in Appendix 7.

A complete 40 CFR 75 Monitoring Plan is included in Appendix 8 and the gas fuel meter certification documentation is provided in Appendix 9.

In summary, the CEMS on Unit 3A at West County Energy Center provides reliable data and operates within the requirements of the EPA as outlined in 40 CFR 60, Appendix B, Performance Specifications 2, 3, 4/4a and 40 CFR 75, Appendix A and meet the requirements of the FDEP for CEMS.

Table 1 WEST COUNTY ENERGY CENTER UNIT 3A

SUMMARY OF CEMS CERTIFICATION RESULTS

	RESULTS	STANDARD	PASS / FAIL
	RELATIVE ACCURACY		
NO_x lb/mmBtu	0.001 lb/mmBtu	0.015 lb/mmBtu *	PASS
CO ppm @15% O_2	0.1 ppm	5 ppm MD	PASS
CO lb/hr	0.1 ppm	5 ppm MD	PASS
	40 CFR 75 BIAS TEST		
Adjustment Factor	1.111	NA	BAF Required
	7-DAY CALIBRATION ERROR NO_x High		
NO_x High (Zero)	0.1% of span	2.5% of span	PASS
NO_x High (Span)	0.7% of span	2.5% of span	PASS
	7-DAY CALIBRATION ERROR O_2		
O_2 % (Zero)	0.1 % O_2	0.5% O_2	PASS
O_2 % (Span)	0.1 % O_2	0.5% O_2	PASS
	7-DAY CALIBRATION DRIFT CO Low		
CO Low (Zero)	2.0% of span	5.0% of span	PASS
CO Low (Span)	2.0% of span	5.0% of span	PASS
	7-DAY CALIBRATION DRIFT CO High		
CO High (Zero)	0.2% of span	5.0% of span	PASS
CO High (Span)	2.1% of span	5.0% of span	PASS
	LINEARITY		
NO_x High Range	2.6%	5% LE	PASS
O_2 %	0.3%	5% LE	PASS
	CYLINDER GAS AUDIT		
CO Low Range	8.0%	15% CGA Error	PASS
CO High Range	11.4%	15% CGA Error	PASS
	CYCLE TIME		
NO_x lb/mmBtu	3 Minutes	15 Minutes	PASS
CO Low Range	87 Seconds	90 Seconds	PASS
ANALYZER SERIAL NUMBERS			
NO_x		0934838567	
CO		CM09400112	
O_2		01440DIVO2/4246	

WHERE: RA = RELATIVE ACCURACY RESULTS BASED ON DIFFERENCE FROM MEAN REFERENCE METHOD VALUE
* = RATA RESULTS REQUIRED FOR ANNUAL RATA FREQUENCY FOR 40 CFR 75
MD = MEAN DIFFERENCE BETWEEN RM AND CEMS PLUS THE 2.5 % CONFIDENCE COEFFICIENT
DRIFT AND LINEARITY RESULTS ARE THE HIGHEST ENCOUNTERED DURING ALL TESTS

2. CEMS CERTIFICATION

Field tests and DAHS tests were performed for CEMS certification in accordance with the criteria in 40 CFR 60, Appendix B, 40 CFR 75, Appendix A, and 40 CFR 75.20. The results for all tests were determined from the data collected by the DAHS. The computer printouts for each field test are included in the Appendices.

2.1 RELATIVE ACCURACY

The relative accuracy test audit (RATA) was performed on March 16 and 17, 2011. Each test run was a minimum of 21 minutes in duration and consisted of sampling for NO_x, CO and O_2. The times during which the tests were performed are shown in the Air Hygiene test report in Appendix 1.

The reference methods used by Air Hygiene are outlined below:

CONSTITUENT	METHOD
O_2	EPA METHOD 3A
CO	EPA METHOD 10
NO_x	EPA METHOD 7E

As shown in the Relative Accuracy (RA) tables in the Air Hygiene test report, relative accuracy is reported as an error and is the sum of the absolute mean value of the differences between the reference method tests and the instrument readings, plus the 95 percent confidence interval of the differences, expressed as a percentage of the mean reference method value. As an alternative, 40 CFR 75 allows low NO_x emitters (less than 0.20 lb/mmBtu) to express relative accuracy as the difference between the average reference method value and the average CEMS value.

CO results are acceptable if the RA does not exceed 10%, if the average difference between the CEMS and reference method values plus the 2.5 percent confidence coefficient does not exceed 5.0 ppm, or if the alternative relative accuracy (ARA) does not exceed 5%.

The analyzer response was determined from the average of readings taken every minute for the duration of the time the relative accuracy tests were performed. The raw value reports from the CEMS are included in the Air Hygiene test report.

The NO_x and O_2 analyzers passed the relative accuracy requirements as stated in 40 CFR 75, Appendix A and the NO_x systems (NO_x and O_2 analyzer) qualify for annual RATA frequency under 40 CFR 75. The NO_x systems had relative accuracy results significantly less than 0.015 lb/mmBtu. The CO analyzers passed the relative accuracy requirements as stated in 40 CFR 60, Appendix B, PS 4/4a.

2.2 BIAS CHECK

The relative accuracy result for NO_x lb/mmBtu on Unit 3A was checked for low bias by determining if the mean difference between the test team's values and the CEMS values is greater than the absolute value of the confidence coefficient. The CEMS on Unit 3A did exhibit bias and a bias adjustment factor is required.

2.3 CALIBRATION ERROR/CALIBRATION DRIFT

The 7-day calibration error test on both ranges of the CO analyzer and the high ranges of the NO_x and O_2 analyzers occurred on seven consecutive days when the unit was operating at normal load. No adjustments were made to any of the analyzers during the seven day period. The calibration gases used for the calibration error test were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

The NO_x, CO and O_2 data from calibrations occurring over seven days are provided in Appendix 3. As shown, the calibration error for all analyzers was well within EPA requirements.

2.4 LINEARITY/CGA

The NO_x high range and O_2 linearity tests and the CO Cylinder Gas Audits (CGA) were performed on March 18, 2011. To perform the linearity test, the analyzers were challenged three times with each of three levels of calibration gas (low, mid and high). To perform the CGA, both ranges of the CO analyzer were challenged three times with each of two levels of calibration gas (low and mid).

The mean difference between the analyzer response and the calibration gas value, as a percentage of the calibration gas value, must be within 5% for linearity tests and within 15% for CGA. Results are also acceptable if the difference between the mean response and the calibration gas is within 5 ppm for NO_x and CO or 0.5% O_2. The linearity results for Unit 3A were within the requirements of 40 CFR 75, Appendix A and the CGA results met requirements of 40 CFR 60, Appendix F.

Summaries of the linearity and CGA test results are provided in tables in Appendix 4. The calibration gases used for the tests were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

2.5 CYCLE TIME/RESPONSE TIME

The cycle time tests were performed on March 18, 2011. To perform the test, both ranges of the NO_x analyzer and the O_2 analyzer were challenged with a zero gas and high level (80 to 100% of span) calibration gas. Both the upscale and down scale response times were determined. As stated in 40 CFR 75, Appendix A, the response time to reach 95% of

the gas value must be less than 15 minutes. For the NO_x system (NO_x and O_2 analyzer), the longer of the two analyzers response times is the response time for the system.

The response time test on the low range of the CO was performed on March 18, 2011. As stated in 40 CFR 60, Appendix B, PS 4a, the three averaged upscale and downscale response times must be less than or equal to 90 seconds. The system response times met this requirement for Unit 3A. Reports that show the analyzers response are provided in Appendix 5.

3. DAHS VERIFICATION

Each of the missing data routines and calculations performed by the DAHS was verified. All variables included in the calculations (bias adjustment factor, fuel inputs) were included. The formula verification and associated printouts are included in Appendix 7.

4. DISCUSSION OF RESULTS

The CEMS and DAHS on Unit 3A at West County Energy Center successfully met all the requirements of the EPA as outlined in 40 CFR 60 and 40 CFR 75. The certification data has been entered in the format specified by EPA for 40 CFR 75 and a printout of the results generated by ECMPS is included in Appendix 2.

APPENDIX 1

AIR HYGIENE RATA TEST REPORT

AIR HYGIENE, INC.

Testing Solutions for a Better World

RELATIVE ACCURACY TEST AUDIT

FOR THE

MITSUBISHI, MODEL 501G, UNIT 3A CEMS

PREPARED FOR

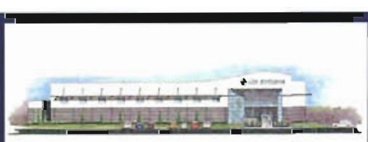
FLORIDA POWER AND LIGHT

AT THE

WEST COUNTY ENERGY CENTER

LOXAHATCHEE, FLORIDA

MARCH 16-17, 2011



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RELATIVE ACCURACY TEST AUDIT
FOR THE
MITSUBISHI, MODEL 501G, UNIT 3A CEMS
PREPARED FOR
FLORIDA POWER AND LIGHT
AT THE
WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA
MARCH 16-17, 2011

Prepared and Reviewed by:

Mars Sharief, QSTI, Director of Specialty Testing

Paul Little, QSTI, Director of Customer Service

Jake Fahlenkamp, QSTI, Director of Quality Assurance

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APPENDICES

Relative Accuracy Test Audit
Mitsubishi, Model 501G, Unit 3A CEMS
Florida Power and Light
West County Energy Center
Loxahatchee, Florida
March 16-17, 2011

1.0 INTRODUCTION

Air Hygiene International, Inc. (Air Hygiene) has completed the Relative Accuracy Test Audit (RATA) for nitrogen oxides (NOx), carbon monoxide (CO), and oxygen (O_2) from the exhaust of the Mitsubishi, Model 501G, Unit 3A for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. This report details the background, results, process description, and the sampling/analysis methodology of the stack sampling survey conducted on March 16-17, 2011.

1.1 TEST PURPOSE AND OBJECTIVES

The purpose of the test was to perform the initial certification RATA on the CEMS that serves the Mitsubishi, Model 501G, Unit 3A for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. Reference method (RM) testing followed the Code of Federal Regulations (CFR), Title 40 (40 CFR), Part 60 (40 CFR 60), Appendix A, Methods 1, 3a, 7e, 10, and 19. RM values are compared with the on-site CEMS to document performance as required in the 40 CFR 60, Appendix B, Performance Specifications (PS) and 40 CFR 75 Appendix A and B. All relative accuracies were established on-site and were governed by the following sets of rules:

In accordance with 40 CFR 75, Appendix A, Section 3.3.2(a) and (b), the NOx RATA results are acceptable if the RA does not exceed 10.0 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.02 lb/MMBtu. Passing this set of criteria requires the CEMS to be retested after no more than two operating quarters. Alternatively, in accordance with 40 CFR 75, Appendix B, Section 2.3.1.2(a) and (f), and Appendix B, Figure 2, the NOx RATA results are acceptable if the RA does not exceed 7.5 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.015 lb/MMBtu. Passing this set of criteria allows the CEMS to be retested after four operating quarters or at least within eight calendar quarters.

In accordance with 40 CFR 60, Appendix B, PS 4 and 4A, Sections 13.2 of each, the CO RA test results are acceptable if the RA does not exceed 10.0 percent, if the average difference between the CEMS and RM values plus the 2.5 percent confidence coefficient (2.5%CC) does not exceed 5.0 parts per million (ppm), or if the alternative relative accuracy (ARA) does not exceed 5.0 percent. Part 60 further requires that the unit be operating at greater than 50 percent of normal load.

1.2 SUMMARY OF TEST PROGRAM

The following list details pertinent information related to this specific project:

1.2.1 Participating Organizations
- Florida Department of Environmental Protection (FDEP)
- Florida Power and Light
- Black and Veatch
- Custom Instrumentation Services Corporation (CiSCO)
- Air Hygiene

1.2.2 Industry
- Electric Utility / Electric Services

1.2.3 Air Permit and Federal Requirements
- Permit Number: PSD-FL396
- Emission Unit ID: 013
- 40 CFR 60, Appendix B, Performance Specifications (PS)
- 40 CFR 75, Appendix A
- 40 CFR 75, Appendix B

1.2.4 Plant Location
- West County Energy Center near Loxahatchee, Florida

1.2.5 Equipment Tested
- Mitsubishi, Model 501G, Unit 3A
- NOx Analyzer (THERMO, 42i-LS, Serial #0934838567)
- CO Analyzer (THERMO, 48i, Serial #CM09400112)
- O_2 Analyzer (Servomex, 1440D, Serial#01440DIV02/4246)

1.2.6 Emission Points
- Exhaust from the Mitsubishi, Model 501G, Unit 3A
- For all gases, one sample point in the exhaust duct from the Mitsubishi, Model 501G, Unit 3A, determined after conducting a stratification test (refer to Appendix E)

1.2.7 Pollutants Measured
- NOx
- CO
- O_2

1.2.8 Dates of Emission Test
- March 16-17, 2011

1.3 KEY PERSONNEL

Florida Power and Light:	John Mirino	786-242-3895
Black and Veatch:	Bill Stevenson	913-458-8549
CiSCO:	Justin Hewett	936-537-4848
Air Hygiene:	Jake Fahlenkamp	918-307-8865

2.0 SUMMARY OF TEST RESULTS

Results from the sampling conducted on Florida Power and Light's Mitsubishi, Model 501G, Unit 3A located at the West County Energy Center on March 16-17, 2011 are summarized in the following table.

TABLE 2.1
SUMMARY OF MITSUBISHI, 501G, UNIT 3A RATA RESULTS

Pollutant	Units	Criteria			Results	Passed / Test Frequency
		CFR	Specification / Section	Standard		
NOx	lb/MMBtu	Part 75	Appendix A, Section 3.3.2(a),(b) Appendix B, Section 2.3.1.2(a),(f), Figure 2	RA ≤ 10%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.02 lb/MMBtu Annual Incentive RA ≤ 7.5%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.015 lb/MMBtu	RA = 17.3% RM = 0.01 lb/MMBtu d = 0.001 lb/MMBtu BAF=1.111	YES / ANNUAL
CO	ppm@ 15%O_2	Part 60	Appendix B, Performance Specification 4, 4A, from all Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	RA = 16.7% |d|+2.5%CC = 0.1 ppm	YES / ANNUAL
CO	lb/hr	Part 60	Appendix B, Performance Specification 4, 4A Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	RA = 16% |d|+2.5%CC = 0.1 ppm	YES / ANNUAL
Load	MW	Part 60	Appendix B, Performance Specifications	> 50% max load	393.4	WITHIN TOLERANCE
Load	MW	Part 75	Appendix A and B	normal load range	393.4	WITHIN TOLERANCE

Notes: RA = relative accuracy, ARA = alternative relative accuracy, RM = reference method value, d = difference between RM and CEMS value, CC = confidence coefficient, v = velocity, BAF = bias adjustment factor

The RATA passed for all pollutants (NOx and CO) in all units (ppm@15%O_2, lb/hr, and lb/MMBtu) under all 40 CFR 60 and 40 CFR 75 criteria.

Specifically, NOx in units of lb/MMBtu passed the 40 CFR 75 alternative annual incentive criteria with an emissions rate of less than 0.2 lb/MMBtu and a difference between the RM and CEMS analyzers of less than 0.015 lb/MMBtu. Also there is a Bias Adjustment Factor of 1.111 required. CO in units of ppm@15%O_2 and lb/hr passed the 40 CFR 60 alternative criteria with a concentration difference between the RM and CEMS analyzers plus the confidence coefficient of less than 5 ppm.

Unit load was within the 40 CFR 60 required criteria of greater than 50 percent of the maximum load and also fell within the normal load criteria as defined by the plants Quality Control and Monitoring Plan which defined the upper and lower boundary on the unit and the normal and alternative normal load ranges.

On March 16, 2011 CT 3A tripped during emission compliance testing at 14:37. The cause of the trip was the improper placement of a jumper while checking the fire protection panel for a ground fault. The fault was tracked to an enclosure damper solenoid. Once the source of the ground fault was located and isolated; the CT was restarted and returned to base load at 19:40. Compliance testing was resumed at that time.

3.0 SOURCE OPERATION

3.1 PROCESS DESCRIPTION

Florida Power and Light (FPL) owns and operates the West County Energy Center (West County) located at 20505 State Road 80 in Loxahatchee, Florida. West County is a nominal 2,500 megawatt (MW) greenfield power plant and consists of two combined cycle units (Unit 1 and 2). Each combined cycle unit consists of: three nominal 250 MW Mitsubishi Model 501G combustion turbine-electrical generator (CTGs) sets with evaporative inlet cooling systems; three supplementary-fired heat recovery steam generators (HRSGs) with selective catalytic reduction (SCR) reactors; one nominal 428 million British thermal units per hour (MMBtu/hour) based on low heat value (LHV) natural gas-fired duct burner (DB) located within each of the three HRSG's; and a common nominal 500 MW steam turbine-electrical generator (STG). The total nominal generating capacity of each of the "3 on 1" combined cycle unit is approximately 1,250 MW.

Each CTG has a nominal heat input rate of 2,333 MMBtu/hr when firing natural gas and 2,117 MMBtu/hr when firing distillate fuel oil (based on a compressor inlet air temperature of 59 degrees Fahrenheit (°F), the lower heating value (LHV) of each fuel, and 100 percent load), includes an automated gas turbine control system, and has dual-fuel capability of firing natural gas as the primary fuel or ultra low sulfur distillate (ULSD) fuel oil as a restricted alternate fuel. Each HRSG recovers exhaust, heat energy from each of the CTGs. Each Unit delivers steam to each STG. The efficient combustion of natural gas and restricted firing of ULSD fuel oil minimizes the emissions of carbon monoxide (CO), particulate matter (PM), sulfuric acid mist (H_2SO_4), sulfur dioxide (SO_2) and volatile organic compounds (VOCs). Dry Low-NOX (DLN) combustors for gas firing and water injection for oil firing reduce nitrogen oxides (NOx) emissions. A selective catalyst reduction (SCR) system further reduces NOx emissions.

3.2 SAMPLING LOCATION

The 501G stack is circular and measures 21.9 feet (ft) (263 inches) in diameter at the test ports which are approximately 138 ft above grade level with an exit elevation of approximately 150 ft above grade level. The test ports are located approximately 44.31 ft (531.75 inches) downstream and approximately 12 ft (144 inches) upstream from the nearest disturbances. All exhaust samples for gaseous emissions were continuously drawn from the exhaust system at the sample ports from a single point determined after conducting a stratification test (Appendix E). During the stratification test three points were traversed from each of the four ports. The probe was allowed to remain at a point for two times the system response time.

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 TEST METHODS

The emission test on the Mitsubishi, Model 501G, Unit 3A at the West County Energy Center was performed following United States Environmental Protection Agency (EPA) methods described by the Code of Federal Regulations (CFR). Table 4.1 outlines the specific methods performed on March 16-17, 2011.

TABLE 4.1
SUMMARY OF SAMPLING METHODS

Pollutant or Parameter	Sampling Method	Analysis Method
Sample Point Location	EPA Method 1	Equal Area Method
Oxygen	EPA Method 3a	Paramagnetic Cell
Nitrogen Oxides	EPA Method 7e	Chemiluminescent Analyzer
Carbon Monoxide	EPA Method 10	Nondispersive Infrared Analyzer
Stack Flow Rate	EPA Method 19	Dry Oxygen F Factor

4.2 INSTRUMENT CONFIGURATION AND OPERATIONS FOR GAS ANALYSIS

The sampling and analysis procedures used during these tests conform with the methods outlined in the Code of Federal Regulations (CFR), Title 40, Part 60, Appendix A, Methods 1, 3a, 7e, 10, and 19.

Figure 4.1 depicts the sample system used for the NOx, CO, and O_2 tests. A stainless steel probe was inserted into the sample ports of the stack to extract gas measurements from the emission stream at three points located at 16.7, 50, and 83.3 percent across the stack diameter / 0.4 (15.7), 1.2 (47.2), and 2.0 (78.7) meters (inches) from the wall of the stack . The gas sample was continuously pulled through the probe and transported, via heat-traced Teflon® tubing, to a stainless steel minimum-contact condenser designed to dry the sample. Transportation of the sample, through Teflon® tubing, continued into the sample manifold within the mobile laboratory via a stainless steel/Teflon® diaphragm pump. From the manifold, the sample was partitioned to the NOx, CO, and O_2 analyzers through rotameters that controlled the flow rate of the sample.

Figure 4.1 shows that the sample system was also equipped with a separate path through which a calibration gas could be delivered to the probe and back through the entire sampling system. This allowed for convenient performance of system bias checks as required by the testing methods.

All instruments were housed in an air-conditioned, trailer-mounted mobile laboratory. Gaseous calibration standards were provided in aluminum cylinders with the concentrations certified by the vendor. EPA Protocol No. 1 was used to determine the cylinder concentrations where applicable (i.e. NOx calibration gases).

Table 4.2 provides a description of the analyzers used for the instrument portion of the tests. All data from the continuous monitoring instruments were recorded on a Logic Beach Portable Data Logging System Hyperlogger which retrieves calibrated electronic data from each instrument every one second and reports an average of the collected data every 30 seconds. Data records can be found in Appendix A and B of this report.

Six test runs of approximately 60 minutes and four test runs of approximately 21 minutes each were conducted on the Mitsubishi, Model 501G, Unit 3A for NOx, CO, and O_2. The unit operation was greater than 50 percent of capacity as required by the 40 CFR 60, Performance Specifications. The unit operation was at the normal load as required by 40 CFR 75.

The stack gas analysis for O_2 concentrations was performed in accordance with procedures set forth in EPA Method 3a. The O_2 analyzer uses a paramagnetic cell.

EPA Method 7e was used to determine concentrations of NOx. A chemiluminescent analyzer was used to determine the nitrogen oxides concentration in the gas stream. A NO_2 in nitrogen certified gas cylinder was used to verify at least a 90 percent NO_2 conversion on the day of the test.

CO emission concentrations were quantified in accordance with procedures set forth in EPA Method 10. A continuous nondispersive infrared (NDIR) analyzer was used for this purpose.

TABLE 4.2
ANALYTICAL INSTRUMENTATION

Parameter	Model and Manufacturer	Range	Sensitivity	Detection Principle
NOx	THERMO 42i-HL	User may select up to 5,000 ppm	0.1 ppm	Thermal reduction of NO_2 to NO. Chemiluminescence of reaction of NO with O_3. Detection by PMT. Inherently linear for listed ranges.
CO	THERMO 48i	User may select up to 10,000 ppm	0.1 ppm	Infrared absorption, gas filter correlation detector, microprocessor based linearization.
O_2	THERMO 42i-HL	0-25%	0.1%	Paramagnetic cell, inherently linear.

E:\SHARED\DRAWINGS\EMISSIONS TESTING LAB.PPT 04/18/08 DRAWING:08-001 TKG

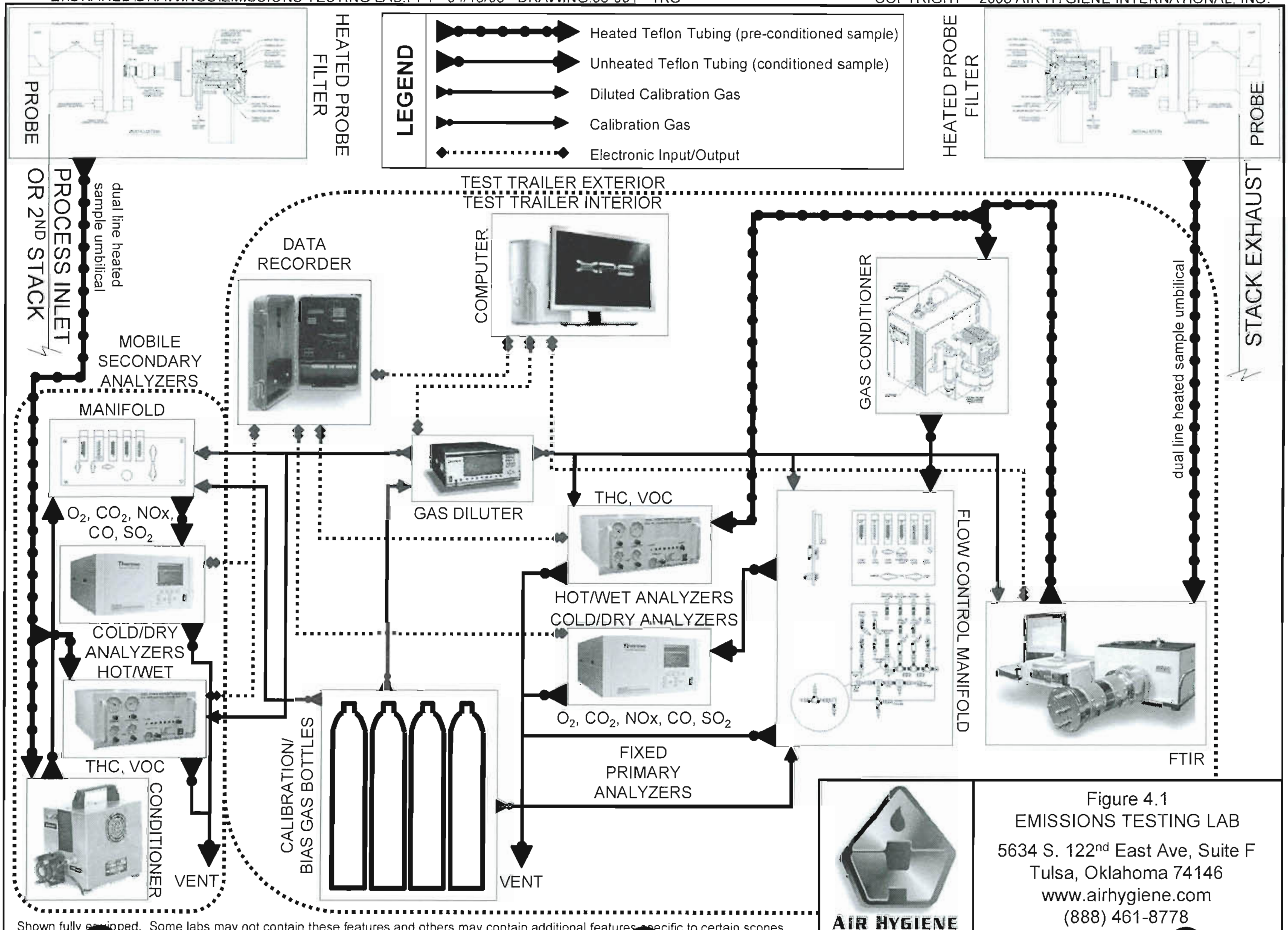

Figure 4.1
EMISSIONS TESTING LAB

5634 S. 122nd East Ave, Suite F
Tulsa, Oklahoma 74146
www.airhygiene.com
(888) 461-8778

APPENDIX A

TEST RESULTS AND CALCULATIONS

TABLE A.1:
EMISSIONS TESTING SCHEDULE

Unit	Load	Test Type	Run	Date	Start	Stop	Time Sync
3A	Base Load	Stratification Test	1	03/16/11	8:45:56	9:28:26	DAHS
3A	Base	Gas RATA	1	03/16/11	9:47:26	10:46:56	DAHS
3A	Base	Gas RATA	2	03/16/11	11:03:26	12:02:56	DAHS
3A	Base	Gas RATA	3	03/16/11	12:21:26	13:20:56	DAHS
3A	Base	Gas RATA	4	03/16/11	18:31:07	18:51:37	DAHS
3A	Base wDB	Gas RATA	5	03/17/11	10:05:07	11:04:37	DAHS
3A	Base wDB	Gas RATA	6	03/17/11	11:25:07	12:24:37	DAHS
3A	Base wDB	Gas RATA	7	03/17/11	12:43:07	13:42:37	DAHS
3A	Base wDB	Gas RATA	8	03/17/11	13:58:07	14:18:37	DAHS
3A	Base wDB	Gas RATA	9	03/17/11	14:28:07	14:48:37	DAHS
3A	Base wDB	Gas RATA	10	03/17/11	14:58:07	15:18:37	DAHS

Note: DAHS Time (EST minus 1hr)

TEST RESULTS

Florida Power and Light
March 16-17, 2011
Mitsubishi, 501G, Unit 3A
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(ppm@ 15%O_2)	(ppm@ 15%O_2)	(diff)	($diff^2$)
1	09:47 - 10:46	YES	381.3	0.70	0.60	0.1000	0.01
2	11:03 - 12:02	YES	377.3	0.70	0.60	0.1000	0.01
3	12:21 - 13:20	YES	376.3	0.50	0.60	-0.1000	0.01
4	18:31 - 18:51	YES	369.1	0.80	0.70	0.1000	0.01
5	10:05 - 11:04	YES	413.2	0.50	0.60	-0.1000	0.01
6	11:25 - 12:24	YES	400.3	0.50	0.50	0.0000	0.00
7	12:43 - 13:42	YES	403.9	0.50	0.50	0.0000	0.00
8	13:58 - 14:18	YES	405.0	0.60	0.50	0.1000	0.01
9	14:28 - 14:48	NO	404.4	0.60	0.50		
10	14:58 - 15:18	YES	402.8	0.60	0.50	0.1000	0.01
11		NO					
12		NO					
		Total	**3529.2**	**5.40**	**5.10**	**0.3000**	**0.0700**
		Average	**392.1**	**0.60**	**0.57**	**0.0333**	

Number of Runs	9
Standard Deviation	0.087
T-value	2.306
Confidence Coefficient	0.0666

Relative Accuracy =	**16.7%**
|d (difference in ppm)| + CC =	**0.1**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 16-17, 2011
Mitsubishi, 501G, Unit 3A
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(lb/hr)	(lb/hr)	(diff)	($diff^2$)
1	09:47 - 10:46	YES	381.3	3.90	3.50	0.4000	0.16
2	11:03 - 12:02	YES	377.3	4.00	3.30	0.7000	0.49
3	12:21 - 13:20	YES	376.3	3.00	3.20	-0.2000	0.04
4	18:31 - 18:51	YES	369.1	4.70	4.20	0.5000	0.25
5	10:05 - 11:04	YES	413.2	3.30	3.20	0.1000	0.01
6	11:25 - 12:24	YES	400.3	3.20	3.20	0.0000	0.00
7	12:43 - 13:42	YES	403.9	3.40	3.00	0.4000	0.16
8	13:58 - 14:18	YES	405.0	3.60	3.10	0.5000	0.25
9	14:28 - 14:48	NO	404.4	3.80	3.00		
10	14:58 - 15:18	YES	402.8	3.70	3.00	0.7000	0.49
11		NO					
12		NO					
		Total	**3529.2**	**32.80**	**29.70**	**3.1000**	**1.8500**
		Average	**392.1**	**3.64**	**3.30**	**0.3444**	

Number of Runs	9
Standard Deviation	0.313
T-value	2.306
Confidence Coefficient	0.2404

Relative Accuracy =	**16.0%**
|d (difference in ppm)| + CC =	**0.1**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 16-17, 2011
Mitsubishi, 501G, Unit 3A
NOx RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD (MW)	RM (lb/MMBtu)	CEMS (lb/MMBtu)	RM-CEMS (diff)	(diff^2)
1	09:47 - 10:46	YES	381.3	0.007	0.006	0.0010	0.0000
2	11:03 - 12:02	YES	377.3	0.007	0.006	0.0010	0.0000
3	12:21 - 13:20	YES	376.3	0.007	0.006	0.0010	0.0000
4	18:31 - 18:51	YES	369.1	0.007	0.006	0.0010	0.0000
5	10:05 - 11:04	YES	413.2	0.006	0.005	0.0010	0.0000
6	11:25 - 12:24	YES	400.3	0.006	0.005	0.0010	0.0000
7	12:43 - 13:42	NO	403.9	0.007	0.005		
8	13:58 - 14:18	YES	405.0	0.006	0.006	0.0000	0.0000
9	14:28 - 14:48	YES	404.4	0.006	0.005	0.0010	0.0000
10	14:58 - 15:18	YES	402.8	0.006	0.006	0.0000	0.0000
11		NO					
12		NO					
	Total		**3529.7**	**0.058**	**0.051**	**0.0070**	**0.0000**
	Average		**392.2**	**0.006**	**0.006**	**0.0008**	

Number of Runs	9
Standard Deviation	0.000
T-value	2.306
Confidence Coefficient	0.0003

Relative Accuracy = 17.33%

If the mean difference is less than or equal to the absolute value of the confidence coefficient, then the Bias Test passes and the bias adjustment factor is not applicable.

Mean Difference =	0.0008
Confidence Coefficient =	0.0003

BAF = 1 + (abs. value mean difference/avg. CEMS reading)

Average CEMS Reading =	0.006
BAF =	**1.111**

Part 75, Appendix A,

3.3.2 Relative Accuracy for NOX-Diluent Continuous Emission Monitoring Systems

(a) The relative accuracy for NOX-diluent continuous emission monitoring systems shall not exceed 10.0 percent.

(b) For affected units where the average of the reference method measurements of NOX emission rate (this means lb/MMBtu) during the relative accuracy test audit is less than or equal to 0.200 lb/mmBtu, the difference between the mean value of the continuous emission monitoring system measurements and the reference method mean value shall not exceed ±0.020 lb/mmBtu, wherever the relative accuracy specification of 10.0 percent is not achieved.

7.6.5 Bias Adjustment

(b) For single-load RATAs of SO2 pollutant concentration monitors, NOX concentration monitoring systems, and NOX-diluent monitoring systems and for the single-load flow RATAs required or allowed under section 6.5.2 of this appendix and sections 2.3.1.3(b) and 2.3.1.3(c) of Appendix B to this part, the appropriate BAF is determined directly from the RATA results at normal load, using Equation A-12. Notwithstanding, when a NOX concentration CEMS or an SO2 CEMS or a NOX-diluent CEMS installed on a low-emitting affected unit (i.e., average SO2 or NOX concentration during the RATA &IE; 250 ppm or average NOX emission rate &IE; 0.200 lb/mmBtu) meets the normal 10.0 percent relative accuracy specification (as calculated using Equation A-10) or the alternate relative accuracy specification in section 3.3 of this appendix for low-emitters, but fails the bias test, the BAF may either be determined using Equation A-12, or a default BAF of 1.111 may be used.

Part 75, Appendix B,

2.3.1.2 Reduced RATA Frequencies. Relative accuracy test audits of primary and redundant backup SO2 pollutant concentration monitors, CO2 pollutant concentration monitors (including O2 monitors used to determine CO2 emissions), CO2 or O2 diluent monitors used to determine heat input, moisture monitoring systems, NOX concentration monitoring systems, flow monitors, NOX-diluent monitoring systems or SO2-diluent monitoring systems may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters) if any of the following conditions are met for the specific monitoring system involved:

(a) The relative accuracy during the audit of an SO2 or CO2 pollutant concentration monitor (including an O2 pollutant monitor used to measure CO2 using the procedures in appendix F to this part), or of a CO2 or O2 diluent monitor used to determine heat input, or of a NOX concentration monitoring system, or of a NOX-diluent monitoring system, or of an SO2-diluent continuous emissions monitoring system is ≤ 7.5 percent;

(f) For units with low NOX emission rates (average NOX emission rate measured by the reference method during the RATA ≤ 0.200 lb/mmBtu), when a NOX-diluent continuous emission monitoring system fails to achieve a relative accuracy ≤ 7.5 percent, but the monitoring system mean value from the RATA, calculated using Equation A-7 in appendix A to this part, is within ± 0.015 lb/mmBtu of the reference method mean value;

Figure 2 to Appendix B of Part 75_Relative Accuracy Test Frequency Incentive System.

RATA	Semiannual(percent)(1)	Annual(1)
SO2 or NOX(3)	7.5% < RA ≤ 10.0% or ± 15.0 ppm(2)	RA ≤ 7.5% or ± 12.0 ppm(2)
SO2-diluent	7.5% < RA ≤ 10.0% or ± 0.030 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.025 lb/mmBtu(2)
NOX-diluent	7.5% < RA ≤ 10.0% or ± 0.020 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.015 lb/mmBtu(2)
Flow	7.5% < RA ≤ 10.0% or ± 2.0 fps(2)	RA ≤ 7.5% or ± 1.5 fps
CO2 or O2	7.5% < RA ≤ 10.0% or ± 1.0% CO2/O2(2)	RA ≤ 7.5% or ± 0.7% CO2/O2(2)
Moisture	7.5% < RA ≤ 10.0% or ± 1.5% H2O(2)	RA ≤ 7.5% or ± 1.0% H2O(2)

(1) The deadline for the next RATA is the end of the second (if semiannual) or fourth (if annual) successive QA operating quarter following the quarter in which the CEMS was last tested. Exclude calendar quarters with fewer than 168 unit operating hours (or, for common stacks and bypass stacks, exclude quarters with fewer than 168 stack operating hours) in determining the RATA deadline. For SO2 monitors, QA operating quarters in which only very low sulfur fuel as defined in § 72.2, is combusted may also be excluded. However, the exclusion of calendar quarters is limited as follows: the deadline for the next RATA shall be no more than 8 calendar quarters after the quarter in which a RATA was last performed.

(2) The difference between monitor and reference method mean values applies to moisture monitors, CO2, and O2 monitors, low emitters, or low flow, only.

(3) A NOX concentration monitoring system used to determine NOX mass emissions under § 75.71.

Relative Accuracy Test Data
CEMS Results (NOx)
Mitsubishi, 501G, Unit 3A

Parameter:	Oxides of Nitrogen
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 7e
CEMS Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-LS
Serial #:	0934838567

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:47 - 10:46	381.3				0.006
2	11:03 - 12:02	377.3				0.006
3	12:21 - 13:20	376.3				0.006
4	18:31 - 18:51	369.1				0.006
5	10:05 - 11:04	413.2				0.005
6	11:25 - 12:24	400.3				0.005
7	12:43 - 13:42	403.9				0.005
8	13:58 - 14:18	405.0				0.006
9	14:28 - 14:48	404.4				0.005
10	14:58 - 15:18	402.8				0.006
11						
12						

Relative Accuracy Test Data
CEMS Results (CO)
Mitsubishi, 501G, Unit 3A

Parameter:	Carbon Monoxide
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 10
CEMS Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48i
Serial #:	CM09400112

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:47 - 10:46	381.3	0.80	0.60	3.50	
2	11:03 - 12:02	377.3	0.80	0.60	3.30	
3	12:21 - 13:20	376.3	0.70	0.60	3.20	
4	18:31 - 18:51	369.1	1.00	0.70	4.20	
5	10:05 - 11:04	413.2	0.80	0.60	3.20	
6	11:25 - 12:24	400.3	0.70	0.50	3.20	
7	12:43 - 13:42	403.9	0.70	0.50	3.00	
8	13:58 - 14:18	405.0	0.70	0.50	3.10	
9	14:28 - 14:48	404.4	0.70	0.50	3.00	
10	14:58 - 15:18	402.8	0.70	0.50	3.00	
11						
12						

Relative Accuracy Test Data
CEMS Results (O_2)
Mitsubishi, 501G, Unit 3A

Parameter:	Oxygen
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 3a
CEMS Analyzer Type:	Paramagnetic Cell
Manufacturer:	Servomex
Model #:	1440D
Serial #:	01440DIV02/4246

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:47 - 10:46	381.3	13.15
2	11:03 - 12:02	377.3	13.18
3	12:21 - 13:20	376.3	13.18
4	18:31 - 18:51	369.1	13.10
5	10:05 - 11:04	413.2	12.33
6	11:25 - 12:24	400.3	12.34
7	12:43 - 13:42	403.9	12.34
8	13:58 - 14:18	405.0	12.32
9	14:28 - 14:48	404.4	12.31
10	14:58 - 15:18	402.8	12.32
11			
12			

Relative Accuracy Test Data
Reference Method Results (NOx)
Mitsubishi, 501G, Unit 3A

Parameter:	Oxides of Nitrogen
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 7e
RM Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:47 - 10:46	381.3				0.007
2	11:03 - 12:02	377.3				0.007
3	12:21 - 13:20	376.3				0.007
4	18:31 - 18:51	369.1				0.007
5	10:05 - 11:04	413.2				0.006
6	11:25 - 12:24	400.3				0.006
7	12:43 - 13:42	403.9				0.007
8	13:58 - 14:18	405.0				0.006
9	14:28 - 14:48	404.4				0.006
10	14:58 - 15:18	402.8				0.006
11						
12						

Relative Accuracy Test Data
Reference Method Results (CO)
Mitsubishi, 501G, Unit 3A

Parameter:	Carbon Monoxide
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 10
RM Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48i
Serial #:	INST-CO-0015

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:47 - 10:46	381.3	0.89	0.67	3.92	
2	11:03 - 12:02	377.3	0.91	0.69	4.01	
3	12:21 - 13:20	376.3	0.67	0.51	2.95	
4	18:31 - 18:51	369.1	1.08	0.81	4.70	
5	10:05 - 11:04	413.2	0.75	0.53	3.33	
6	11:25 - 12:24	400.3	0.73	0.51	3.19	
7	12:43 - 13:42	403.9	0.80	0.55	3.44	
8	13:58 - 14:18	405.0	0.84	0.58	3.61	
9	14:28 - 14:48	404.4	0.88	0.60	3.76	
10	14:58 - 15:18	402.8	0.82	0.57	3.70	
11						
12						

Relative Accuracy Test Data
Reference Method Results (O_2)
Mitsubishi, 501G, Unit 3A

Parameter:	Oxygen
Date of Test:	March 16-17, 2011
Reference Method:	EPA Method 3a
RM Analyzer Type:	Paramagnetic Cell
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:47 - 10:46	381.3	13.09
2	11:03 - 12:02	377.3	13.10
3	12:21 - 13:20	376.3	13.21
4	18:31 - 18:51	369.1	13.03
5	10:05 - 11:04	413.2	12.47
6	11:25 - 12:24	400.3	12.36
7	12:43 - 13:42	403.9	12.35
8	13:58 - 14:18	405.0	12.29
9	14:28 - 14:48	404.4	12.28
10	14:58 - 15:18	402.8	12.30
11			
12			

CALCULATIONS

EXAMPLE CALCULATIONS (CALIBRATION)

Analyzer Calibration Error

RM 7E, (12-17-09), 12.2 Analyzer Calibration Error. For non-dilution systems, use Equation 7E-1 to calculate the analyzer calibration error for the low-, mid-, and high-level calibration gases. (calc for NOx analyzer mid gas, if applicable)

$$ACE = \left(\frac{C_{Dir} - C_V}{CS} \right) \times 100$$ Eq. 7E-1

$$ACE = \frac{5.00 \text{ ppm} - 4.93 \text{ ppm}}{12.10 \text{ ppm}} \times 100 = 0.58 \%$$

EXAMPLE CALCULATIONS (BIAS, DRIFT, AND CORRECTED RAW AVERAGE)

System Bias

RM 7E, (12-17-09), 12.3 System Bias. For non-dilution systems, use Equation 7E-2 to calculate the system bias separately for the low-level and upscale calibration gases. (calc for NOx analyzer upscale gas, Run 1 initial bias, if applicable)

$$SB = \left(\frac{C_S - C_{Dir}}{CS} \right) \times 100$$ Eq. 7E-2

$$SB = \frac{4.84 \text{ ppm} - 5.00 \text{ ppm}}{12.10 \text{ ppm}} \times 100 = -1.32 \%$$

Drift Assessment

RM 7E, (12-17-09), 12.5 Drift Assessment. Use Equation 7E-4 to separately calculate the low-level and upscale drift over each test run. (calc for NOx analyzer upscale drift, Run 1, if applicable)

$$D = \left| SB_{final} - SB_i \right|$$ Eq. 7E-4

$$D = | -1.98 \% - -1.32 \% | = 0.66 \%$$

Alternative Drift and Bias

RM 7E, (12-17-09), 13.2 / 13.3 System Bias and Drift. Alternatively, the results are acceptable if |Cs – Cdir| is ≤ 0.5 ppmv or if |Cs – Cv| is ≤ 0.5 ppmv (as applicable). (calc for NOx analyzer initial upscale, Run 1, if applicable)

$$SB / D_{Alt} = \left| C_S - C_{Dir} \right|$$ Eq. Section 13.2 and 13.3

$$SB / D_{Alt} = | 4.84 \text{ ppm} - 5.00 \text{ ppm} | = 0.16 \text{ ppm}$$

Bias Adjusted Average

RM 7E, (12-17-09), 12.6 Effluent Gas Concentration. For each test run, calculate Cavg, the arithmetic average of all valid NOx concentration values (e.g., 1-minute averages). Then adjust the value of Cavg for bias, using Equation 7E-5b. (calc for NOx analyzer, Run 1, if applicable)

$$C_{Gas} = \left(C_{Avg} - C_O \right) \times \left(\frac{C_{MA}}{C_M - C_O} \right)$$ Eq. 7E-5b

$$C_{Gas} = \left(2.50 \text{ ppm} - 0.12 \text{ ppm} \right) \times \left(\frac{4.93 \text{ ppm}}{4.80 \text{ ppm} - 0.12 \text{ ppm}} \right) = 2.51 \text{ ppm}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RUNS)

Stack Exhaust Flow (Q_S) - RM19

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1{,}000{,}000}\right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}}\right)$$

$$Q_S = \frac{8{,}710.00\ \text{SCF}}{\text{MMBtu}} \times \frac{2{,}535{,}588.62\ \text{SCF}}{\text{hr}} \times \frac{1{,}029.00\ \text{Btu}}{\text{SCF}} \times \frac{\text{MMBtu}}{10^6\ \text{Btu}} \times \left[\frac{20.90\%}{20.9\% - 13.1\ \%}\right] = 60{,}852{,}968.85\ \text{SCFH}$$

Diluent-Corrected Pollutant Concentration, O_2 Based

RM 20, (11-26-02), 7.3.1 Correction of Pollutant Concentration Using O_2 Concentration. Calculate the O_2 corrected pollutant concentration, as follows: (calc for NOx gas, Run 1, if applicable)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}}\right)$$ Eq. 20-4

$$C_{adj} = 2.51\ \text{ppm} \times \left(\frac{20.9\% - 15.00\ \%}{20.9\% - 13.09\ \%}\right) = 1.90\ \text{ppm@15\%}O_2$$

EXAMPLE CALCULATIONS (RUNS)

Emissions Rate (lb/hr)

Calculation for pound per hour emission rate. Calculate, as follows: (calc for NOx gas Run 1, if applicable)

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

$$E_{lb/hr} = \frac{2.51\ \text{ppm}}{10^6\ \text{ppm/part}} \times \frac{60{,}852{,}969\ \text{SCFH} \times 46.01\ \text{lb/lb-mol}}{385.23\ \text{SCF/lb-mol}} = \frac{18.26\ \text{lb}}{\text{hr}}$$

Emissions Rate (lb/MMBtu)

RM 19, (12-17-09), 12.2 Emission Rates of PM, SO_2, and NOx. Select from the following sections the applicable procedure to compute the PM, SO_2, or NOx emission rate (E) in ng/J (lb/million Btu). (calc for NOx gas Run 1, if applicable)

Oxygen Based

12.2.1 Oxygen-Based F Factor, Dry Basis. When measurements are on a dry basis for both O_2 (%O_2d) and pollutant (Cd) concentrations, use the following equation:

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_c \times 20.9\%}{20.9\% - C_{Gas(O2)}}$$ Eq. 19-1

$$E_{lb/MMBtu} = \frac{2.51\ \text{ppm} \times 8{,}710.00\ \text{SCF/MMBtu} \times 0.0000001194\ \text{lb/ppm*ft}^3 \times 20.9\%}{20.9\% - 13.09\ \%} = \frac{0.007\ \text{lb}}{\text{MMBtu}}$$

Conversion Constant

Convc for NOx

$$Conv_c(lb/ppm \cdot ft^3) = \frac{\frac{MW}{G}}{10^6}$$

$$Conv_c = \frac{\frac{46.01\ \text{lb}}{\text{lb•mole}} \times \frac{\text{lb•mole}}{385.23\ \text{SCF}}}{10^6} = \frac{0.0000001194\ \text{lb}}{\text{ppm-ft}^3}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RATA RESULTS)

Difference (d)

40 CFR 75, App A, (12-17-09), 7.3.1 Arithmetic Mean. Calculate the arithmetic mean of the differences, d , of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$d = \sum_{i=1}^{n} d_i$$ Eq. A-7

d = 0.006 lb/MMBtu - 0.006 lb/MMBtu = 0.001 lb/MMBtu

Standard Deviation

40 CFR 75, App A, (12-17-09), 7.3.2 Standard Deviation. Calculate the standard deviation, Sd, of a data set as follows: (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right]}{n-1}}$$ Eq. A-8

$$S_d = \sqrt{\frac{0.000 \text{ lb/MMBtu}^2 - \frac{\left[0.007 \text{ lb/MMBtu}\right]^2}{9}}{9 - 1}} = 0.000 \text{ lb/MMBtu}$$

Confidence Coefficient

40 CFR 75, App A, (12-17-09), 7.3.3 Confidence Coefficient. Calculate the confidence coefficient (one-tailed), cc, of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$ Eq. A-9

$$CC = 2.306 \times \frac{0.000 \text{ lb/MMBtu}}{\sqrt{9}} = 0.000 \text{ lb/MMBtu}$$

T-Values	n	2	3	4	5	6	7	8	9
	$t_{0.025}$	12.706	4.303	3.182	2.776	2.571	2.447	2.365	2.306

2.5 percent confidence coefficients

Relative Accuracy

40 CFR 75, App A, (12-17-09), 7.3.4 Relative Accuracy. Calculate the relative accuracy of a data set using the following equation. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$ Eq. A-10

$$RA = \frac{|0.001 \text{ lb/MMBtu}| + |0.000 \text{ lb/MMBtu}|}{0.006 \text{ lb/MMBtu}} \times 100 = 17.33 \%$$

Bias Adjustment Factor (BAF)

40 CFR 75, App A, (12-17-09), 7.6.5 Bias Adjustment. (a) If the monitor or monitoring system fails to meet the bias test requirement, adjust the value obtained from the monitor using the following equation: (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}}\right)$$ Eq. A-12

d_{AVG} = 0.001 > |CC| = 0.000 ⇒ $BAF = 1 + \frac{|0.001 \text{ lb/MMBtu}|}{0.006 \text{ lb/MMBtu}} = 1.137$ lb/MMBtu

Note: BAF only applies if the mean difference (d) is greater than the absolute value of the confidence coefficient.

Note: Lack of significant figures may cause rounding arrors between actual calculations and example calculations.

RM 7E, (08-15-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

ACE = Analyzer calibration error, percent of calibration span.
B_{WS} = Moisture content of sample gas as measured by Method 4 or other approved method, percent/100.
C_{Avg} = Average unadjusted gas concentration indicated by data recorder for the test run.
C_D = Pollutant concentration adjusted to dry conditions.
C_{Dir} = Measured concentration of a calibration gas (low, mid, or high) when introduced in direct calibration mode.
C_{Gas} = Average effluent gas concentration adjusted for bias.
C_M = Average of initial and final system calibration bias (or 2-point system calibration error) check responses for the upscale calibration gas.
C_{MA} = Actual concentration of the upscale calibration gas, ppmv.
C_O = Average of the initial and final system calibration bias (or 2-point system calibration error) check responses from the low-level (or zero) calibration gas.
C_S = Measured concentration of a calibration gas (low, mid, or high) when introduced in system calibration mode.
C_{SS} = Concentration of NOx measured in the spiked sample.
C_{Spike} = Concentration of NOx in the undiluted spike gas.
C_{Calc} = Calculated concentration of NOx in the spike gas diluted in the sample.
C_V = Manufacturer certified concentration of a calibration gas (low, mid, or high).
C_W = Pollutant concentration measured under moist sample conditions, wet basis.
CS = Calibration span.
D = Drift assessment, percent of calibration span.
E_p = The predicted response for the low-level and mid-level gases based on a linear response line between the zero and high-level response.
Eff_{NO2} = NO_2 to NO converter efficiency, percent.
H = High calibration gas, designator.
L = Low calibration gas, designator.
M = Mid calibration gas, designator.
NOFinal = The average NO concentration observed with the analyzer in the NO mode during the converter efficiency test in Section 16.2.2.
NOxCorr = The NOx concentration corrected for the converter efficiency.
NOxFinal = The final NOx concentration observed during the converter efficiency test in Section 16.2.2.
NOxPeak = The highest NOx concentration observed during the converter efficiency test in Section 16.2.2.
Q_{Spike} = Flow rate of spike gas introduced in system calibration mode, L/min.
Q_{Total} = Total sample flow rate during the spike test, L/min.
R = Spike recovery, percent.
SB = System bias, percent of calibration span.
SB_i = Pre-run system bias, percent of calibration span.
SB_f = Post-run system bias, percent of calibration span.
SB / D_{Alt} = Alternative absolute difference criteria to pass bias and/or drift checks.
SCE = System calibration error, percent of calibration span.
SCE_i = Pre-run system calibration error, percent of calibration span.
SCE_{final} = Post-run system calibration error, percent of calibration span.
Z = Zero calibration gas, designator.

40CFR60.355(b)(1), (09-20-06), Nomenclature. The terms used in the equations are defined as follows:

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg
P_o = observed combustor inlet absolute pressure at test, mm Hg
H_o = observed humidity of ambient air, g H_2O/g air
e = transcendental constant, 2.718
T_a = ambient temperature, K

RM 19, (07-29-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

AdjFactor = Percent oxygen or carbon dioxide adjustment applied to a target pollutant
B_{wa} = Moisture fraction of ambient air, percent.
Btu = British thermal unit
$\%_C$ = Concentration of carbon from an ultimate analysis of fuel, weight percent.
$\%_{CO2d}$, $\%_{CO2w}$ = Concentration of carbon dioxide on a dry and wet basis, respectively, percent.
CIP / CDP = Combustor inlet pressure / compressor discharge pressure (mm Hg); note, some manufactures reference as PCD.
E = Pollutant emission rate, ng/J (lb/million Btu).
E_a = Average pollutant rate for the specified performance test period, ng/J (lb/million Btu).
E_{ao}, E_{ai} = Average pollutant rate of the control device, outlet and inlet, respectively, for the performance test period, ng/J (lb/million Btu).
E_{bi} = Pollutant rate from the steam generating unit, ng/J (lb/million Btu).
E_{bo} = Pollutant emission rate from the steam generating unit, ng/J (lb/million Btu).
E_{ci} = Pollutant rate in combined effluent, ng/J (lb/million Btu).
E_{co} = Pollutant emission rate in combined effluent, ng/J (lb/million Btu).
E_d = Average pollutant rate for each sampling period (e.g.,24-hr Method 6B sample or 24-hr fuel sample) or for each fuel lot (e.g., amount of fuel bunkered), ng/J (lb/million Btu).
E_{di} = Average inlet SO_2 rate for each sampling period d, ng/J (lb/million Btu).
E_g = Pollutant rate from gas turbine, ng/J (lb/million Btu).
E_{ga} = Daily geometric average pollutant rate, ng/J (lbs/million Btu) or ppm corrected to 7 percent O_2.
E_{jo},E_{ji} = *Matched pair hourly arithmetic average pollutant rate, outlet and inlet, respectively, ng/J (lb/million Btu) or ppm corrected to 7 percent* O_2.
E_h = Hourly average pollutant, ng/J (lb/million Btu).
E_{hj} = Hourly arithmetic average pollutant rate for hour "j," ng/J (lb/million Btu) or ppm corrected to 7 percent O_2.
EXP = Natural logarithmic base (2.718) raised to the value enclosed by brackets.
Fc = Ratio of the volume of carbon dioxide produced to the gross calorific value of the fuel from Method 19
F_d, F_w, F_c = Volumes of combustion components per unit of heat content, scm/J (scf/million Btu).
ft^3 = cubic feet
G = ideal gas conversion factor
(385.23 SCF/lb-mol at 68 deg F & 14.696 psia)
GCM = gross Btu per SCF (constant, compound based)
GCV = Gross calorific value of the fuel consistent with the ultimate analysis, kJ/kg (Btu/lb).
GCV_p, GCV_r = Gross calorific value for the product and raw fuel lots, respectively, dry basis, kJ/kg (Btu/lb).
$\%_H$ = Concentration of hydrogen from an ultimate analysis of fuel, weight percent.
H_b = Heat input rate to the steam generating unit from fuels fired in the steam generating unit, J/hr (million Btu/hr).
H_g = Heat input rate to gas turbine from all fuels fired in the gas turbine, J/hr (million Btu/hr).
$\%_{H2O}$ = Concentration of water from an ultimate analysis of fuel, weight percent.
H_r = Total numbers of hours in the performance test period (e.g., 720 hours for 30-day performance test period).
K = volume of combustion component per pound of component (constant)
K = Conversion factor, 10^{-5} (kJ/J)/(%) [10^6 Btu/million Btu].
K_c = (9.57 scm/kg)/% [(1.53 scf/lb)/%].
K_{cc} = (2.0 scm/kg)/% [(0.321 scf/lb)/%].
K_{hd} = (22.7 scm/kg)/% [(3.64 scf/lb)/%].
K_{hw} = (34.74 scm/kg)/% [(5.57 scf/lb)/%].
K_n = (0.86 scm/kg)/% [(0.14 scf/lb)/%].
K_o = (2.85 scm/kg)/% [(0.46 scf/lb)/%].
K_s = (3.54 scm/kg)/% [(0.57 scf/lb)/%].
K_{sulfur} = $2x10^4$ Btu/wt%-MMBtu
K_w = (1.30 scm/kg)/% [(0.21 scf/lb)/%].
lb = *pound*
ln = Natural log of indicated value.
L_p,L_r = Weight of the product and raw fuel lots, respectively, metric ton (ton).
$\%_N$ = Concentration of nitrogen from an ultimate analysis of fuel, weight percent.
$M_{\%}$ = mole percent
mol = mole
MW = molecular weight (lb/lb-mol)
MW_{AIR} = molecular weight of air (28.9625 lb/lb-mole)[1]
NCM = net Btu per SCF (constant based on compound)
$\%_O$ = Concentration of oxygen from an ultimate analysis of fuel, weight percent.
$\%_{O2d}$, $\%_{O2w}$ = Concentration of oxygen on a dry and wet basis, respectively, percent.
P_B = barometirc pressure, in Hg
P_s = Potential SO2 emissions, percent.
$\%_S$ = Sulfur content of as-fired fuel lot, dry basis, weight percent.
S_e = Standard deviation of the hourly average pollutant rates for each performance test period, ng/J (lb/million Btu).
$\%_{Sf}$ = Concentration of sulfur from an ultimate analysis of fuel, weight percent.
S(wt%) = weight percent of sulfur, per lab analysis by appropriate ASTM standard
S_i = *Standard deviation of the hourly average inlet pollutant rates for each performance test period, ng/J (lb/million Btu).*
S_o = Standard deviation of the hourly average emission rates for each performance test period, ng/J (lb/million Btu).
$\%S_p$, $\%S_r$ = Sulfur content of the product and raw fuel lots respectively, dry basis, weight percent.
SCF = standard cubic feet
SH = specific humidity, pounds of water per pound of air
$t_{0.95}$ = Values shown in Table 19-3 for the indicated number of data points n.
T_{amb} = ambient temperature, °F
W/D Factor = 1.0236 = conv. at 14.696 psia and
68 deg F (ref. Civil Eng. Ref. Manual, 7th Ed.)
X_{CO2}=CO_2 Correction factor, percent.
X_k = Fraction of total heat input from each type of fuel k.

Calculations, Formulas, and Constants

The following information supports the spreadsheets for this testing project.

Given Data:

Ideal Gas Conversion Factor = 385.23 SCF/lb-mol at 68 deg F & 14.696 psia

Fuel Heating Value is based upon Air Hygiene's fuel gas calculation sheet. All calculations are based upon a correction to 68 deg F & 14.696 psia

High Heating Values (HHV) are used for the Fuel Heating Value, F-Factor, and Fuel Flow Data per EPA requirements.

ASTM D 3588

Molecular Weight of NOx (lb/lb-mole) = 46.01

Molecular Weight of CO (lb/lb-mole) = 28.00

Molecular Weight of SO_2 (lb/lb-mole) = 64.00

Molecular Weight of THC (propane) (lb/lb-mole) = 44.00

Molecular Weight of VOC (methane) (lb/lb-mole) = 16.00

Molecular Weight of NH_3 (lb/lb-mole) = 17.03

Molecular Weight of HCHO (lb/lb-mole) = 30.03

40CFR60, App. A., RM 19, Table 19-1

Conversion Constant for NOx = 0.0000001194351

Conversion Constant for CO = 0.0000000726839

Conversion Constant for SO_2 = 0.0000001661345

Conversion Constant for THC = 0.0000001142175

Conversion Constant for VOC (methane) = 0.0000000415336

Conversion Constant for NH_3 = 0.0000000442074

Conversion Constant for HCHO = 0.0000000779534

NOTE: units are lb/ppm*ft^3

Formulas:

1. Corrected Raw Average (C_{Gas}), 40CFR60, App. A, RM 7E, Eq. 7E-5 (08/15/06)

$$C_{Gas} = (C_{Avg} - C_O) \times \left(\frac{C_{MA}}{C_M - C_O} \right)$$

2. Correction to % O_2, 40CFR60, App. A, RM 20, Eq. 20-5 (11/26/02)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}} \right)$$

3. Correction to % O_2 and ISO Conditions

$$C_{ISO} = C_{Adj} \times \sqrt{\frac{P_r}{P_o}} \times e^{(19 \times (H_O - 0.00633))} \times \left(\frac{288}{T_a} \right)^{1.53}$$

4. Method 19 stack exhaust flow (scfh)

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1,000,000} \right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}} \right)$$

5. Emission Rate in lb/hr

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

6. Emission Rate in tons per year

$$E_{tons/yr} = \frac{E_{lb/hr} \times hr_{year}}{2000}$$

7. Emission Concentration in lb/MMBtu (O_2 based)

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_C \times 20.9\%}{20.9\% - C_{Gas(O2)}}$$

8. Emission Concentration in g/hp*hr

$$E_{g/hp \cdot hr} = \frac{E_{lb/hr} \times 453.6}{mw \times 1314.022} \text{ or } \frac{E_{lb/hr} \times 453.6}{hp}$$

RATA SHEET CALCULATIONS

d = Reference Method Data - CEMS Data

S_d = Standard Deviation

CC = Confident Coefficient

n = number of runs

$t_{0.025}$ = 2.5 percent confidence coefficent T-values

RA = relative accuracy

ARA = alternative relative accuracy

BAF = Bias adjustment factor

n	t	n	t	n	t
2	12.706	7	2.447	12	2.201
3	4.303	8	2.365	13	2.179
4	3.182	9	2.306	14	2.160
5	2.776	10	2.262	15	2.145
6	2.571	11	2.228	16	2.131

1. Difference

$$d = \sum_{i=1}^{n} d_i$$

2. Standard Deviation

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i \right)^2}{n} \right]}{n-1}}$$

3. Confident Coefficient

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$

4. Relative Accuracy

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$

5. Alternative Relative Accuracy

$$ARA = \frac{|d_{AVG}| + |CC|}{AS} \times 100$$

5. Bias Adjustment Factor

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}} \right)$$

APPENDIX B

CEMS AND REFERENCE METHOD DATA

Florida Power and Light

Air Permit # :	PSD-FL-396
Plant Name or Location:	West County Energy Center
Date:	March 16, 2011
Project Number:	cis-10-westcounty.fl-rata#1
Manufacturer & Equipment:	Mitsubishi
Model:	501G
Unit Number:	3A
Test Load:	Base and Base wDB
Tester(s) / Test Unit(s):	JF/127/206

		RUN									
	UNITS	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Start Time	hh:mm:ss	09:47:26	11:03:26	12:21:26	18:31:07	10:05:07	11:25:07	12:43:07	13:58:07	14:28:07	14:58:07
End Time	hh:mm:ss	10:46:56	12:02:56	13:20:56	18:51:37	11:04:37	12:24:37	13:42:37	14:18:37	14:48:37	15:18:37
Bar. Pressure	in. Hg	30.25	30.24	30.25	30.18	30.27	30.27	30.25	30.24	30.22	30.22
Amb. Temp.	°F	73	69	77	76	74	81	84	83	84	84
Rel. Humidity	%	55	57	51	46	56	42	34	38	41	41
Spec. Humidity	lb water / lb air	0.009400	0.008494	0.009971	0.008703	0.009899	0.009349	0.008332	0.009030	0.010085	0.010085
Date	mm/dd/yy	03/16/11	03/16/11	03/16/11	03/16/11	03/17/11	03/17/11	03/17/11	03/17/11	03/17/11	03/17/11
Load Designator		Base	Base	Base	Base	Base wDB	Base wDB	Base wDB	Base wDB	Base wDB	Base wDB
Turbine Fuel Flow	lb/min	1,848	1,830	1,818	1,830	1,830	1,812	1,806	1,806	1,806	1,806
Duct Burner Fuel Flow	lb/min	0	0	0	0	173	173	173	173	173	259
Total Fuel Flow	SCFH	2,535,589	2,510,891	2,494,426	2,510,891	2,748,420	2,724,066	2,715,376	2,715,010	2,714,804	2,833,534
Power Output	megawatts	381.3	377.3	376.3	369.1	413.2	400.3	403.9	405.0	404.4	402.8
O_2 CEMS Data	%	13.15	13.18	13.18	13.10	12.33	12.34	12.34	12.32	12.31	12.32
NOx CEMS Data	lb/MMBtu	0.006	0.006	0.006	0.006	0.005	0.005	0.005	0.006	0.005	0.006
CO CEMS Data	ppmvd	0.80	0.80	0.70	1.00	0.80	0.70	0.70	0.70	0.70	0.70
	ppm@15%O_2	0.60	0.60	0.60	0.70	0.60	0.50	0.50	0.50	0.50	0.50
	lb/hr	3.50	3.30	3.20	4.20	3.20	3.20	3.00	3.10	3.00	3.00

CEMS AND REFERENCE METHOD DATA

CEMS Data

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/16/2011 9:47
Period End: 3/16/2011 10:46
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/16/2011 9:47	30.9	0.005	0.8	0.6	3.6	13.13	382.9
3/16/2011 9:48	31	0.005	0.8	0.6	3.6	13.13	383.2
3/16/2011 9:49	30.9	0.005	0.8	0.6	3.6	13.14	382.3
3/16/2011 9:50	30.7	0.005	0.8	0.6	3.6	13.14	381.6
3/16/2011 9:51	30.8	0.005	0.8	0.6	3.6	13.14	382.9
3/16/2011 9:52	31	0.005	0.8	0.6	3.6	13.13	383.9
3/16/2011 9:53	31	0.006	0.8	0.6	3.6	13.13	382.8
3/16/2011 9:54	30.8	0.005	0.8	0.6	3.6	13.14	382.2
3/16/2011 9:55	30.8	0.005	0.8	0.6	3.6	13.13	383.5
3/16/2011 9:56	31.1	0.006	0.8	0.6	3.6	13.13	383.4
3/16/2011 9:57	30.7	0.005	0.8	0.6	3.6	13.14	381.7
3/16/2011 9:58	30.8	0.005	0.8	0.6	3.6	13.15	381.4
3/16/2011 9:59	31	0.005	0.9	0.7	3.8	13.14	383.1
3/16/2011 10:00	30.9	0.006	0.8	0.6	3.6	13.15	383.1
3/16/2011 10:01	30.9	0.006	0.8	0.6	3.6	13.13	383
3/16/2011 10:02	31	0.006	0.8	0.6	3.6	13.12	383.3
3/16/2011 10:03	30.9	0.006	0.8	0.6	3.6	13.14	382.7
3/16/2011 10:04	30.6	0.006	0.8	0.6	3.5	13.14	381.3
3/16/2011 10:05	30.6	0.006	0.8	0.6	3.5	13.13	380.7
3/16/2011 10:06	30.8	0.005	0.8	0.6	3.6	13.15	380.7
3/16/2011 10:07	30.9	0.005	0.8	0.6	3.6	13.14	381.5
3/16/2011 10:08	30.7	0.005	0.9	0.7	3.8	13.15	380.8
3/16/2011 10:09	30.8	0.005	0.9	0.7	3.8	13.15	382
3/16/2011 10:10	31	0.006	0.9	0.7	3.8	13.15	382.4
3/16/2011 10:11	30.9	0.006	0.9	0.7	3.8	13.14	381.9
3/16/2011 10:12	30.8	0.006	0.8	0.6	3.6	13.14	381.7
3/16/2011 10:13	31	0.006	0.8	0.6	3.6	13.14	381.6
3/16/2011 10:14	30.5	0.006	0.8	0.6	3.5	13.15	380.1
3/16/2011 10:15	30.9	0.006	0.8	0.6	3.6	13.15	381.8
3/16/2011 10:16	30.7	0.006	0.8	0.6	3.6	13.14	381
3/16/2011 10:17	30.8	0.006	0.8	0.6	3.6	13.14	381.5
3/16/2011 10:18	30.6	0.006	0.8	0.6	3.5	13.15	380.2
3/16/2011 10:19	30.9	0.005	0.9	0.7	3.8	13.16	381.9
3/16/2011 10:20	30.8	0.005	0.9	0.7	3.8	13.14	380.6
3/16/2011 10:21	30.8	0.006	0.8	0.6	3.6	13.14	381.8
3/16/2011 10:22	30.8	0.006	0.8	0.6	3.6	13.18	381.3
3/16/2011 10:23	30.7	0.005	0.9	0.7	3.8	13.15	380.7
3/16/2011 10:24	30.9	0.006	0.8	0.6	3.6	13.13	381.4
3/16/2011 10:25	30.9	0.006	0.7	0.5	3.1	13.17	380.5
3/16/2011 10:26	30.5	0.006	0.7	0.5	3.0	13.17	379.6
3/16/2011 10:27	30.8	0.006	0.8	0.6	3.6	13.16	381.7
3/16/2011 10:28	30.7	0.006	0.8	0.6	3.6	13.15	381.2
3/16/2011 10:29	30.6	0.006	0.8	0.6	3.5	13.16	379.6
3/16/2011 10:30	30.9	0.006	0.8	0.6	3.6	13.16	380.8
3/16/2011 10:31	30.7	0.006	0.8	0.6	3.6	13.15	380.1
3/16/2011 10:32	30.6	0.006	0.8	0.6	3.5	13.17	379.7
3/16/2011 10:33	30.8	0.005	0.8	0.6	3.6	13.18	380.2
3/16/2011 10:34	30.6	0.006	0.8	0.6	3.5	13.16	380.2
3/16/2011 10:35	30.8	0.006	0.7	0.5	3.1	13.16	380.1
3/16/2011 10:36	30.6	0.006	0.7	0.5	3.0	13.18	379.2
3/16/2011 10:37	30.7	0.005	0.8	0.6	3.6	13.18	380.5
3/16/2011 10:38	30.9	0.005	0.8	0.6	3.6	13.18	380.7
3/16/2011 10:39	30.5	0.005	0.8	0.6	3.5	13.18	379.6
3/16/2011 10:40	30.8	0.006	0.8	0.6	3.6	13.17	381.5
3/16/2011 10:41	30.8	0.006	0.7	0.5	3.1	13.17	380.8
3/16/2011 10:42	30.6	0.006	0.7	0.5	3.0	13.16	380.1
3/16/2011 10:43	30.6	0.006	0.7	0.5	3.0	13.18	380.1
3/16/2011 10:44	30.6	0.006	0.8	0.6	3.5	13.17	380
3/16/2011 10:45	30.7	0.006	0.7	0.5	3.0	13.18	379.7
3/16/2011 10:46	30.5	0.005	0.8	0.6	3.5	13.19	379.6
Final Average*	30.8	0.006	0.8	0.6	3.5	13.15	381.3
Maximum*	31.1	0.006	0.9	0.7	3.8	13.19	383.9
Minimum*	30.5	0.005	0.7	0.5	3.0	13.12	379.2

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/16/2011 11:03
Period End: 3/16/2011 12:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/16/2011 11:03	30.4	0.005	0.7	0.5	3.0	13.18	379
3/16/2011 11:04	30.5	0.005	0.8	0.6	3.5	13.18	379.3
3/16/2011 11:05	30.6	0.005	0.8	0.6	3.5	13.18	378.9
3/16/2011 11:06	30.5	0.005	0.8	0.6	3.5	13.18	378.9
3/16/2011 11:07	30.7	0.006	0.7	0.5	3.0	13.17	379.4
3/16/2011 11:08	30.5	0.006	0.7	0.5	3.0	13.17	377.2
3/16/2011 11:09	30.5	0.006	0.7	0.5	3.0	13.18	376.8
3/16/2011 11:10	30.7	0.006	0.8	0.6	3.6	13.17	376.9
3/16/2011 11:11	30.6	0.006	0.7	0.5	3.0	13.16	375.6
3/16/2011 11:12	30.6	0.006	0.7	0.5	3.0	13.17	374.8
3/16/2011 11:13	30.7	0.005	0.7	0.5	3.0	13.19	375.5
3/16/2011 11:14	30.6	0.005	0.8	0.6	3.5	13.17	376
3/16/2011 11:15	30.5	0.006	0.7	0.5	3.0	13.16	375.2
3/16/2011 11:16	30.6	0.005	0.7	0.5	3.0	13.18	376.7
3/16/2011 11:17	30.8	0.005	0.8	0.6	3.6	13.17	377.4
3/16/2011 11:18	30.4	0.006	0.7	0.5	3.0	13.16	376.5
3/16/2011 11:19	30.5	0.006	0.7	0.5	3.0	13.14	376.7
3/16/2011 11:20	30.5	0.006	0.7	0.5	3.0	13.18	376.5
3/16/2011 11:21	30.5	0.005	0.8	0.6	3.5	13.16	376.6
3/16/2011 11:22	30.5	0.006	0.7	0.5	3.0	13.14	375.7
3/16/2011 11:23	30.2	0.005	0.7	0.5	3.0	13.17	375.6
3/16/2011 11:24	30.6	0.005	0.9	0.7	3.8	13.21	377.8
3/16/2011 11:25	30.5	0.005	0.9	0.7	3.8	13.18	378.5
3/16/2011 11:26	30.4	0.006	0.8	0.6	3.5	13.16	377.8
3/16/2011 11:27	30.3	0.006	0.7	0.5	3.0	13.19	376.9
3/16/2011 11:28	30.7	0.005	0.8	0.6	3.6	13.19	378.7
3/16/2011 11:29	30.5	0.005	0.8	0.6	3.5	13.18	378.1
3/16/2011 11:30	30.5	0.006	0.8	0.6	3.5	13.18	378.7
3/16/2011 11:31	30.7	0.006	0.7	0.5	3.0	13.17	379.3
3/16/2011 11:32	30.5	0.006	0.8	0.6	3.5	13.18	378.6
3/16/2011 11:33	30.4	0.006	0.7	0.5	3.0	13.16	378.3
3/16/2011 11:34	30.5	0.006	0.7	0.5	3.0	13.13	378
3/16/2011 11:35	30.3	0.006	0.7	0.5	3.0	13.16	375.8
3/16/2011 11:36	30.2	0.005	0.8	0.6	3.5	13.20	375.7
3/16/2011 11:37	30.4	0.005	0.9	0.7	3.8	13.18	377.1
3/16/2011 11:38	30.5	0.006	0.8	0.6	3.5	13.19	377
3/16/2011 11:39	30.4	0.005	0.8	0.6	3.5	13.21	376.5
3/16/2011 11:40	30.4	0.006	0.8	0.6	3.5	13.17	377.2
3/16/2011 11:41	30.4	0.006	0.7	0.5	3.0	13.18	376.8
3/16/2011 11:42	30.4	0.006	0.7	0.5	3.0	13.19	375.7
3/16/2011 11:43	30.4	0.005	0.8	0.6	3.5	13.20	376.2
3/16/2011 11:44	30.5	0.005	0.8	0.6	3.5	13.18	377.8
3/16/2011 11:45	30.6	0.006	0.7	0.5	3.0	13.17	378.6
3/16/2011 11:46	30.4	0.006	0.7	0.5	3.0	13.17	377.5
3/16/2011 11:47	30.3	0.006	0.7	0.5	3.0	13.17	376.8
3/16/2011 11:48	30.6	0.006	0.7	0.5	3.0	13.18	378.1
3/16/2011 11:49	30.5	0.006	0.8	0.6	3.5	13.18	377
3/16/2011 11:50	30.4	0.006	0.7	0.5	3.0	13.18	376.9
3/16/2011 11:51	30.4	0.006	0.7	0.5	3.0	13.20	377
3/16/2011 11:52	30.5	0.005	0.8	0.6	3.5	13.20	377.3
3/16/2011 11:53	30.4	0.006	0.8	0.6	3.5	13.19	377.2
3/16/2011 11:54	30.4	0.006	0.8	0.6	3.5	13.18	377.9
3/16/2011 11:55	30.6	0.006	0.7	0.5	3.0	13.18	378.1
3/16/2011 11:56	30.4	0.006	0.8	0.6	3.5	13.18	377
3/16/2011 11:57	30.5	0.006	0.7	0.5	3.0	13.17	378
3/16/2011 11:58	30.6	0.006	0.7	0.5	3.0	13.18	377.8
3/16/2011 11:59	30.5	0.005	0.8	0.6	3.5	13.19	377.3
3/16/2011 12:00	30.3	0.005	0.8	0.6	3.5	13.14	378.3
3/16/2011 12:01	30.5	0.006	0.7	0.5	3.0	13.14	379
3/16/2011 12:02	30.4	0.005	0.7	0.5	3.0	13.18	377.9
Final Average*	30.5	0.006	0.8	0.6	3.3	13.18	377.3
Maximum*	30.8	0.006	0.9	0.7	3.8	13.21	379.4
Minimum*	30.2	0.005	0.7	0.5	3.0	13.13	374.8

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/16/2011 12:21
Period End: 3/16/2011 13:20
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/16/2011 12:21	30.4	0.006	0.8	0.6	3.5	13.17	377.7
3/16/2011 12:22	30.3	0.006	0.7	0.5	3.0	13.18	376.7
3/16/2011 12:23	30.3	0.005	0.7	0.5	3.0	13.20	376.8
3/16/2011 12:24	30.5	0.005	0.8	0.6	3.5	13.18	378.4
3/16/2011 12:25	30.4	0.006	0.8	0.6	3.5	13.16	377.3
3/16/2011 12:26	30.3	0.006	0.7	0.5	3.0	13.18	377.7
3/16/2011 12:27	30.4	0.006	0.7	0.5	3.0	13.18	377
3/16/2011 12:28	30.3	0.006	0.7	0.5	3.0	13.17	376.2
3/16/2011 12:29	30.4	0.006	0.7	0.5	3.0	13.18	376.9
3/16/2011 12:30	30.3	0.005	0.7	0.5	3.0	13.20	376
3/16/2011 12:31	30.4	0.005	0.8	0.6	3.5	13.20	377.6
3/16/2011 12:32	30.4	0.006	0.8	0.6	3.5	13.16	377.5
3/16/2011 12:33	30.1	0.006	0.6	0.5	2.5	13.18	376.1
3/16/2011 12:34	30.5	0.005	0.7	0.5	3.0	13.21	377.6
3/16/2011 12:35	30.3	0.005	0.8	0.6	3.5	13.16	377.1
3/16/2011 12:36	30.4	0.006	0.7	0.5	3.0	13.17	377.6
3/16/2011 12:37	30.3	0.006	0.6	0.5	2.5	13.18	376.6
3/16/2011 12:38	30.3	0.005	0.8	0.6	3.5	13.20	377.3
3/16/2011 12:39	30.5	0.006	0.8	0.6	3.5	13.15	378
3/16/2011 12:40	30.1	0.006	0.6	0.5	2.5	13.16	376.5
3/16/2011 12:41	30.4	0.006	0.7	0.5	3.0	13.17	376.8
3/16/2011 12:42	30.1	0.005	0.7	0.5	3.0	13.17	374.9
3/16/2011 12:43	30.3	0.005	0.7	0.5	3.0	13.20	376.9
3/16/2011 12:44	30.2	0.006	0.8	0.6	3.5	13.18	375.9
3/16/2011 12:45	30.1	0.006	0.7	0.5	3.0	13.18	376.4
3/16/2011 12:46	30.4	0.006	0.7	0.5	3.0	13.17	376.4
3/16/2011 12:47	30.2	0.006	0.6	0.5	2.5	13.10	375.1
3/16/2011 12:48	29.8	0.005	0.6	0.5	2.5	13.18	372.4
3/16/2011 12:49	30.2	0.005	0.9	0.7	4.0	13.26	374.9
3/16/2011 12:50	30.2	0.005	1.2	0.9	5.2	13.24	375.1
3/16/2011 12:51	30	0.005	1	0.8	4.2	13.22	375.2
3/16/2011 12:52	30.3	0.005	0.9	0.7	3.8	13.19	377.5
3/16/2011 12:53	30.4	0.006	0.8	0.6	3.5	13.17	377.2
3/16/2011 12:54	30.3	0.006	0.7	0.5	3.0	13.17	377.1
3/16/2011 12:55	30.4	0.006	0.7	0.5	3.0	13.17	378.1
3/16/2011 12:56	30.2	0.005	0.7	0.5	3.0	13.16	376
3/16/2011 12:57	30.2	0.005	0.7	0.5	3.0	13.18	376.9
3/16/2011 12:58	30.3	0.005	0.8	0.6	3.5	13.20	376.8
3/16/2011 12:59	30.4	0.005	0.8	0.6	3.5	13.18	377.4
3/16/2011 13:00	30.5	0.006	0.7	0.5	3.0	13.10	377.2
3/16/2011 13:01	29.9	0.006	0.6	0.5	2.5	13.12	374
3/16/2011 13:02	30.3	0.005	0.7	0.5	3.0	13.17	374.6
3/16/2011 13:03	30.1	0.005	0.9	0.7	3.7	13.14	374.5
3/16/2011 13:04	30	0.005	0.8	0.6	3.5	13.15	374.5
3/16/2011 13:05	30.3	0.005	0.8	0.6	3.5	13.20	375.7
3/16/2011 13:06	30.2	0.005	0.8	0.6	3.5	13.18	375.3
3/16/2011 13:07	30.1	0.006	0.7	0.5	3.0	13.16	375.7
3/16/2011 13:08	30.2	0.006	0.6	0.5	2.5	13.15	375.8
3/16/2011 13:09	30.1	0.005	0.7	0.5	3.0	13.21	374.1
3/16/2011 13:10	30.2	0.005	0.8	0.6	3.5	13.21	375.5
3/16/2011 13:11	30.4	0.005	0.8	0.6	3.5	13.18	376.9
3/16/2011 13:12	30.4	0.006	0.7	0.5	3.0	13.18	376
3/16/2011 13:13	30	0.006	0.6	0.5	2.5	13.16	374.5
3/16/2011 13:14	30.2	0.005	0.7	0.5	3.0	13.21	375.1
3/16/2011 13:15	30.2	0.005	0.8	0.6	3.5	13.23	375.4
3/16/2011 13:16	30.2	0.005	0.8	0.6	3.5	13.19	377.1
3/16/2011 13:17	30.4	0.006	0.7	0.5	3.0	13.17	377.1
3/16/2011 13:18	30.1	0.006	0.6	0.5	2.5	13.20	375.5
3/16/2011 13:19	30.3	0.005	0.7	0.5	3.0	13.19	377.7
3/16/2011 13:20	30.3	0.006	0.6	0.5	2.5	13.17	376.3
Final Average*	30.3	0.006	0.7	0.6	3.2	13.18	376.3
Maximum*	30.5	0.006	1.2	0.9	5.2	13.26	378.4
Minimum*	29.8	0.005	0.6	0.5	2.5	13.10	372.4

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/16/2011 18:31
Period End: 3/16/2011 18:51
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/16/2011 18:31	29.6	0.005	2	1.5	8.3	13.21	354.2
3/16/2011 18:32	30.1	0.005	1.8	1.4	7.7	13.21	359.3
3/16/2011 18:33	30.9	0.005	1.7	1.3	7.4	13.14	361.7
3/16/2011 18:34	29.7	0.006	1.3	1.0	5.4	13.15	361.2
3/16/2011 18:35	30.8	0.006	1.3	1.0	5.6	13.13	366.2
3/16/2011 18:36	30.6	0.006	1.1	0.8	4.8	13.10	364.7
3/16/2011 18:37	30	0.007	0.9	0.7	3.7	13.08	365.4
3/16/2011 18:38	30.9	0.007	0.8	0.6	3.6	13.08	371.1
3/16/2011 18:39	30.7	0.007	0.7	0.5	3.0	13.06	369.5
3/16/2011 18:40	30.2	0.007	0.7	0.5	3.0	13.03	371.7
3/16/2011 18:41	31.3	0.007	0.6	0.4	2.6	13.03	374.9
3/16/2011 18:42	30.3	0.007	0.6	0.5	2.5	13.05	370.0
3/16/2011 18:43	30.6	0.006	0.7	0.5	3.0	13.07	372.4
3/16/2011 18:44	31.1	0.006	0.7	0.5	3.1	13.08	374.0
3/16/2011 18:45	30	0.006	0.7	0.5	3.0	13.04	370.2
3/16/2011 18:46	30.9	0.005	0.7	0.5	3.1	13.10	373.7
3/16/2011 18:47	30.3	0.005	0.8	0.6	3.5	13.06	370.9
3/16/2011 18:48	30.5	0.005	0.8	0.6	3.5	13.09	374.8
3/16/2011 18:49	30.9	0.005	0.8	0.6	3.6	13.10	373.9
3/16/2011 18:50	29.9	0.005	0.8	0.6	3.5	13.08	372.8
3/16/2011 18:51	30.9	0.004	0.8	0.6	3.6	13.12	378.0
Final Average*	30.5	0.006	1	0.7	4.2	13.10	369.1
Maximum*	31.3	0.007	2	1.5	8.3	13.21	378.0
Minimum*	29.6	0.004	0.6	0.4	2.5	13.03	354.2

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: #REF!
Period End: #REF!
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 10:05	30.4	10214	0.004	0.8	0.6	3.3	12.35	401.8
3/17/2011 10:06	30.5	10231	0.005	0.8	0.6	3.3	12.33	402.5
3/17/2011 10:07	31.1	10241	0.004	0.8	0.6	3.4	12.34	403.4
3/17/2011 10:08	31.0	10243	0.004	0.8	0.6	3.4	12.32	403.5
3/17/2011 10:09	31.0	10253	0.005	0.8	0.6	3.4	12.33	403.5
3/17/2011 10:10	30.1	10278	0.004	0.9	0.6	3.8	12.34	403.3
3/17/2011 10:11	29.7	10306	0.005	0.8	0.5	3.2	12.31	403.2
3/17/2011 10:12	30.2	10339	0.005	0.8	0.6	3.3	12.34	403.6
3/17/2011 10:13	31.0	10353	0.005	0.8	0.5	3.4	12.31	405.8
3/17/2011 10:14	30.4	10372	0.005	0.8	0.6	3.3	12.33	405.4
3/17/2011 10:15	30.1	10386	0.005	0.8	0.6	3.3	12.34	404.9
3/17/2011 10:16	30.5	10396	0.005	0.8	0.6	3.3	12.34	406.0
3/17/2011 10:17	30.9	10400	0.005	0.8	0.6	3.4	12.32	406.7
3/17/2011 10:18	30.5	10404	0.005	0.8	0.6	3.3	12.33	404.9
3/17/2011 10:19	30.9	10411	0.005	0.8	0.6	3.4	12.32	406.5
3/17/2011 10:20	30.6	10414	0.005	0.8	0.6	3.3	12.32	409.7
3/17/2011 10:21	29.5	10414	0.005	0.8	0.6	3.2	12.33	409.9
3/17/2011 10:22	30.9	10407	0.005	0.8	0.6	3.4	12.32	414.3
3/17/2011 10:23	30.2	10400	0.005	0.8	0.6	3.3	12.32	413.7
3/17/2011 10:24	30.5	10394	0.005	0.8	0.6	3.3	12.32	414.1
3/17/2011 10:25	30.8	10403	0.005	0.8	0.6	3.3	12.33	413.8
3/17/2011 10:26	30.0	10401	0.005	0.8	0.6	3.3	12.32	412.9
3/17/2011 10:27	29.9	10398	0.005	0.8	0.5	3.3	12.31	412.7
3/17/2011 10:28	30.6	10397	0.005	0.7	0.5	3.0	12.34	415.0
3/17/2011 10:29	30.2	10398	0.005	0.8	0.6	3.3	12.33	416.8
3/17/2011 10:30	30.7	10395	0.005	0.8	0.6	3.3	12.35	419.9
3/17/2011 10:31	30.5	10403	0.005	0.8	0.6	3.3	12.34	419.5
3/17/2011 10:32	30.2	10402	0.005	0.7	0.5	3.0	12.33	419.5
3/17/2011 10:33	30.6	10404	0.005	0.7	0.5	3.0	12.32	420.7
3/17/2011 10:34	30.8	10408	0.005	0.7	0.5	3.1	12.32	490.9
3/17/2011 10:35	31.0	10406	0.005	0.7	0.5	3.1	12.32	490.6
3/17/2011 10:36	29.1	10400	0.005	0.8	0.6	3.2	12.34	488.3
3/17/2011 10:37	30.5	10399	0.005	0.7	0.5	3.0	12.34	422.3
3/17/2011 10:38	30.1	10409	0.005	0.7	0.5	3.0	12.31	417.1
3/17/2011 10:39	30.6	10417	0.005	0.7	0.5	3.0	12.33	411.8
3/17/2011 10:40	30.7	10421	0.005	0.7	0.5	3.1	12.33	414.1
3/17/2011 10:41	30.2	10425	0.005	0.7	0.5	3.0	12.33	413.7
3/17/2011 10:42	30.3	10422	0.005	0.7	0.5	3.0	12.31	408.8
3/17/2011 10:43	30.9	10417	0.005	0.7	0.5	3.1	12.31	411.1
3/17/2011 10:44	30.3	10424	0.005	0.8	0.6	3.3	12.33	412.0
3/17/2011 10:45	30.2	10426	0.005	0.8	0.6	3.3	12.36	412.4
3/17/2011 10:46	30.6	10422	0.006	0.8	0.6	3.3	12.32	410.0
3/17/2011 10:47	30.7	10421	0.006	0.7	0.5	3.1	12.32	409.2
3/17/2011 10:48	30.5	10422	0.006	0.7	0.5	3.0	12.35	409.0
3/17/2011 10:49	30.3	10419	0.006	0.8	0.6	3.3	12.33	408.2
3/17/2011 10:50	30.6	10419	0.006	0.7	0.5	3.0	12.32	406.4
3/17/2011 10:51	30.8	10414	0.006	0.7	0.5	3.1	12.34	405.9
3/17/2011 10:52	30.6	10417	0.006	0.8	0.6	3.3	12.33	406.3
3/17/2011 10:53	30.4	10413	0.006	0.7	0.5	3.0	12.35	407.1
3/17/2011 10:54	30.4	10417	0.006	0.8	0.6	3.3	12.32	405.9
3/17/2011 10:55	30.4	10418	0.006	0.7	0.5	3.0	12.34	404.7
3/17/2011 10:56	30.8	10411	0.006	0.8	0.6	3.3	12.35	406.8
3/17/2011 10:57	30.3	10404	0.006	0.8	0.6	3.3	12.34	409.0
3/17/2011 10:58	30.4	10399	0.006	0.7	0.5	3.0	12.29	405.0
3/17/2011 10:59	30.8	10403	0.006	0.7	0.5	3.1	12.32	402.5
3/17/2011 11:00	30.8	10398	0.005	0.8	0.6	3.3	12.36	405.4
3/17/2011 11:01	30.3	10401	0.005	0.8	0.6	3.3	12.33	406.9
3/17/2011 11:02	30.2	10402	0.006	0.7	0.5	3.0	12.31	404.5
3/17/2011 11:03	30.5	10402	0.006	0.7	0.5	3.0	12.33	403.9
3/17/2011 11:04	30.7	10398	0.005	0.8	0.6	3.3	12.35	404.2
Final Average*	30.5	10387	0.005	0.8	0.6	3.2	12.33	413.2
Maximum*	31.1	10426	0.006	0.9	0.6	3.8	12.36	490.9
Minimum*	29.1	10214	0.004	0.7	0.5	3.0	12.29	401.8

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: #REF!
Period End: #REF!
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 11:25	30.7	10403	0.006	0.7	0.5	3.1	12.33	397.4
3/17/2011 11:26	30.3	10401	0.006	0.7	0.5	3.0	12.34	393.4
3/17/2011 11:27	30.4	10398	0.006	0.7	0.5	3.0	12.35	392.3
3/17/2011 11:28	30.3	10403	0.006	0.7	0.5	3.0	12.33	390.6
3/17/2011 11:29	30.5	10401	0.006	0.7	0.5	3.0	12.28	388.8
3/17/2011 11:30	30.3	10403	0.006	0.7	0.5	3.0	12.31	387.1
3/17/2011 11:31	30.3	10400	0.005	0.8	0.6	3.3	12.34	388.4
3/17/2011 11:32	30.4	10400	0.005	0.8	0.6	3.3	12.35	394.5
3/17/2011 11:33	30.3	10403	0.005	0.8	0.6	3.3	12.33	397.3
3/17/2011 11:34	30.0	10403	0.005	0.7	0.5	3.0	12.35	397.5
3/17/2011 11:35	30.2	10404	0.005	0.7	0.5	3.0	12.36	399.3
3/17/2011 11:36	30.5	10405	0.006	0.8	0.5	3.3	12.3	400.1
3/17/2011 11:37	30.3	10403	0.006	0.7	0.5	3.0	12.29	398.7
3/17/2011 11:38	30.2	10400	0.005	0.7	0.5	3.0	12.38	399.2
3/17/2011 11:39	30.2	10401	0.005	0.9	0.6	3.8	12.34	400.4
3/17/2011 11:40	30.1	10404	0.005	0.8	0.5	3.3	12.31	400.8
3/17/2011 11:41	30.2	10403	0.005	0.8	0.6	3.3	12.34	399.9
3/17/2011 11:42	30.3	10405	0.005	0.8	0.5	3.3	12.28	398.8
3/17/2011 11:43	30.2	10401	0.005	0.8	0.6	3.3	12.36	398.5
3/17/2011 11:44	30.2	10405	0.005	0.9	0.6	3.8	12.38	398.9
3/17/2011 11:45	30.2	10409	0.005	0.9	0.6	3.8	12.38	400.7
3/17/2011 11:46	30.0	10414	0.005	0.8	0.6	3.3	12.34	400.5
3/17/2011 11:47	30.4	10405	0.006	0.7	0.5	3.0	12.29	400.5
3/17/2011 11:48	30.4	10395	0.006	0.6	0.4	2.5	12.34	399.1
3/17/2011 11:49	30.3	10396	0.005	0.7	0.5	3.0	12.35	400.3
3/17/2011 11:50	30.2	10398	0.005	0.7	0.5	3.0	12.33	400.5
3/17/2011 11:51	30.4	10392	0.005	0.7	0.5	3.0	12.33	401.2
3/17/2011 11:52	30.2	10391	0.005	0.8	0.6	3.3	12.35	401.8
3/17/2011 11:53	30.3	10397	0.005	0.8	0.6	3.3	12.38	403.1
3/17/2011 11:54	30.3	10395	0.005	0.8	0.5	3.3	12.31	403.8
3/17/2011 11:55	30.1	10401	0.005	0.7	0.5	3.0	12.31	401.8
3/17/2011 11:56	30.4	10409	0.005	0.8	0.6	3.3	12.35	402.6
3/17/2011 11:57	30.2	10406	0.005	0.7	0.5	3.0	12.34	402.0
3/17/2011 11:58	30.4	10404	0.005	0.7	0.5	3.0	12.35	403.5
3/17/2011 11:59	29.9	10409	0.005	0.7	0.5	3.0	12.36	402.6
3/17/2011 12:00	30.1	10404	0.005	0.8	0.6	3.3	12.36	403.7
3/17/2011 12:01	30.2	10407	0.006	0.8	0.6	3.3	12.33	403.0
3/17/2011 12:02	30.0	10405	0.006	0.7	0.5	3.0	12.33	402.2
3/17/2011 12:03	30.2	10406	0.006	0.7	0.5	3.0	12.37	402.9
3/17/2011 12:04	30.1	10414	0.006	0.7	0.5	3.0	12.34	403.1
3/17/2011 12:05	30.3	10405	0.006	0.6	0.4	2.5	12.34	403.5
3/17/2011 12:06	30.1	10412	0.006	0.7	0.5	3.0	12.35	403.2
3/17/2011 12:07	30.3	10415	0.006	0.7	0.5	3.0	12.36	403.5
3/17/2011 12:08	30.3	10406	0.006	0.7	0.5	3.0	12.35	403.3
3/17/2011 12:09	30.2	10402	0.006	0.7	0.5	3.0	12.32	403.7
3/17/2011 12:10	30.2	10403	0.006	0.7	0.5	3.0	12.26	402.5
3/17/2011 12:11	30.0	10400	0.005	0.7	0.5	3.0	12.31	401.6
3/17/2011 12:12	30.0	10400	0.005	0.8	0.6	3.3	12.32	401.6
3/17/2011 12:13	29.9	10393	0.005	0.9	0.6	3.8	12.31	402.0
3/17/2011 12:14	30.2	10397	0.005	0.9	0.6	3.8	12.39	402.6
3/17/2011 12:15	30.1	10393	0.005	0.9	0.6	3.8	12.35	403.5
3/17/2011 12:16	30.2	10396	0.006	0.8	0.5	3.3	12.31	403.7
3/17/2011 12:17	30.0	10395	0.006	0.6	0.4	2.4	12.29	401.7
3/17/2011 12:18	29.9	10399	0.005	0.7	0.5	3.0	12.4	401.5
3/17/2011 12:19	30.0	10401	0.005	0.9	0.6	3.8	12.38	402.7
3/17/2011 12:20	30.2	10400	0.005	0.8	0.6	3.3	12.36	403.6
3/17/2011 12:21	30.3	10403	0.006	0.7	0.5	3.0	12.32	404.5
3/17/2011 12:22	30.1	10403	0.006	0.6	0.4	2.5	12.27	402.7
3/17/2011 12:23	30.0	10393	0.005	0.7	0.5	3.0	12.37	401.9
3/17/2011 12:24	30.1	10387	0.005	0.8	0.5	3.3	12.3	403.3
Final Average*	30.2	10402	0.005	0.7	0.5	3.2	12.34	400.3
Maximum*	30.7	10415	0.006	0.9	0.6	3.8	12.4	404.5
Minimum*	29.9	10387	0.005	0.6	0.4	2.4	12.26	387.1

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version S9

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: #REF!
Period End: #REF!
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 12:43	30.0	10375	0.006	0.6	0.4	2.4	12.31	401.3
3/17/2011 12:44	30.0	10374	0.005	0.7	0.5	3.0	12.36	402.0
3/17/2011 12:45	30.2	10368	0.005	0.8	0.5	3.3	12.28	403.0
3/17/2011 12:46	29.8	10377	0.005	0.7	0.5	3.0	12.33	401.1
3/17/2011 12:47	30.4	10383	0.005	0.8	0.6	3.3	12.35	403.2
3/17/2011 12:48	30.1	10377	0.005	0.8	0.5	3.3	12.27	403.9
3/17/2011 12:49	29.7	10369	0.005	0.8	0.6	3.2	12.34	402.2
3/17/2011 12:50	30.1	10368	0.005	0.9	0.6	3.8	12.35	403.8
3/17/2011 12:51	30.1	10371	0.005	0.8	0.6	3.3	12.33	404.6
3/17/2011 12:52	30.2	10379	0.006	0.7	0.5	3.0	12.32	405.4
3/17/2011 12:53	30.0	10375	0.006	0.6	0.4	2.4	12.28	403.2
3/17/2011 12:54	30.0	10374	0.005	0.7	0.5	3.0	12.34	403.1
3/17/2011 12:55	30.1	10372	0.005	0.7	0.5	3.0	12.35	402.7
3/17/2011 12:56	30.0	10385	0.005	0.7	0.5	3.0	12.38	403.5
3/17/2011 12:57	30.1	10383	0.005	0.7	0.5	3.0	12.33	405.1
3/17/2011 12:58	29.9	10378	0.006	0.6	0.4	2.4	12.28	402.8
3/17/2011 12:59	30.1	10375	0.005	0.7	0.5	3.0	12.38	402.6
3/17/2011 13:00	30.0	10374	0.005	0.7	0.5	3.0	12.39	404.2
3/17/2011 13:01	30.0	10375	0.005	0.8	0.6	3.3	12.38	404.6
3/17/2011 13:02	30.2	10380	0.006	0.7	0.5	3.0	12.37	405.7
3/17/2011 13:03	30.2	10383	0.006	0.6	0.4	2.5	12.36	405.4
3/17/2011 13:04	30.2	10387	0.006	0.7	0.5	3.0	12.34	405.2
3/17/2011 13:05	30.0	10385	0.006	0.6	0.4	2.4	12.31	404.0
3/17/2011 13:06	30.0	10381	0.005	0.6	0.4	2.4	12.32	402.7
3/17/2011 13:07	29.9	10385	0.005	0.7	0.5	3.0	12.40	403.2
3/17/2011 13:08	30.0	10385	0.005	0.8	0.6	3.3	12.34	403.2
3/17/2011 13:09	30.1	10385	0.005	0.7	0.5	3.0	12.28	403.3
3/17/2011 13:10	29.7	10383	0.005	0.6	0.4	2.4	12.32	402.2
3/17/2011 13:11	29.9	10375	0.005	0.7	0.5	3.0	12.31	402.5
3/17/2011 13:12	29.9	10380	0.005	0.8	0.6	3.3	12.38	402.7
3/17/2011 13:13	29.9	10383	0.005	0.8	0.6	3.3	12.33	403.5
3/17/2011 13:14	30.1	10385	0.006	0.8	0.5	3.3	12.30	404.3
3/17/2011 13:15	29.9	10382	0.006	0.7	0.5	3.0	12.34	403.4
3/17/2011 13:16	30.0	10383	0.005	0.8	0.6	3.3	12.36	403.8
3/17/2011 13:17	30.2	10388	0.005	0.8	0.6	3.3	12.39	405.0
3/17/2011 13:18	30.3	10385	0.006	0.7	0.5	3.0	12.34	406.2
3/17/2011 13:19	30.2	10383	0.006	0.7	0.5	3.0	12.32	405.9
3/17/2011 13:20	30.0	10385	0.006	0.7	0.5	3.0	12.36	404.9
3/17/2011 13:21	30.2	10387	0.006	0.7	0.5	3.0	12.35	405.3
3/17/2011 13:22	30.2	10388	0.006	0.7	0.5	3.0	12.28	404.7
3/17/2011 13:23	30.0	10385	0.006	0.6	0.4	2.4	12.28	402.7
3/17/2011 13:24	29.9	10383	0.005	0.7	0.5	3.0	12.35	401.7
3/17/2011 13:25	30.0	10385	0.005	0.8	0.6	3.3	12.37	402.6
3/17/2011 13:26	30.0	10383	0.005	0.9	0.6	3.8	12.36	404.4
3/17/2011 13:27	30.1	10386	0.005	0.8	0.6	3.3	12.36	404.9
3/17/2011 13:28	30.3	10383	0.006	0.8	0.6	3.3	12.32	405.4
3/17/2011 13:29	30.0	10385	0.006	0.7	0.5	3.0	12.33	403.2
3/17/2011 13:30	30.0	10384	0.005	0.8	0.6	3.3	12.40	404.1
3/17/2011 13:31	30.3	10385	0.005	0.8	0.6	3.3	12.36	404.9
3/17/2011 13:32	30.2	10386	0.005	0.7	0.5	3.0	12.32	406.0
3/17/2011 13:33	29.9	10385	0.005	0.7	0.5	3.0	12.32	405.1
3/17/2011 13:34	30.0	10383	0.005	0.7	0.5	3.0	12.35	404.6
3/17/2011 13:35	30.0	10383	0.005	0.7	0.5	3.0	12.31	403.6
3/17/2011 13:36	30.1	10382	0.005	0.7	0.5	3.0	12.42	403.0
3/17/2011 13:37	30.2	10386	0.005	0.8	0.6	3.3	12.37	404.4
3/17/2011 13:38	30.2	10388	0.005	0.7	0.5	3.0	12.31	404.7
3/17/2011 13:39	30.2	10386	0.005	0.7	0.5	3.0	12.34	404.7
3/17/2011 13:40	30.1	10385	0.005	0.7	0.5	3.0	12.36	405.5
3/17/2011 13:41	29.9	10386	0.005	0.8	0.6	3.3	12.35	404.4
3/17/2011 13:42	29.9	10391	0.005	0.7	0.5	3.0	12.36	404.9
Final Average*	30.1	10382	0.005	0.7	0.5	3.0	12.34	403.9
Maximum*	30.4	10391	0.006	0.9	0.6	3.8	12.42	406.2
Minimum*	29.7	10368	0.005	0.6	0.4	2.4	12.27	401.1

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/17/2011 13:58
Period End: 3/17/2011 14:18
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 13:58	30	10359	0.005	0.8	0.6	3.30	12.33	405.6
3/17/2011 13:59	30.1	10358	0.006	0.8	0.6	3.30	12.32	405.5
3/17/2011 14:00	30.2	10356	0.006	0.7	0.5	3.00	12.31	405.4
3/17/2011 14:01	30.3	10356	0.006	0.7	0.5	3.00	12.34	406.8
3/17/2011 14:02	30.2	10355	0.006	0.7	0.5	3.00	12.27	405.4
3/17/2011 14:03	30	10356	0.006	0.6	0.4	2.40	12.36	405.0
3/17/2011 14:04	30.1	10354	0.005	0.8	0.6	3.30	12.36	405.4
3/17/2011 14:05	30.2	10363	0.005	0.8	0.6	3.30	12.32	405.9
3/17/2011 14:06	30.1	10361	0.006	0.7	0.5	3.00	12.3	404.8
3/17/2011 14:07	30.3	10364	0.006	0.7	0.5	3.00	12.34	405.0
3/17/2011 14:08	29.9	10368	0.006	0.7	0.5	3.00	12.32	404.3
3/17/2011 14:09	30.2	10371	0.005	0.7	0.5	3.00	12.3	404.8
3/17/2011 14:10	30	10373	0.005	0.7	0.5	3.00	12.29	404.0
3/17/2011 14:11	30	10375	0.005	0.7	0.5	3.00	12.32	404.4
3/17/2011 14:12	30	10378	0.005	0.8	0.6	3.30	12.33	404.5
3/17/2011 14:13	30.1	10385	0.005	0.7	0.5	3.00	12.33	404.7
3/17/2011 14:14	30.2	10379	0.006	0.7	0.5	3.00	12.29	404.6
3/17/2011 14:15	29.9	10370	0.006	0.7	0.5	3.00	12.29	403.9
3/17/2011 14:16	29.9	10374	0.005	0.7	0.5	3.00	12.35	404.9
3/17/2011 14:17	30.3	10370	0.005	0.8	0.6	3.30	12.32	406.2
3/17/2011 14:18	30	10371	0.006	0.7	0.5	3.00	12.27	404.6
Final Average*	30.1	10366	0.006	0.7	0.5	3.10	12.32	405.0
Maximum*	30.3	10385	0.006	0.8	0.6	3.30	12.36	406.8
Minimum*	29.9	10354	0.005	0.6	0.4	2.40	12.27	403.9

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/17/2011 14:28
Period End: 3/17/2011 14:48
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 14:28	30.2	10364	0.006	0.7	0.5	3.00	12.31	405.9
3/17/2011 14:29	30.1	10361	0.006	0.7	0.5	3.00	12.26	404.6
3/17/2011 14:30	30.1	10354	0.006	0.7	0.5	3.00	12.31	404.3
3/17/2011 14:31	30.1	10352	0.005	0.7	0.5	3.00	12.34	404.1
3/17/2011 14:32	30.1	10357	0.005	0.8	0.6	3.30	12.38	405.4
3/17/2011 14:33	30.3	10359	0.005	0.8	0.6	3.30	12.35	405.8
3/17/2011 14:34	30.1	10366	0.006	0.7	0.5	3.00	12.31	405.8
3/17/2011 14:35	30.1	10359	0.006	0.7	0.5	3.00	12.24	404.5
3/17/2011 14:36	29.9	10352	0.006	0.6	0.4	2.40	12.29	402.3
3/17/2011 14:37	29.9	10353	0.005	0.8	0.6	3.30	12.35	401.9
3/17/2011 14:38	30.1	10352	0.005	0.9	0.6	3.80	12.33	403.9
3/17/2011 14:39	30.1	10358	0.005	0.8	0.5	3.30	12.3	403.5
3/17/2011 14:40	30	10354	0.006	0.7	0.5	3.00	12.28	403.0
3/17/2011 14:41	30.1	10354	0.005	0.7	0.5	3.00	12.34	403.6
3/17/2011 14:42	29.9	10355	0.005	0.8	0.5	3.30	12.29	403.2
3/17/2011 14:43	30	10359	0.005	0.7	0.5	3.00	12.31	404.3
3/17/2011 14:44	30	10355	0.005	0.7	0.5	3.00	12.32	404.6
3/17/2011 14:45	30.1	10361	0.005	0.7	0.5	3.00	12.35	405.3
3/17/2011 14:46	30.1	10355	0.005	0.7	0.5	3.00	12.31	406.0
3/17/2011 14:47	30.3	10357	0.006	0.6	0.4	2.50	12.29	405.6
3/17/2011 14:48	29.9	10357	0.005	0.6	0.4	2.40	12.31	403.9
Final Average*	30.1	10357	0.005	0.7	0.5	3.00	12.31	404.4
Maximum*	30.3	10366	0.006	0.9	0.6	3.80	12.38	406.0
Minimum*	29.9	10352	0.005	0.6	0.4	2.40	12.24	401.9

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/17/2011 14:58
Period End: 3/17/2011 15:18
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_CT_GAS #/sec	3A_DB_GAS #/Hr	3ANOXMMBTU #/MBTU	3A_CO ppm	3A_COCORR ppm	3A_COLBHR #/Hr	3A_O2 %	3A_MW_TOT MW
3/17/2011 14:58	30.1	10385	0.006	0.7	0.5	3.00	12.34	403.8
3/17/2011 14:59	30.1	10383	0.006	0.7	0.5	3.00	12.3	402.5
3/17/2011 15:00	30.1	10393	0.006	0.6	0.4	2.50	12.33	401.4
3/17/2011 15:01	30.1	10391	0.006	0.7	0.5	3.00	12.32	401.7
3/17/2011 15:02	29.9	10390	0.006	0.7	0.5	3.00	12.23	400.2
3/17/2011 15:03	29.7	10364	0.005	0.7	0.5	3.00	12.31	398.7
3/17/2011 15:04	30.1	10359	0.005	0.8	0.6	3.30	12.38	400.2
3/17/2011 15:05	30.2	10358	0.005	0.9	0.6	3.80	12.36	401.9
3/17/2011 15:06	29.9	10368	0.005	0.8	0.5	3.30	12.3	402.6
3/17/2011 15:07	30	10364	0.006	0.7	0.5	3.00	12.33	402.5
3/17/2011 15:08	30.2	10362	0.006	0.7	0.5	3.00	12.27	402.3
3/17/2011 15:09	30.1	10361	0.006	0.6	0.4	2.50	12.28	402.8
3/17/2011 15:10	29.8	10364	0.005	0.7	0.5	3.00	12.34	401.3
3/17/2011 15:11	30.7	10363	0.005	0.8	0.6	3.30	12.33	404.5
3/17/2011 15:12	29.5	10353	0.005	0.7	0.5	2.90	12.29	402.8
3/17/2011 15:13	30.7	10355	0.005	0.7	0.5	3.10	12.35	404.7
3/17/2011 15:14	29.8	10355	0.005	0.7	0.5	3.00	12.32	404.1
3/17/2011 15:15	30.3	10357	0.006	0.7	0.5	3.00	12.32	405.4
3/17/2011 15:16	29.6	10353	0.006	0.7	0.5	3.00	12.33	404.9
3/17/2011 15:17	30.4	10350	0.006	0.7	0.5	3.00	12.31	404.4
3/17/2011 15:18	30.1	10353	0.005	0.7	0.5	3.00	12.35	406.2
Final Average*	30.1	10366	0.006	0.7	0.5	3.00	12.32	402.8
Maximum*	30.7	10393	0.006	0.9	0.6	3.80	12.38	406.2
Minimum*	29.5	10350	0.005	0.6	0.4	2.50	12.23	398.7

*Does not include Invalid Averaging Periods ("N/A")

CEMS AND REFERENCE METHOD DATA

Reference Method Data

Florida Power and Light
March 16, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,535,589	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	55	%
Ambient Temperature	73	°F
Specific Humidity	0.009400	lb H_2O / lb air

Unit Data

Unit Load	381.3	megawatts
Stack Exhaust Flow (M19)	60,852,969	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 09:47:26	10980	13.10	2.82	0.46
03/16/11 09:47:56	11010	13.10	2.84	0.39
03/16/11 09:48:26	11040	13.11	2.83	0.46
03/16/11 09:48:56	11070	13.10	2.82	0.46
03/16/11 09:49:26	11100	13.11	2.81	0.44
03/16/11 09:49:56	11130	13.10	2.80	0.39
03/16/11 09:50:26	11160	13.10	2.78	0.43
03/16/11 09:50:56	11190	13.11	2.79	0.42
03/16/11 09:51:26	11220	13.12	2.77	0.42
03/16/11 09:51:56	11250	13.11	2.75	0.40
03/16/11 09:52:26	11280	13.10	2.79	0.40
03/16/11 09:52:56	11310	13.11	2.83	0.36
03/16/11 09:53:26	11340	13.11	2.84	0.43
03/16/11 09:53:56	11370	13.12	2.83	0.47
03/16/11 09:54:26	11400	13.12	2.82	0.50
03/16/11 09:54:56	11430	13.11	2.80	0.48
03/16/11 09:55:26	11460	13.11	2.83	0.45
03/16/11 09:55:56	11490	13.10	2.85	0.40
03/16/11 09:56:26	11520	13.10	2.87	0.46
03/16/11 09:56:56	11550	13.11	2.87	0.40
03/16/11 09:57:26	11580	13.12	2.87	0.37
03/16/11 09:57:56	11610	13.13	2.82	0.39
03/16/11 09:58:26	11640	13.14	2.77	0.48
03/16/11 09:58:56	11670	13.13	2.76	0.48
03/16/11 09:59:26	11700	13.12	2.79	0.47
03/16/11 09:59:56	11730	13.12	2.81	0.49
03/16/11 10:00:26	11760	13.13	2.88	0.41
03/16/11 10:00:56	11790	13.11	2.87	0.41
03/16/11 10:01:26	11820	13.11	2.89	0.36
03/16/11 10:01:56	11850	13.11	2.92	0.41
03/16/11 10:02:26	11880	13.11	2.94	0.48
03/16/11 10:02:56	11910	13.12	2.96	0.36
03/16/11 10:03:26	11940	13.13	2.93	0.38
03/16/11 10:03:56	11970	13.14	2.93	0.42
03/16/11 10:04:26	12000	13.14	2.92	0.47
03/16/11 10:04:56	12030	13.12	2.87	0.37
03/16/11 10:05:26	12060	13.13	2.86	0.39
03/16/11 10:05:56	12090	13.14	2.86	0.43
03/16/11 10:06:26	12120	13.14	2.85	0.50
03/16/11 10:06:56	12150	13.14	2.83	0.38
03/16/11 10:07:26	12180	13.14	2.81	0.34
03/16/11 10:07:56	12210	13.15	2.50	0.45
03/16/11 10:08:26	12240	13.16	2.36	0.49
03/16/11 10:08:56	12270	13.16	2.32	0.46
03/16/11 10:09:26	12300	13.16	2.35	0.44
03/16/11 10:09:56	12330	13.16	2.42	0.42
03/16/11 10:10:26	12360	13.16	2.43	0.40
03/16/11 10:10:56	12390	13.14	2.39	0.39
03/16/11 10:11:26	12420	13.14	2.40	0.39
03/16/11 10:11:56	12450	13.14	2.43	0.34
03/16/11 10:12:26	12480	13.14	2.45	0.42
03/16/11 10:12:56	12510	13.13	2.48	0.33
03/16/11 10:13:26	12540	13.14	2.51	0.44
03/16/11 10:13:56	12570	13.15	2.49	0.40
03/16/11 10:14:26	12600	13.15	2.47	0.36

Florida Power and Light
March 16, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,535,589	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	55	%
Ambient Temperature	73	°F
Specific Humidity	0.009400	lb H_2O / lb air

Unit Data

Unit Load	381.3	megawatts
Stack Exhaust Flow (M19)	60,852,969	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 10:14:56	12630	13.15	2.44	0.33
03/16/11 10:15:26	12660	13.16	2.45	0.34
03/16/11 10:15:56	12690	13.16	2.45	0.30
03/16/11 10:16:26	12720	13.15	2.43	0.40
03/16/11 10:16:56	12750	13.13	2.44	0.39
03/16/11 10:17:26	12780	13.15	2.48	0.28
03/16/11 10:17:56	12810	13.16	2.45	0.43
03/16/11 10:18:26	12840	13.17	2.44	0.43
03/16/11 10:18:56	12870	13.18	2.39	0.46
03/16/11 10:19:26	12900	13.17	2.35	0.41
03/16/11 10:19:56	12930	13.16	2.35	0.44
03/16/11 10:20:26	12960	13.16	2.39	0.41
03/16/11 10:20:56	12990	13.15	2.43	0.48
03/16/11 10:21:26	13020	13.15	2.47	0.31
03/16/11 10:21:56	13050	13.18	2.49	0.31
03/16/11 10:22:26	13080	13.21	2.44	0.41
03/16/11 10:22:56	13110	13.20	2.39	0.47
03/16/11 10:23:26	13140	13.17	2.41	0.38
03/16/11 10:23:56	13170	13.15	2.52	0.30
03/16/11 10:24:26	13200	13.16	2.63	0.25
03/16/11 10:24:56	13230	13.17	2.65	0.22
03/16/11 10:25:26	13260	13.19	2.56	0.23
03/16/11 10:25:56	13290	13.19	2.47	0.31
03/16/11 10:26:26	13320	13.20	2.44	0.37
03/16/11 10:26:56	13350	13.19	2.44	0.36
03/16/11 10:27:26	13380	13.18	2.43	0.25
03/16/11 10:27:56	13410	13.18	2.44	0.18
03/16/11 10:28:26	13440	13.18	2.46	0.29
03/16/11 10:28:56	13470	13.18	2.31	0.22
03/16/11 10:29:26	13500	13.19	2.25	0.37
03/16/11 10:29:56	13530	13.19	2.21	0.30
03/16/11 10:30:26	13560	13.20	2.20	0.27
03/16/11 10:30:56	13590	13.18	2.18	0.28
03/16/11 10:31:26	13620	13.19	2.19	0.26
03/16/11 10:31:56	13650	13.19	2.20	0.29
03/16/11 10:32:26	13680	13.20	2.20	0.32
03/16/11 10:32:56	13710	13.21	2.19	0.33
03/16/11 10:33:26	13740	13.21	2.15	0.39
03/16/11 10:33:56	13770	13.21	2.14	0.28
03/16/11 10:34:26	13800	13.21	2.17	0.25
03/16/11 10:34:56	13830	13.19	2.18	0.26
03/16/11 10:35:26	13860	13.21	2.22	0.21
03/16/11 10:35:56	13890	13.21	2.21	0.17
03/16/11 10:36:26	13920	13.23	2.19	0.26
03/16/11 10:36:56	13950	13.24	2.17	0.31
03/16/11 10:37:26	13980	13.24	2.11	0.37
03/16/11 10:37:56	14010	13.24	2.09	0.44
03/16/11 10:38:26	14040	13.24	2.13	0.32
03/16/11 10:38:56	14070	13.22	2.14	0.27
03/16/11 10:39:26	14100	13.22	2.16	0.22
03/16/11 10:39:56	14130	13.22	2.17	0.30
03/16/11 10:40:26	14160	13.22	2.17	0.26
03/16/11 10:40:56	14190	13.21	2.23	0.25
03/16/11 10:41:26	14220	13.22	2.25	0.25
03/16/11 10:41:56	14250	13.21	2.26	0.21

Florida Power and Light
March 16, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,535,589	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	55	%
Ambient Temperature	73	°F
Specific Humidity	0.009400	lb H_2O / lb air

Unit Data

Unit Load	381.3	megawatts
Stack Exhaust Flow (M19)	60,852,969	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 10:42:26	14280	13.21	2.27	0.19
03/16/11 10:42:56	14310	13.22	2.25	0.24
03/16/11 10:43:26	14340	13.23	2.22	0.25
03/16/11 10:43:56	14370	13.23	2.18	0.26
03/16/11 10:44:26	14400	13.22	2.16	0.17
03/16/11 10:44:56	14430	13.19	2.16	0.13
03/16/11 10:45:26	14460	13.23	2.22	0.13
03/16/11 10:45:56	14490	13.25	2.20	0.35
03/16/11 10:46:26	14520	13.25	2.16	0.30
03/16/11 10:46:56	14550	13.24	2.12	0.30
RAW AVERAGE		**13.16**	**2.50**	**0.36**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.02	0.10	-0.53
Bias	Final Zero	0.16	0.13	-0.65
Bias	Avg. Zero	0.09	0.12	-0.59
Bias	Initial UpScale	12.11	4.84	4.77
Bias	Final UpScale	12.23	4.76	4.56
Bias	Avg. UpScale	12.17	4.80	4.67
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	2.51	0.89
Concentration (ppm@ 15%O_2)	N/A	1.90	0.67
Emission Rate (lb/hr)	N/A	18.26	3.92
Emission Rate (lb/MMBtu)	N/A	0.007	0.002

Florida Power and Light
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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,510,891	SCFH

Weather Data

Barometric Pressure	30.24	in. Hg
Relative Humidity	57	%
Ambient Temperature	69	°F
Specific Humidity	0.008494	lb H_2O / lb air

Unit Data

Unit Load	377.3	megawatts
Stack Exhaust Flow (M19)	60,305,631	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 11:03:26	15540	13.24	2.18	0.92
03/16/11 11:03:56	15570	13.24	2.13	1.05
03/16/11 11:04:26	15600	13.24	2.12	0.96
03/16/11 11:04:56	15630	13.24	2.14	1.01
03/16/11 11:05:26	15660	13.24	2.17	0.96
03/16/11 11:05:56	15690	13.24	2.17	0.89
03/16/11 11:06:26	15720	13.24	2.17	1.01
03/16/11 11:06:56	15750	13.23	2.20	0.99
03/16/11 11:07:26	15780	13.23	2.23	0.91
03/16/11 11:07:56	15810	13.24	2.23	0.92
03/16/11 11:08:26	15840	13.24	2.22	0.90
03/16/11 11:08:56	15870	13.24	2.21	0.92
03/16/11 11:09:26	15900	13.24	2.18	0.89
03/16/11 11:09:56	15930	13.23	2.17	0.99
03/16/11 11:10:26	15960	13.24	2.20	0.96
03/16/11 11:10:56	15990	13.24	2.19	0.91
03/16/11 11:11:26	16020	13.23	2.22	0.97
03/16/11 11:11:56	16050	13.23	2.23	0.91
03/16/11 11:12:26	16080	13.24	2.24	0.81
03/16/11 11:12:56	16110	13.27	2.21	0.99
03/16/11 11:13:26	16140	13.28	2.15	1.04
03/16/11 11:13:56	16170	13.26	2.11	1.09
03/16/11 11:14:26	16200	13.24	2.13	1.02
03/16/11 11:14:56	16230	13.22	2.20	0.92
03/16/11 11:15:26	16260	13.24	2.24	0.83
03/16/11 11:15:56	16290	13.26	2.24	0.94
03/16/11 11:16:26	16320	13.27	2.18	1.01
03/16/11 11:16:56	16350	13.26	2.13	1.01
03/16/11 11:17:26	16380	13.25	2.14	1.02
03/16/11 11:17:56	16410	13.25	2.19	0.94
03/16/11 11:18:26	16440	13.25	2.22	0.94
03/16/11 11:18:56	16470	13.23	2.24	0.92
03/16/11 11:19:26	16500	13.23	2.24	0.82
03/16/11 11:19:56	16530	13.25	2.27	0.87
03/16/11 11:20:26	16560	13.27	2.21	0.99
03/16/11 11:20:56	16590	13.26	2.14	1.00
03/16/11 11:21:26	16620	13.23	2.12	0.97
03/16/11 11:21:56	16650	13.21	2.17	0.89
03/16/11 11:22:26	16680	13.22	2.21	0.87
03/16/11 11:22:56	16710	13.23	2.19	0.97
03/16/11 11:23:26	16740	13.27	2.17	0.97
03/16/11 11:23:56	16770	13.29	2.08	1.17
03/16/11 11:24:26	16800	13.29	2.03	1.13
03/16/11 11:24:56	16830	13.27	2.04	1.06
03/16/11 11:25:26	16860	13.25	2.12	1.06
03/16/11 11:25:56	16890	13.24	2.34	0.87
03/16/11 11:26:26	16920	13.25	2.53	0.91
03/16/11 11:26:56	16950	13.27	2.54	0.88
03/16/11 11:27:26	16980	13.28	2.46	0.97
03/16/11 11:27:56	17010	13.28	2.40	1.03
03/16/11 11:28:26	17040	13.28	2.37	1.05
03/16/11 11:28:56	17070	13.27	2.37	1.01
03/16/11 11:29:26	17100	13.26	2.41	0.87
03/16/11 11:29:56	17130	13.26	2.46	0.86
03/16/11 11:30:26	17160	13.28	2.45	0.93

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,510,891	SCFH

Weather Data

Barometric Pressure	30.24	in. Hg
Relative Humidity	57	%
Ambient Temperature	69	°F
Specific Humidity	0.008494	lb H_2O / lb air

Unit Data

Unit Load	377.3	megawatts
Stack Exhaust Flow (M19)	60,305,631	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 11:30:56	17190	13.27	2.44	0.92
03/16/11 11:31:26	17220	13.26	2.42	0.90
03/16/11 11:31:56	17250	13.26	2.43	0.91
03/16/11 11:32:26	17280	13.27	2.46	0.87
03/16/11 11:32:56	17310	13.27	2.45	0.88
03/16/11 11:33:26	17340	13.26	2.46	0.86
03/16/11 11:33:56	17370	13.24	2.47	0.81
03/16/11 11:34:26	17400	13.23	2.52	0.79
03/16/11 11:34:56	17430	13.24	2.57	0.77
03/16/11 11:35:26	17460	13.27	2.51	0.85
03/16/11 11:35:56	17490	13.29	2.37	1.04
03/16/11 11:36:26	17520	13.30	2.29	1.16
03/16/11 11:36:56	17550	13.27	2.25	1.05
03/16/11 11:37:26	17580	13.27	2.32	1.00
03/16/11 11:37:56	17610	13.27	2.42	0.87
03/16/11 11:38:26	17640	13.30	2.45	0.86
03/16/11 11:38:56	17670	13.30	2.44	0.95
03/16/11 11:39:26	17700	13.30	2.39	0.97
03/16/11 11:39:56	17730	13.28	2.37	0.88
03/16/11 11:40:26	17760	13.27	2.44	0.77
03/16/11 11:40:56	17790	13.27	2.53	0.79
03/16/11 11:41:26	17820	13.28	2.56	0.74
03/16/11 11:41:56	17850	13.28	2.52	0.83
03/16/11 11:42:26	17880	13.30	2.46	0.83
03/16/11 11:42:56	17910	13.32	2.39	0.91
03/16/11 11:43:26	17940	13.31	2.31	1.05
03/16/11 11:43:56	17970	13.29	2.29	0.98
03/16/11 11:44:26	18000	13.28	2.37	0.82
03/16/11 11:44:56	18030	13.27	2.46	0.86
03/16/11 11:45:26	18060	13.28	2.47	0.80
03/16/11 11:45:56	18090	13.27	2.48	0.78
03/16/11 11:46:26	18120	13.28	2.49	0.81
03/16/11 11:46:56	18150	13.28	2.70	0.72
03/16/11 11:47:26	18180	13.29	2.86	0.78
03/16/11 11:47:56	18210	13.29	2.85	0.86
03/16/11 11:48:26	18240	13.29	2.80	0.91
03/16/11 11:48:56	18270	13.29	2.81	0.84
03/16/11 11:49:26	18300	13.30	2.83	0.84
03/16/11 11:49:56	18330	13.29	2.82	0.80
03/16/11 11:50:26	18360	13.30	2.83	0.76
03/16/11 11:50:56	18390	13.31	2.84	0.83
03/16/11 11:51:26	18420	13.32	2.81	0.77
03/16/11 11:51:56	18450	13.31	2.74	0.84
03/16/11 11:52:26	18480	13.32	2.75	0.75
03/16/11 11:52:56	18510	13.31	2.77	0.83
03/16/11 11:53:26	18540	13.31	2.78	0.82
03/16/11 11:53:56	18570	13.30	2.77	0.85
03/16/11 11:54:26	18600	13.30	2.82	0.83
03/16/11 11:54:56	18630	13.30	2.81	0.76
03/16/11 11:55:26	18660	13.30	2.79	0.83
03/16/11 11:55:56	18690	13.30	2.79	0.84
03/16/11 11:56:26	18720	13.31	2.79	0.79
03/16/11 11:56:56	18750	13.28	2.80	0.86
03/16/11 11:57:26	18780	13.29	2.80	0.87
03/16/11 11:57:56	18810	13.31	2.86	0.77

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,510,891	SCFH

Weather Data

Barometric Pressure	30.24	in. Hg
Relative Humidity	57	%
Ambient Temperature	69	°F
Specific Humidity	0.008494	lb H_2O / lb air

Unit Data

Unit Load	377.3	megawatts
Stack Exhaust Flow (M19)	60,305,631	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 11:58:26	18840	13.32	2.84	0.81
03/16/11 11:58:56	18870	13.33	2.77	0.85
03/16/11 11:59:26	18900	13.33	2.72	0.80
03/16/11 11:59:56	18930	13.32	2.73	0.79
03/16/11 12:00:26	18960	13.29	2.77	0.72
03/16/11 12:00:56	18990	13.27	2.85	0.69
03/16/11 12:01:26	19020	13.28	2.88	0.65
03/16/11 12:01:56	19050	13.30	2.82	0.63
03/16/11 12:02:26	19080	13.31	2.78	0.81
03/16/11 12:02:56	19110	13.30	2.76	0.80
RAW AVERAGE		**13.27**	**2.44**	**0.89**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.16	0.13	0.07
	Final Zero	0.31	0.16	-0.28
	Avg. Zero	0.24	0.15	-0.11
	Initial UpScale	12.23	4.76	4.99
	Final UpScale	12.32	4.71	5.55
	Avg. UpScale	12.28	4.74	5.27
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.10	2.46	0.91
Concentration (ppm@ 15%O_2)	N/A	1.86	0.69
Emission Rate (lb/hr)	N/A	17.73	4.01
Emission Rate (lb/MMBtu)	N/A	0.007	0.002

Florida Power and Light
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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,818	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,494,426	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	51	%
Ambient Temperature	77	°F
Specific Humidity	0.009971	lb H_2O / lb air

Unit Data

Unit Load	376.3	megawatts
Stack Exhaust Flow (M19)	60,724,697	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 12:21:26	20220	13.33	2.88	0.41
03/16/11 12:21:56	20250	13.34	2.90	0.57
03/16/11 12:22:26	20280	13.36	2.87	0.53
03/16/11 12:22:56	20310	13.37	2.79	0.63
03/16/11 12:23:26	20340	13.37	2.76	0.64
03/16/11 12:23:56	20370	13.36	2.69	0.62
03/16/11 12:24:26	20400	13.36	2.74	0.46
03/16/11 12:24:56	20430	13.34	2.79	0.54
03/16/11 12:25:26	20460	13.34	2.85	0.47
03/16/11 12:25:56	20490	13.36	2.89	0.44
03/16/11 12:26:26	20520	13.38	2.88	0.57
03/16/11 12:26:56	20550	13.36	2.81	0.59
03/16/11 12:27:26	20580	13.37	2.80	0.58
03/16/11 12:27:56	20610	13.35	2.83	0.46
03/16/11 12:28:26	20640	13.36	2.85	0.66
03/16/11 12:28:56	20670	13.37	2.86	0.60
03/16/11 12:29:26	20700	13.37	2.83	0.52
03/16/11 12:29:56	20730	13.38	2.81	0.39
03/16/11 12:30:26	20760	13.41	2.80	0.53
03/16/11 12:30:56	20790	13.40	2.68	0.68
03/16/11 12:31:26	20820	13.39	2.65	0.61
03/16/11 12:31:56	20850	13.37	2.73	0.51
03/16/11 12:32:26	20880	13.35	2.87	0.38
03/16/11 12:32:56	20910	13.36	2.98	0.44
03/16/11 12:33:26	20940	13.39	2.97	0.48
03/16/11 12:33:56	20970	13.40	2.87	0.50
03/16/11 12:34:26	21000	13.40	2.71	0.63
03/16/11 12:34:56	21030	13.38	2.65	0.69
03/16/11 12:35:26	21060	13.36	2.75	0.47
03/16/11 12:35:56	21090	13.37	2.89	0.34
03/16/11 12:36:26	21120	13.38	2.94	0.38
03/16/11 12:36:56	21150	13.37	2.89	0.48
03/16/11 12:37:26	21180	13.39	2.83	0.54
03/16/11 12:37:56	21210	13.41	2.78	0.55
03/16/11 12:38:26	21240	13.40	2.70	0.64
03/16/11 12:38:56	21270	13.38	2.70	0.50
03/16/11 12:39:26	21300	13.37	2.84	0.44
03/16/11 12:39:56	21330	13.37	2.93	0.39
03/16/11 12:40:26	21360	13.38	2.95	0.47
03/16/11 12:40:56	21390	13.38	2.90	0.47
03/16/11 12:41:26	21420	13.39	2.86	0.44
03/16/11 12:41:56	21450	13.39	2.85	0.56
03/16/11 12:42:26	21480	13.36	2.77	0.45
03/16/11 12:42:56	21510	13.41	2.78	0.40
03/16/11 12:43:26	21540	13.41	2.70	0.54
03/16/11 12:43:56	21570	13.36	2.67	0.54
03/16/11 12:44:26	21600	13.40	2.80	0.53
03/16/11 12:44:56	21630	13.40	2.83	0.41
03/16/11 12:45:26	21660	13.39	2.54	0.47
03/16/11 12:45:56	21690	13.38	2.45	0.44
03/16/11 12:46:26	21720	13.39	2.49	0.44
03/16/11 12:46:56	21750	13.34	2.46	0.31
03/16/11 12:47:26	21780	13.31	2.53	0.33
03/16/11 12:47:56	21810	13.34	2.56	0.34
03/16/11 12:48:26	21840	13.41	2.40	0.48

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,818	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,494,426	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	51	%
Ambient Temperature	77	°F
Specific Humidity	0.009971	lb H_2O / lb air

Unit Data

Unit Load	376.3	megawatts
Stack Exhaust Flow (M19)	60,724,697	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 12:48:56	21870	13.49	2.22	0.86
03/16/11 12:49:26	21900	13.48	2.03	1.10
03/16/11 12:49:56	21930	13.45	2.04	0.93
03/16/11 12:50:26	21960	13.45	2.07	0.92
03/16/11 12:50:56	21990	13.45	2.13	0.61
03/16/11 12:51:26	22020	13.44	2.22	0.71
03/16/11 12:51:56	22050	13.42	2.26	0.57
03/16/11 12:52:26	22080	13.42	2.30	0.65
03/16/11 12:52:56	22110	13.41	2.38	0.64
03/16/11 12:53:26	22140	13.40	2.45	0.46
03/16/11 12:53:56	22170	13.40	2.49	0.41
03/16/11 12:54:26	22200	13.40	2.49	0.48
03/16/11 12:54:56	22230	13.40	2.48	0.37
03/16/11 12:55:26	22260	13.41	2.42	0.45
03/16/11 12:55:56	22290	13.40	2.38	0.45
03/16/11 12:56:26	22320	13.39	2.38	0.52
03/16/11 12:56:56	22350	13.40	2.44	0.44
03/16/11 12:57:26	22380	13.41	2.41	0.42
03/16/11 12:57:56	22410	13.41	2.34	0.59
03/16/11 12:58:26	22440	13.43	2.30	0.49
03/16/11 12:58:56	22470	13.44	2.30	0.44
03/16/11 12:59:26	22500	13.42	2.27	0.54
03/16/11 12:59:56	22530	13.37	2.34	0.36
03/16/11 13:00:26	22560	13.32	2.49	0.23
03/16/11 13:00:56	22590	13.33	2.59	0.25
03/16/11 13:01:26	22620	13.37	2.56	0.35
03/16/11 13:01:56	22650	13.40	2.38	0.39
03/16/11 13:02:26	22680	13.42	2.25	0.53
03/16/11 13:02:56	22710	13.41	2.11	0.58
03/16/11 13:03:26	22740	13.36	2.09	0.55
03/16/11 13:03:56	22770	13.40	2.23	0.42
03/16/11 13:04:26	22800	13.40	2.22	0.45
03/16/11 13:04:56	22830	13.45	2.08	0.49
03/16/11 13:05:26	22860	13.46	1.99	0.58
03/16/11 13:05:56	22890	13.44	2.00	0.60
03/16/11 13:06:26	22920	13.43	2.08	0.42
03/16/11 13:06:56	22950	13.41	2.14	0.33
03/16/11 13:07:26	22980	13.41	2.17	0.35
03/16/11 13:07:56	23010	13.40	2.21	0.36
03/16/11 13:08:26	23040	13.40	2.21	0.28
03/16/11 13:08:56	23070	13.44	2.18	0.25
03/16/11 13:09:26	23100	13.47	2.11	0.48
03/16/11 13:09:56	23130	13.47	2.00	0.63
03/16/11 13:10:26	23160	13.46	2.01	0.51
03/16/11 13:10:56	23190	13.43	2.06	0.47
03/16/11 13:11:26	23220	13.42	2.15	0.32
03/16/11 13:11:56	23250	13.42	2.21	0.26
03/16/11 13:12:26	23280	13.42	2.24	0.28
03/16/11 13:12:56	23310	13.40	2.23	0.28
03/16/11 13:13:26	23340	13.40	2.23	0.25
03/16/11 13:13:56	23370	13.43	2.22	0.22
03/16/11 13:14:26	23400	13.47	2.16	0.47
03/16/11 13:14:56	23430	13.49	2.09	0.47
03/16/11 13:15:26	23460	13.48	2.03	0.56
03/16/11 13:15:56	23490	13.44	2.04	0.43

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,818	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,494,426	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	51	%
Ambient Temperature	77	°F
Specific Humidity	0.009971	lb H_2O / lb air

Unit Data

Unit Load	376.3	megawatts
Stack Exhaust Flow (M19)	60,724,697	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 13:16:26	23520	13.43	2.12	0.33
03/16/11 13:16:56	23550	13.42	2.19	0.37
03/16/11 13:17:26	23580	13.43	2.27	0.30
03/16/11 13:17:56	23610	13.44	2.32	0.29
03/16/11 13:18:26	23640	13.46	2.24	0.30
03/16/11 13:18:56	23670	13.45	2.17	0.41
03/16/11 13:19:26	23700	13.44	2.12	0.43
03/16/11 13:19:56	23730	13.43	2.15	0.27
03/16/11 13:20:26	23760	13.42	2.22	0.22
03/16/11 13:20:56	23790	13.42	2.25	0.29
RAW AVERAGE		**13.40**	**2.48**	**0.48**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.31	0.16	-0.28
	Final Zero	0.45	0.19	-0.14
	Avg. Zero	0.38	0.18	-0.21
	Initial UpScale	12.32	4.71	4.96
	Final UpScale	12.30	4.68	4.71
	Avg. UpScale	12.31	4.70	4.84
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.21	2.51	0.67
Concentration (ppm@ 15%O_2)	N/A	1.93	0.51
Emission Rate (lb/hr)	N/A	18.22	2.95
Emission Rate (lb/MMBtu)	N/A	0.007	0.001

Florida Power and Light
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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	0	lb/min
Total Fuel Flow	2,510,891	SCFH

Weather Data

Barometric Pressure	30.18	in. Hg
Relative Humidity	46	%
Ambient Temperature	76	°F
Specific Humidity	0.008703	lb H_2O / lb air

Unit Data

Unit Load	369.1	megawatts
Stack Exhaust Flow (M19)	59,774,760	SCFH

Base Load, Run - 4

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/16/11 18:31:07	5640	12.98	2.01	2.11
03/16/11 18:31:37	5670	12.98	2.02	2.02
03/16/11 18:32:07	5700	12.99	2.02	2.02
03/16/11 18:32:37	5730	12.97	2.04	1.97
03/16/11 18:33:07	5760	12.92	2.09	1.82
03/16/11 18:33:37	5790	12.91	2.18	1.47
03/16/11 18:34:07	5820	12.92	2.28	1.44
03/16/11 18:34:37	5850	12.91	2.34	1.45
03/16/11 18:35:07	5880	12.90	2.37	1.45
03/16/11 18:35:37	5910	12.89	2.45	1.38
03/16/11 18:36:07	5940	12.90	2.52	1.23
03/16/11 18:36:37	5970	12.87	2.61	1.19
03/16/11 18:37:07	6000	12.88	2.70	1.12
03/16/11 18:37:37	6030	12.84	2.75	1.09
03/16/11 18:38:07	6060	12.86	2.83	1.08
03/16/11 18:38:37	6090	12.86	2.88	1.04
03/16/11 18:39:07	6120	12.84	2.91	0.99
03/16/11 18:39:37	6150	12.83	3.00	0.90
03/16/11 18:40:07	6180	12.82	3.00	0.93
03/16/11 18:40:37	6210	12.82	3.03	0.90
03/16/11 18:41:07	6240	12.82	3.01	0.89
03/16/11 18:41:37	6270	12.82	3.02	0.86
03/16/11 18:42:07	6300	12.85	3.00	0.97
03/16/11 18:42:37	6330	12.84	2.87	0.91
03/16/11 18:43:07	6360	12.85	2.73	0.89
03/16/11 18:43:37	6390	12.87	2.61	0.86
03/16/11 18:44:07	6420	12.88	2.48	1.07
03/16/11 18:44:37	6450	12.85	2.33	1.08
03/16/11 18:45:07	6480	12.83	2.29	0.96
03/16/11 18:45:37	6510	12.84	2.28	0.80
03/16/11 18:46:07	6540	12.88	2.26	0.94
03/16/11 18:46:37	6570	12.91	2.15	1.11
03/16/11 18:47:07	6600	12.88	2.04	1.07
03/16/11 18:47:37	6630	12.87	2.05	1.03
03/16/11 18:48:07	6660	12.89	2.07	0.98
03/16/11 18:48:37	6690	12.90	2.01	1.00
03/16/11 18:49:07	6720	12.93	1.97	1.10
03/16/11 18:49:37	6750	12.91	1.93	1.08
03/16/11 18:50:07	6780	12.87	1.95	0.95
03/16/11 18:50:37	6810	12.91	2.02	0.93
03/16/11 18:51:07	6840	12.92	1.99	1.01
03/16/11 18:51:37	6870	12.93	1.93	1.08
RAW AVERAGE		**12.88**	**2.41**	**1.17**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.00	0.01	0.11
Bias	**Final Zero**	-0.08	-0.01	0.03
Bias	**Avg. Zero**	-0.04	0.00	0.07
Bias	**Initial UpScale**	11.96	5.03	5.00
Bias	**Final UpScale**	11.96	4.98	5.08
Bias	**Avg. UpScale**	11.96	5.01	5.04
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.03	2.37	1.08
Concentration (ppm@ 15%O_2)	N/A	1.78	0.81
Emission Rate (lb/hr)	N/A	16.92	4.70
Emission Rate (lb/MMBtu)	N/A	0.007	0.002

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Mitsubishi, 501G, Unit 3A
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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,748,420	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	56	%
Ambient Temperature	74	°F
Specific Humidity	0.009899	lb H_2O / lb air

Unit Data

Unit Load	413.2	megawatts
Stack Exhaust Flow (M19)	61,101,365	SCFH

Base Wdb Load, Run - 5

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 10:05:07	12150	12.67	2.64	0.86
03/17/11 10:05:37	12180	12.67	2.64	0.77
03/17/11 10:06:07	12210	12.67	2.65	0.90
03/17/11 10:06:37	12240	12.67	2.66	0.79
03/17/11 10:07:07	12270	12.69	2.65	0.79
03/17/11 10:07:37	12300	12.68	2.59	0.82
03/17/11 10:08:07	12330	12.67	2.57	0.83
03/17/11 10:08:37	12360	12.65	2.61	0.76
03/17/11 10:09:07	12390	12.70	2.69	0.84
03/17/11 10:09:37	12420	12.67	2.57	0.92
03/17/11 10:10:07	12450	12.70	2.61	0.89
03/17/11 10:10:37	12480	12.68	2.61	0.83
03/17/11 10:11:07	12510	12.65	2.68	0.86
03/17/11 10:11:37	12540	12.70	2.75	0.73
03/17/11 10:12:07	12570	12.69	2.72	0.87
03/17/11 10:12:37	12600	12.71	2.68	0.87
03/17/11 10:13:07	12630	12.70	2.66	0.81
03/17/11 10:13:37	12660	12.68	2.64	0.81
03/17/11 10:14:07	12690	12.70	2.73	0.69
03/17/11 10:14:37	12720	12.71	2.69	0.81
03/17/11 10:15:07	12750	12.72	2.65	0.89
03/17/11 10:15:37	12780	12.71	2.66	0.91
03/17/11 10:16:07	12810	12.73	2.70	0.90
03/17/11 10:16:37	12840	12.71	2.73	0.85
03/17/11 10:17:07	12870	12.72	2.76	0.84
03/17/11 10:17:37	12900	12.71	2.85	0.82
03/17/11 10:18:07	12930	12.70	2.79	0.75
03/17/11 10:18:37	12960	12.72	2.83	0.79
03/17/11 10:19:07	12990	12.72	2.81	0.72
03/17/11 10:19:37	13020	12.73	2.78	0.82
03/17/11 10:20:07	13050	12.73	2.78	0.74
03/17/11 10:20:37	13080	12.72	2.81	0.81
03/17/11 10:21:07	13110	12.73	2.79	0.73
03/17/11 10:21:37	13140	12.73	2.80	0.79
03/17/11 10:22:07	13170	12.74	2.85	0.79
03/17/11 10:22:37	13200	12.73	2.83	0.77
03/17/11 10:23:07	13230	12.73	2.82	0.72
03/17/11 10:23:37	13260	12.74	2.86	0.79
03/17/11 10:24:07	13290	12.74	2.86	0.85
03/17/11 10:24:37	13320	12.74	2.82	0.80
03/17/11 10:25:07	13350	12.76	2.80	0.77
03/17/11 10:25:37	13380	12.74	2.75	0.88
03/17/11 10:26:07	13410	12.74	2.85	0.68
03/17/11 10:26:37	13440	12.69	2.80	0.73
03/17/11 10:27:07	13470	12.63	2.64	0.75
03/17/11 10:27:37	13500	12.66	2.61	0.77
03/17/11 10:28:07	13530	12.68	2.46	0.84
03/17/11 10:28:37	13560	12.68	2.48	0.84
03/17/11 10:29:07	13590	12.67	2.42	0.80
03/17/11 10:29:37	13620	12.65	2.47	0.83
03/17/11 10:30:07	13650	12.67	2.44	0.76
03/17/11 10:30:37	13680	12.67	2.43	0.85
03/17/11 10:31:07	13710	12.67	2.40	0.81
03/17/11 10:31:37	13740	12.66	2.46	0.80
03/17/11 10:32:07	13770	12.66	2.53	0.75

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,748,420	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	56	%
Ambient Temperature	74	°F
Specific Humidity	0.009899	lb H_2O / lb air

Unit Data

Unit Load	413.2	megawatts
Stack Exhaust Flow (M19)	61,101,365	SCFH

Base Wdb Load, Run - 5

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 10:32:37	13800	12.67	2.56	0.71
03/17/11 10:33:07	13830	12.66	2.57	0.73
03/17/11 10:33:37	13860	12.66	2.55	0.79
03/17/11 10:34:07	13890	12.66	2.50	0.76
03/17/11 10:34:37	13920	12.66	2.48	0.74
03/17/11 10:35:07	13950	12.68	2.48	0.82
03/17/11 10:35:37	13980	12.67	2.42	0.75
03/17/11 10:36:07	14010	12.69	2.42	0.78
03/17/11 10:36:37	14040	12.69	2.41	0.83
03/17/11 10:37:07	14070	12.70	2.44	0.72
03/17/11 10:37:37	14100	12.69	2.45	0.75
03/17/11 10:38:07	14130	12.68	2.47	0.70
03/17/11 10:38:37	14160	12.66	2.52	0.70
03/17/11 10:39:07	14190	12.69	2.54	0.67
03/17/11 10:39:37	14220	12.72	2.53	0.72
03/17/11 10:40:07	14250	12.71	2.48	0.81
03/17/11 10:40:37	14280	12.67	2.45	0.78
03/17/11 10:41:07	14310	12.68	2.48	0.75
03/17/11 10:41:37	14340	12.70	2.54	0.74
03/17/11 10:42:07	14370	12.67	2.52	0.81
03/17/11 10:42:37	14400	12.66	2.52	0.69
03/17/11 10:43:07	14430	12.66	2.56	0.74
03/17/11 10:43:37	14460	12.69	2.55	0.73
03/17/11 10:44:07	14490	12.69	2.48	0.83
03/17/11 10:44:37	14520	12.72	2.42	0.84
03/17/11 10:45:07	14550	12.74	2.45	0.87
03/17/11 10:45:37	14580	12.73	2.49	0.88
03/17/11 10:46:07	14610	12.70	2.57	0.77
03/17/11 10:46:37	14640	12.69	2.50	0.75
03/17/11 10:47:07	14670	12.68	2.60	0.67
03/17/11 10:47:37	14700	12.70	2.66	0.63
03/17/11 10:48:07	14730	12.73	2.60	0.74
03/17/11 10:48:37	14760	12.73	2.54	0.78
03/17/11 10:49:07	14790	12.72	2.49	0.79
03/17/11 10:49:37	14820	12.71	2.49	0.70
03/17/11 10:50:07	14850	12.72	2.49	0.70
03/17/11 10:50:37	14880	12.72	2.52	0.77
03/17/11 10:51:07	14910	12.72	2.53	0.73
03/17/11 10:51:37	14940	12.73	2.52	0.72
03/17/11 10:52:07	14970	12.71	2.48	0.79
03/17/11 10:52:37	15000	12.74	2.51	0.68
03/17/11 10:53:07	15030	12.75	2.48	0.64
03/17/11 10:53:37	15060	12.73	2.44	0.76
03/17/11 10:54:07	15090	12.72	2.44	0.80
03/17/11 10:54:37	15120	12.71	2.51	0.72
03/17/11 10:55:07	15150	12.72	2.54	0.81
03/17/11 10:55:37	15180	12.72	2.47	0.74
03/17/11 10:56:07	15210	12.74	2.46	0.78
03/17/11 10:56:37	15240	12.74	2.46	0.75
03/17/11 10:57:07	15270	12.74	2.44	0.70
03/17/11 10:57:37	15300	12.73	2.48	0.65
03/17/11 10:58:07	15330	12.71	2.52	0.64
03/17/11 10:58:37	15360	12.66	2.57	0.68
03/17/11 10:59:07	15390	12.70	2.56	0.66
03/17/11 10:59:37	15420	12.74	2.51	0.74

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,830	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,748,420	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	56	%
Ambient Temperature	74	°F
Specific Humidity	0.009899	lb H_2O / lb air

Unit Data

Unit Load	413.2	megawatts
Stack Exhaust Flow (M19)	61,101,365	SCFH

Base Wdb Load, Run - 5

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 11:00:07	15450	12.76	2.43	0.79
03/17/11 11:00:37	15480	12.76	2.36	0.88
03/17/11 11:01:07	15510	12.74	2.34	0.72
03/17/11 11:01:37	15540	12.73	2.41	0.69
03/17/11 11:02:07	15570	12.72	2.54	0.68
03/17/11 11:02:37	15600	12.72	2.63	0.59
03/17/11 11:03:07	15630	12.74	2.63	0.69
03/17/11 11:03:37	15660	12.75	2.59	0.76
03/17/11 11:04:07	15690	12.77	2.50	0.79
03/17/11 11:04:37	15720	12.76	2.40	0.80
RAW AVERAGE		**12.70**	**2.58**	**0.77**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.03	0.18	0.13
Bias	**Final Zero**	0.47	0.18	-0.16
Bias	**Avg. Zero**	0.25	0.18	-0.02
Bias	**Initial UpScale**	12.12	5.06	5.28
Bias	**Final UpScale**	12.54	4.96	5.01
Bias	**Avg. UpScale**	12.33	5.01	5.15
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.47	2.45	0.75
Concentration (ppm@ 15%O_2)	N/A	1.72	0.53
Emission Rate (lb/hr)	N/A	17.89	3.33
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

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Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,724,066	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	42	%
Ambient Temperature	81	°F
Specific Humidity	0.009349	lb H_2O / lb air

Unit Data

Unit Load	400.3	megawatts
Stack Exhaust Flow (M19)	59,778,648	SCFH

Base Wdb Load, Run - 6

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 11:25:07	16950	12.75	2.45	0.56
03/17/11 11:25:37	16980	12.74	2.51	0.60
03/17/11 11:26:07	17010	12.76	2.53	0.60
03/17/11 11:26:37	17040	12.77	2.52	0.72
03/17/11 11:27:07	17070	12.77	2.46	0.64
03/17/11 11:27:37	17100	12.76	2.45	0.60
03/17/11 11:28:07	17130	12.77	2.45	0.67
03/17/11 11:28:37	17160	12.75	2.47	0.73
03/17/11 11:29:07	17190	12.73	2.46	0.57
03/17/11 11:29:37	17220	12.68	2.50	0.51
03/17/11 11:30:07	17250	12.74	2.54	0.55
03/17/11 11:30:37	17280	12.76	2.43	0.60
03/17/11 11:31:07	17310	12.78	2.27	0.80
03/17/11 11:31:37	17340	12.76	2.18	0.72
03/17/11 11:32:07	17370	12.80	2.16	0.69
03/17/11 11:32:37	17400	12.78	2.17	0.73
03/17/11 11:33:07	17430	12.76	2.22	0.58
03/17/11 11:33:37	17460	12.77	2.34	0.61
03/17/11 11:34:07	17490	12.78	2.38	0.57
03/17/11 11:34:37	17520	12.80	2.37	0.67
03/17/11 11:35:07	17550	12.82	2.34	0.74
03/17/11 11:35:37	17580	12.79	2.31	0.69
03/17/11 11:36:07	17610	12.76	2.40	0.55
03/17/11 11:36:37	17640	12.73	2.49	0.45
03/17/11 11:37:07	17670	12.73	2.56	0.51
03/17/11 11:37:37	17700	12.75	2.61	0.50
03/17/11 11:38:07	17730	12.83	2.45	0.62
03/17/11 11:38:37	17760	12.82	2.24	0.69
03/17/11 11:39:07	17790	12.80	2.10	0.73
03/17/11 11:39:37	17820	12.78	2.15	0.59
03/17/11 11:40:07	17850	12.78	2.20	0.57
03/17/11 11:40:37	17880	12.76	2.27	0.58
03/17/11 11:41:07	17910	12.82	2.33	0.62
03/17/11 11:41:37	17940	12.78	2.29	0.59
03/17/11 11:42:07	17970	12.73	2.31	0.51
03/17/11 11:42:37	18000	12.74	2.37	0.47
03/17/11 11:43:07	18030	12.82	2.34	0.60
03/17/11 11:43:37	18060	12.84	2.19	0.76
03/17/11 11:44:07	18090	12.83	2.12	0.71
03/17/11 11:44:37	18120	12.87	2.17	0.64
03/17/11 11:45:07	18150	12.87	2.16	0.69
03/17/11 11:45:37	18180	12.85	2.23	0.64
03/17/11 11:46:07	18210	12.84	2.35	0.64
03/17/11 11:46:37	18240	12.82	2.42	0.56
03/17/11 11:47:07	18270	12.79	2.49	0.51
03/17/11 11:47:37	18300	12.78	2.53	0.57
03/17/11 11:48:07	18330	12.79	2.57	0.43
03/17/11 11:48:37	18360	12.83	2.51	0.48
03/17/11 11:49:07	18390	12.85	2.35	0.48
03/17/11 11:49:37	18420	12.82	2.24	0.57
03/17/11 11:50:07	18450	12.84	2.20	0.50
03/17/11 11:50:37	18480	12.80	2.15	0.57
03/17/11 11:51:07	18510	12.82	2.18	0.49
03/17/11 11:51:37	18540	12.83	2.13	0.58
03/17/11 11:52:07	18570	12.85	2.23	0.58

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,724,066	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	42	%
Ambient Temperature	81	°F
Specific Humidity	0.009349	lb H_2O / lb air

Unit Data

Unit Load	400.3	megawatts
Stack Exhaust Flow (M19)	59,778,648	SCFH

Base Wdb Load, Run - 6

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 11:52:37	18600	12.87	2.28	0.54
03/17/11 11:53:07	18630	12.91	2.24	0.60
03/17/11 11:53:37	18660	12.85	2.19	0.67
03/17/11 11:54:07	18690	12.83	2.32	0.59
03/17/11 11:54:37	18720	12.82	2.48	0.52
03/17/11 11:55:07	18750	12.81	2.59	0.42
03/17/11 11:55:37	18780	12.86	2.58	0.53
03/17/11 11:56:07	18810	12.87	2.51	0.50
03/17/11 11:56:37	18840	12.84	2.46	0.50
03/17/11 11:57:07	18870	12.86	2.50	0.46
03/17/11 11:57:37	18900	12.87	2.53	0.41
03/17/11 11:58:07	18930	12.88	2.51	0.37
03/17/11 11:58:37	18960	12.81	2.47	0.61
03/17/11 11:59:07	18990	12.87	2.56	0.47
03/17/11 11:59:37	19020	12.88	2.57	0.49
03/17/11 12:00:07	19050	12.89	2.47	0.64
03/17/11 12:00:37	19080	12.85	2.48	0.58
03/17/11 12:01:07	19110	12.87	2.61	0.50
03/17/11 12:01:37	19140	12.85	2.71	0.48
03/17/11 12:02:07	19170	12.85	2.76	0.45
03/17/11 12:02:37	19200	12.86	2.78	0.42
03/17/11 12:03:07	19230	12.89	2.77	0.44
03/17/11 12:03:37	19260	12.88	2.66	0.47
03/17/11 12:04:07	19290	12.86	2.64	0.45
03/17/11 12:04:37	19320	12.85	2.70	0.49
03/17/11 12:05:07	19350	12.91	2.77	0.47
03/17/11 12:05:37	19380	12.94	3.05	0.47
03/17/11 12:06:07	19410	12.95	3.23	0.38
03/17/11 12:06:37	19440	12.95	3.19	0.41
03/17/11 12:07:07	19470	12.96	3.15	0.37
03/17/11 12:07:37	19500	12.95	3.11	0.29
03/17/11 12:08:07	19530	12.97	3.12	0.34
03/17/11 12:08:37	19560	12.96	3.07	0.46
03/17/11 12:09:07	19590	12.95	3.10	0.34
03/17/11 12:09:37	19620	12.91	3.13	0.36
03/17/11 12:10:07	19650	12.88	3.17	0.40
03/17/11 12:10:37	19680	12.88	3.25	0.23
03/17/11 12:11:07	19710	12.91	3.14	0.33
03/17/11 12:11:37	19740	12.94	2.93	0.40
03/17/11 12:12:07	19770	12.95	2.67	0.56
03/17/11 12:12:37	19800	12.94	2.55	0.56
03/17/11 12:13:07	19830	12.93	2.57	0.57
03/17/11 12:13:37	19860	12.97	2.65	0.41
03/17/11 12:14:07	19890	13.02	2.75	0.53
03/17/11 12:14:37	19920	13.00	2.72	0.64
03/17/11 12:15:07	19950	12.98	2.79	0.60
03/17/11 12:15:37	19980	12.96	2.95	0.42
03/17/11 12:16:07	20010	12.97	3.11	0.44
03/17/11 12:16:37	20040	12.92	3.22	0.39
03/17/11 12:17:07	20070	12.92	3.35	0.26
03/17/11 12:17:37	20100	12.93	3.35	0.28
03/17/11 12:18:07	20130	13.02	3.17	0.33
03/17/11 12:18:37	20160	13.07	2.87	0.62
03/17/11 12:19:07	20190	13.05	2.67	0.75
03/17/11 12:19:37	20220	13.00	2.65	0.50

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,724,066	SCFH

Weather Data

Barometric Pressure	30.27	in. Hg
Relative Humidity	42	%
Ambient Temperature	81	°F
Specific Humidity	0.009349	lb H_2O / lb air

Unit Data

Unit Load	400.3	megawatts
Stack Exhaust Flow (M19)	59,778,648	SCFH

Base Wdb Load, Run - 6

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 12:20:07	20250	13.00	2.80	0.42
03/17/11 12:20:37	20280	12.97	2.95	0.33
03/17/11 12:21:07	20310	12.95	3.06	0.39
03/17/11 12:21:37	20340	12.93	3.17	0.26
03/17/11 12:22:07	20370	12.88	3.22	0.24
03/17/11 12:22:37	20400	12.91	3.24	0.33
03/17/11 12:23:07	20430	12.99	3.09	0.26
03/17/11 12:23:37	20460	12.99	2.76	0.41
03/17/11 12:24:07	20490	12.93	2.59	0.36
03/17/11 12:24:37	20520	12.91	2.65	0.34
RAW AVERAGE		**12.86**	**2.59**	**0.52**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.47	0.18	-0.16
	Final Zero	0.60	0.16	-0.34
	Avg. Zero	0.54	0.17	-0.25
	Initial UpScale	12.54	4.96	5.01
	Final UpScale	12.65	4.92	4.73
	Avg. UpScale	12.60	4.94	4.87
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.36	2.50	0.73
Concentration (ppm@ 15%O_2)	N/A	1.73	0.51
Emission Rate (lb/hr)	N/A	17.88	3.19
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,715,376	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	34	%
Ambient Temperature	84	°F
Specific Humidity	0.008332	lb H_2O / lb air

Unit Data

Unit Load	403.9	megawatts
Stack Exhaust Flow (M19)	59,471,244	SCFH

Base Wdb Load, Run - 7

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 12:43:07	21630	12.27	3.17	0.31
03/17/11 12:43:37	21660	12.33	3.18	0.38
03/17/11 12:44:07	21690	12.37	2.96	0.51
03/17/11 12:44:37	21720	12.31	2.81	0.55
03/17/11 12:45:07	21750	12.28	2.87	0.47
03/17/11 12:45:37	21780	12.25	2.99	0.47
03/17/11 12:46:07	21810	12.28	3.04	0.37
03/17/11 12:46:37	21840	12.34	2.94	0.50
03/17/11 12:47:07	21870	12.35	2.75	0.57
03/17/11 12:47:37	21900	12.26	2.71	0.67
03/17/11 12:48:07	21930	12.23	2.78	0.37
03/17/11 12:48:37	21960	12.22	2.87	0.55
03/17/11 12:49:07	21990	12.27	2.93	0.50
03/17/11 12:49:37	22020	12.35	2.90	0.62
03/17/11 12:50:07	22050	12.33	2.70	0.70
03/17/11 12:50:37	22080	12.29	2.69	0.55
03/17/11 12:51:07	22110	12.29	2.80	0.51
03/17/11 12:51:37	22140	12.29	2.92	0.49
03/17/11 12:52:07	22170	12.28	3.03	0.47
03/17/11 12:52:37	22200	12.26	3.09	0.48
03/17/11 12:53:07	22230	12.22	3.14	0.43
03/17/11 12:53:37	22260	12.23	3.16	0.47
03/17/11 12:54:07	22290	12.27	3.09	0.45
03/17/11 12:54:37	22320	12.30	2.94	0.52
03/17/11 12:55:07	22350	12.29	2.83	0.51
03/17/11 12:55:37	22380	12.30	2.83	0.47
03/17/11 12:56:07	22410	12.31	2.88	0.51
03/17/11 12:56:37	22440	12.31	2.89	0.63
03/17/11 12:57:07	22470	12.28	2.93	0.61
03/17/11 12:57:37	22500	12.22	3.10	0.55
03/17/11 12:58:07	22530	12.18	3.24	0.52
03/17/11 12:58:37	22560	12.21	3.36	0.41
03/17/11 12:59:07	22590	12.29	3.25	0.48
03/17/11 12:59:37	22620	12.31	2.97	0.63
03/17/11 13:00:07	22650	12.31	2.75	0.66
03/17/11 13:00:37	22680	12.30	2.76	0.67
03/17/11 13:01:07	22710	12.29	2.78	0.61
03/17/11 13:01:37	22740	12.28	2.86	0.49
03/17/11 13:02:07	22770	12.27	2.99	0.61
03/17/11 13:02:37	22800	12.28	3.08	0.47
03/17/11 13:03:07	22830	12.27	3.10	0.45
03/17/11 13:03:37	22860	12.24	3.15	0.56
03/17/11 13:04:07	22890	12.24	3.20	0.47
03/17/11 13:04:37	22920	12.21	3.23	0.56
03/17/11 13:05:07	22950	12.20	3.23	0.45
03/17/11 13:05:37	22980	12.19	3.21	0.46
03/17/11 13:06:07	23010	12.19	3.09	0.48
03/17/11 13:06:37	23040	12.22	2.97	0.52
03/17/11 13:07:07	23070	12.28	2.78	0.63
03/17/11 13:07:37	23100	12.19	2.63	0.62
03/17/11 13:08:07	23130	12.15	2.39	0.67
03/17/11 13:08:37	23160	12.10	2.44	0.71
03/17/11 13:09:07	23190	12.08	2.57	0.56
03/17/11 13:09:37	23220	12.04	2.67	0.58
03/17/11 13:10:07	23250	12.07	2.74	0.53

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,715,376	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	34	%
Ambient Temperature	84	°F
Specific Humidity	0.008332	lb H_2O / lb air

Unit Data

Unit Load	403.9	megawatts
Stack Exhaust Flow (M19)	59,471,244	SCFH

Base Wdb Load, Run - 7

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 13:10:37	23280	12.11	2.70	0.63
03/17/11 13:11:07	23310	12.09	2.54	0.72
03/17/11 13:11:37	23340	12.08	2.49	0.66
03/17/11 13:12:07	23370	12.14	2.49	0.67
03/17/11 13:12:37	23400	12.14	2.48	0.73
03/17/11 13:13:07	23430	12.10	2.48	0.73
03/17/11 13:13:37	23460	12.09	2.58	0.68
03/17/11 13:14:07	23490	12.07	2.70	0.66
03/17/11 13:14:37	23520	12.05	2.80	0.62
03/17/11 13:15:07	23550	12.08	2.87	0.63
03/17/11 13:15:37	23580	12.11	2.74	0.68
03/17/11 13:16:07	23610	12.11	2.64	0.69
03/17/11 13:16:37	23640	12.11	2.64	0.67
03/17/11 13:17:07	23670	12.16	2.68	0.79
03/17/11 13:17:37	23700	12.12	2.67	0.80
03/17/11 13:18:07	23730	12.09	2.71	0.76
03/17/11 13:18:37	23760	12.09	2.81	0.74
03/17/11 13:19:07	23790	12.07	2.91	0.60
03/17/11 13:19:37	23820	12.06	2.97	0.59
03/17/11 13:20:07	23850	12.09	2.96	0.65
03/17/11 13:20:37	23880	12.13	2.86	0.71
03/17/11 13:21:07	23910	12.11	2.71	0.75
03/17/11 13:21:37	23940	12.06	2.72	0.68
03/17/11 13:22:07	23970	12.04	2.85	0.62
03/17/11 13:22:37	24000	11.98	2.87	0.61
03/17/11 13:23:07	24030	11.98	2.81	0.53
03/17/11 13:23:37	24060	12.01	2.72	0.64
03/17/11 13:24:07	24090	12.05	2.56	0.78
03/17/11 13:24:37	24120	12.09	2.32	0.79
03/17/11 13:25:07	24150	12.10	2.16	0.84
03/17/11 13:25:37	24180	12.08	2.11	0.86
03/17/11 13:26:07	24210	12.08	2.17	0.92
03/17/11 13:26:37	24240	12.08	2.23	0.91
03/17/11 13:27:07	24270	12.08	2.30	0.68
03/17/11 13:27:37	24300	12.06	2.37	0.78
03/17/11 13:28:07	24330	12.04	2.41	0.71
03/17/11 13:28:37	24360	12.03	2.47	0.61
03/17/11 13:29:07	24390	12.00	2.53	0.66
03/17/11 13:29:37	24420	12.09	2.57	0.76
03/17/11 13:30:07	24450	12.13	2.39	0.90
03/17/11 13:30:37	24480	12.09	2.24	0.89
03/17/11 13:31:07	24510	12.07	2.25	0.84
03/17/11 13:31:37	24540	12.04	2.31	0.71
03/17/11 13:32:07	24570	12.03	2.34	0.72
03/17/11 13:32:37	24600	12.03	2.39	0.67
03/17/11 13:33:07	24630	12.03	2.42	0.68
03/17/11 13:33:37	24660	12.02	2.46	0.74
03/17/11 13:34:07	24690	12.05	2.42	0.65
03/17/11 13:34:37	24720	12.05	2.30	0.72
03/17/11 13:35:07	24750	11.98	2.28	0.75
03/17/11 13:35:37	24780	12.02	2.32	0.78
03/17/11 13:36:07	24810	12.11	2.30	0.87
03/17/11 13:36:37	24840	12.09	2.17	0.99
03/17/11 13:37:07	24870	12.07	2.15	0.85
03/17/11 13:37:37	24900	12.03	2.21	0.84

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,715,376	SCFH

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	34	%
Ambient Temperature	84	°F
Specific Humidity	0.008332	lb H_2O / lb air

Unit Data

Unit Load	403.9	megawatts
Stack Exhaust Flow (M19)	59,471,244	SCFH

Base Wdb Load, Run - 7

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 13:38:07	24930	12.00	2.30	0.80
03/17/11 13:38:37	24960	11.98	2.38	0.74
03/17/11 13:39:07	24990	12.00	2.38	0.77
03/17/11 13:39:37	25020	12.05	2.39	0.73
03/17/11 13:40:07	25050	12.05	2.33	0.76
03/17/11 13:40:37	25080	12.03	2.31	0.81
03/17/11 13:41:07	25110	12.04	2.35	0.79
03/17/11 13:41:37	25140	12.04	2.40	0.72
03/17/11 13:42:07	25170	12.04	2.41	0.72
03/17/11 13:42:37	25200	12.02	2.37	0.80
RAW AVERAGE		**12.15**	**2.70**	**0.64**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.02	0.16	-0.34
Bias	Final Zero	-0.29	0.09	-0.05
Bias	Avg. Zero	-0.14	0.13	-0.20
Bias	Initial UpScale	12.03	4.92	4.73
Bias	Final UpScale	11.78	4.98	5.13
Bias	Avg. UpScale	11.91	4.95	4.93
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.35	2.63	0.80
Concentration (ppm@ 15%O_2)	N/A	1.81	0.55
Emission Rate (lb/hr)	N/A	18.66	3.44
Emission Rate (lb/MMBtu)	N/A	0.007	0.001

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,715,010	SCFH

Weather Data

Barometric Pressure	30.24	in. Hg
Relative Humidity	38	%
Ambient Temperature	83	°F
Specific Humidity	0.009030	lb H_2O / lb air

Unit Data

Unit Load	405.0	megawatts
Stack Exhaust Flow (M19)	59,085,859	SCFH

Base Wdb Load, Run - 8

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 13:58:07	26130	11.96	2.24	0.94
03/17/11 13:58:37	26160	11.96	2.35	0.91
03/17/11 13:59:07	26190	11.96	2.42	0.95
03/17/11 13:59:37	26220	11.93	2.48	0.83
03/17/11 14:00:07	26250	11.93	2.59	0.77
03/17/11 14:00:37	26280	11.96	2.63	0.76
03/17/11 14:01:07	26310	11.98	2.61	0.80
03/17/11 14:01:37	26340	11.93	2.56	0.83
03/17/11 14:02:07	26370	11.91	2.62	0.76
03/17/11 14:02:37	26400	11.88	2.71	0.79
03/17/11 14:03:07	26430	11.97	2.73	0.74
03/17/11 14:03:37	26460	12.01	2.54	1.01
03/17/11 14:04:07	26490	12.00	2.35	0.93
03/17/11 14:04:37	26520	11.98	2.33	0.92
03/17/11 14:05:07	26550	11.96	2.37	0.78
03/17/11 14:05:37	26580	11.92	2.46	0.80
03/17/11 14:06:07	26610	11.92	2.56	0.84
03/17/11 14:06:37	26640	11.94	2.60	0.77
03/17/11 14:07:07	26670	11.97	2.57	0.81
03/17/11 14:07:37	26700	11.95	2.48	0.87
03/17/11 14:08:07	26730	11.93	2.48	0.73
03/17/11 14:08:37	26760	11.95	2.49	0.85
03/17/11 14:09:07	26790	11.95	2.50	0.86
03/17/11 14:09:37	26820	11.87	2.43	0.85
03/17/11 14:10:07	26850	11.89	2.46	0.84
03/17/11 14:10:37	26880	11.92	2.48	0.85
03/17/11 14:11:07	26910	11.93	2.34	0.99
03/17/11 14:11:37	26940	11.92	2.28	0.92
03/17/11 14:12:07	26970	11.94	2.29	0.88
03/17/11 14:12:37	27000	11.92	2.33	0.87
03/17/11 14:13:07	27030	11.95	2.41	0.80
03/17/11 14:13:37	27060	11.94	2.40	0.85
03/17/11 14:14:07	27090	11.88	2.42	0.82
03/17/11 14:14:37	27120	11.90	2.55	0.70
03/17/11 14:15:07	27150	11.89	2.54	0.79
03/17/11 14:15:37	27180	11.92	2.54	0.78
03/17/11 14:16:07	27210	11.97	2.44	0.85
03/17/11 14:16:37	27240	11.95	2.33	0.94
03/17/11 14:17:07	27270	11.94	2.34	0.88
03/17/11 14:17:37	27300	11.91	2.40	0.89
03/17/11 14:18:07	27330	11.87	2.46	0.85
03/17/11 14:18:37	27360	11.89	2.54	0.82
RAW AVERAGE		**11.93**	**2.47**	**0.84**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	-0.29	0.09	-0.05
	Final Zero	-0.40	0.10	-0.05
	Avg. Zero	-0.35	0.10	-0.05
	Initial UpScale	11.78	4.98	5.13
	Final UpScale	11.71	4.99	5.17
	Avg. UpScale	11.75	4.99	5.15
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.29	2.39	0.84
Concentration (ppm@ 15%O_2)	N/A	1.64	0.58
Emission Rate (lb/hr)	N/A	16.88	3.61
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	173	lb/min
Total Fuel Flow	2,714,804	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	41	%
Ambient Temperature	84	°F
Specific Humidity	0.010085	lb H_2O / lb air

Unit Data

Unit Load	404.4	megawatts
Stack Exhaust Flow (M19)	58,974,206	SCFH

Base Wdb Load, Run - 9

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 14:28:07	27930	11.91	2.55	0.93
03/17/11 14:28:37	27960	11.89	2.61	0.89
03/17/11 14:29:07	27990	11.85	2.68	0.82
03/17/11 14:29:37	28020	11.89	2.77	0.72
03/17/11 14:30:07	28050	11.91	2.68	0.84
03/17/11 14:30:37	28080	11.91	2.52	0.90
03/17/11 14:31:07	28110	11.93	2.43	0.92
03/17/11 14:31:37	28140	11.95	2.35	0.98
03/17/11 14:32:07	28170	12.00	2.27	0.96
03/17/11 14:32:37	28200	11.98	2.23	1.04
03/17/11 14:33:07	28230	11.96	2.27	1.03
03/17/11 14:33:37	28260	11.95	2.36	0.91
03/17/11 14:34:07	28290	11.93	2.47	0.88
03/17/11 14:34:37	28320	11.91	2.56	0.77
03/17/11 14:35:07	28350	11.86	2.67	0.75
03/17/11 14:35:37	28380	11.82	2.71	0.85
03/17/11 14:36:07	28410	11.89	2.68	0.85
03/17/11 14:36:37	28440	11.91	2.48	0.83
03/17/11 14:37:07	28470	11.96	2.30	0.91
03/17/11 14:37:37	28500	11.99	2.14	1.06
03/17/11 14:38:07	28530	11.97	2.11	1.06
03/17/11 14:38:37	28560	11.94	2.15	0.97
03/17/11 14:39:07	28590	11.94	2.25	0.84
03/17/11 14:39:37	28620	11.92	2.37	0.91
03/17/11 14:40:07	28650	11.88	2.46	0.85
03/17/11 14:40:37	28680	11.93	2.56	0.73
03/17/11 14:41:07	28710	11.99	2.47	0.92
03/17/11 14:41:37	28740	11.96	2.30	0.83
03/17/11 14:42:07	28770	11.94	2.26	0.93
03/17/11 14:42:37	28800	11.92	2.31	0.74
03/17/11 14:43:07	28830	11.97	2.32	0.88
03/17/11 14:43:37	28860	11.96	2.26	0.91
03/17/11 14:44:07	28890	11.98	2.22	0.89
03/17/11 14:44:37	28920	11.96	2.22	0.91
03/17/11 14:45:07	28950	12.00	2.26	0.93
03/17/11 14:45:37	28980	11.98	2.26	0.96
03/17/11 14:46:07	29010	11.96	2.32	0.85
03/17/11 14:46:37	29040	11.96	2.45	0.81
03/17/11 14:47:07	29070	11.95	2.47	0.73
03/17/11 14:47:37	29100	11.92	2.48	0.81
03/17/11 14:48:07	29130	11.97	2.49	0.76
03/17/11 14:48:37	29160	11.97	2.39	0.82
RAW AVERAGE		**11.94**	**2.41**	**0.88**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	-0.40	0.10	-0.05
	Final Zero	-0.30	0.08	-0.09
	Avg. Zero	-0.35	0.09	-0.07
	Initial UpScale	11.71	4.99	5.17
	Final UpScale	11.81	4.95	5.28
	Avg. UpScale	11.76	4.97	5.23
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.28	2.34	0.88
Concentration (ppm@ 15%O_2)	N/A	1.60	0.60
Emission Rate (lb/hr)	N/A	16.49	3.76
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 17, 2011
Mitsubishi, 501G, Unit 3A
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	259	lb/min
Total Fuel Flow	2,833,534	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	41	%
Ambient Temperature	84	°F
Specific Humidity	0.010085	lb H_2O / lb air

Unit Data

Unit Load	402.8	megawatts
Stack Exhaust Flow (M19)	61,725,141	SCFH

Base Wdb Load, Run - 10

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/17/11 14:58:07	29730	12.03	2.61	0.87
03/17/11 14:58:37	29760	12.01	2.57	0.87
03/17/11 14:59:07	29790	11.97	2.60	0.85
03/17/11 14:59:37	29820	11.97	2.70	0.74
03/17/11 15:00:07	29850	12.02	2.66	0.81
03/17/11 15:00:37	29880	12.03	2.59	0.78
03/17/11 15:01:07	29910	12.02	2.49	0.83
03/17/11 15:01:37	29940	12.00	2.46	0.72
03/17/11 15:02:07	29970	11.95	2.50	0.73
03/17/11 15:02:37	30000	11.91	2.56	0.71
03/17/11 15:03:07	30030	12.01	2.57	0.88
03/17/11 15:03:37	30060	12.04	2.37	0.98
03/17/11 15:04:07	30090	12.09	2.18	0.99
03/17/11 15:04:37	30120	12.09	2.08	1.01
03/17/11 15:05:07	30150	12.07	2.09	0.94
03/17/11 15:05:37	30180	12.07	2.23	0.99
03/17/11 15:06:07	30210	12.04	2.32	0.94
03/17/11 15:06:37	30240	12.04	2.39	0.84
03/17/11 15:07:07	30270	12.06	2.41	0.78
03/17/11 15:07:37	30300	12.03	2.41	0.80
03/17/11 15:08:07	30330	12.00	2.47	0.84
03/17/11 15:08:37	30360	11.99	2.52	0.70
03/17/11 15:09:07	30390	12.02	2.53	0.69
03/17/11 15:09:37	30420	12.03	2.47	0.75
03/17/11 15:10:07	30450	12.07	2.36	0.88
03/17/11 15:10:37	30480	12.09	2.23	0.80
03/17/11 15:11:07	30510	12.07	2.14	0.90
03/17/11 15:11:37	30540	12.05	2.21	0.95
03/17/11 15:12:07	30570	12.04	2.30	0.82
03/17/11 15:12:37	30600	12.04	2.43	0.78
03/17/11 15:13:07	30630	12.11	2.45	0.83
03/17/11 15:13:37	30660	12.11	2.40	0.80
03/17/11 15:14:07	30690	12.09	2.39	0.86
03/17/11 15:14:37	30720	12.07	2.43	0.72
03/17/11 15:15:07	30750	12.07	2.52	0.78
03/17/11 15:15:37	30780	12.07	2.55	0.80
03/17/11 15:16:07	30810	12.08	2.55	0.80
03/17/11 15:16:37	30840	12.09	2.51	0.69
03/17/11 15:17:07	30870	12.10	2.46	0.69
03/17/11 15:17:37	30900	12.05	2.43	0.72
03/17/11 15:18:07	30930	12.09	2.49	0.89
03/17/11 15:18:37	30960	12.12	2.40	0.85
RAW AVERAGE		**12.05**	**2.43**	**0.82**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	-0.30	0.08	-0.09
Bias	**Final Zero**	-0.18	0.09	-0.03
Bias	**Avg. Zero**	-0.24	0.09	-0.06
Bias	**Initial UpScale**	11.81	4.95	5.28
Bias	**Final UpScale**	11.88	4.92	5.08
Bias	**Avg. UpScale**	11.85	4.94	5.18
Upscale Cal Gas		12.10	4.93	4.89

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.30	2.38	0.82
Concentration (ppm@ 15%O_2)	N/A	1.64	0.57
Emission Rate (lb/hr)	N/A	17.57	3.70
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

APPENDIX C

CALIBRATION GAS CERTIFICATIONS

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-55510
Project No.: 05-86523-002

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM019345 **Certification Date:** 05Apr2010 **Exp. Date:** 04Apr2013
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	8.91 %	+/- 1%	Direct NIST and VSL
OXYGEN	12.1 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	01Apr2010	NDIR
CAI/110P/V03018	17Mar2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis / Second Triad Analysis / Calibration Curve

CARBON DIOXIDE

First Triad Analysis — Date: 09Apr2010 Response Unit:MV

Z1=0.00000	R1=100.0000	T1=56.20000
R2=100.0000	Z2=0.00000	T2=56.16000
Z3=0.00000	T3=56.24000	R3=100.1500
Avg. Concentration:	8.916	%

Calibration Curve — Concentration=A+Bx+Cx2+Dx3+Ex4

r=0.999989193

Constants:	A=-0.00227705
B=0.142642211	C=-0.0004657
D=0.0000133988	E=0

OXYGEN

First Triad Analysis — Date: 09Apr2010 Response Unit:%

Z1=0.00000	R1=23.20000	T1=12.11000
R2=23.20000	Z2=0.00000	T2=12.10000
Z3=0.00000	T3=12.09000	R3=23.19000
Avg. Concentration:	12.08	%

Calibration Curve — Concentration=A+Bx+Cx2+Dx3+Ex4

r=0.9999996862

Constants:	A=-0.0380151
B=1.001181055	C=0
D=0	E=0

APPROVED BY: aDrew

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: ALAS-56936
AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-88735-006
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM004185 **Certification Date:** 21Jun2010 **Exp. Date:** 20Jun2013
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	19.1 %	+/- 1%	Direct NIST and VSL
OXYGEN	21.1 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	07Jun2010	NDIR
CAI/110P/V03018	11Jun2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | Second Triad Analysis | Calibration Curve

CARBON DIOXIDE

Date: 21Jun2010	Response Unit:MV	
Z1=0.00000	R1=100.0000	T1=90.42000
R2=100.0000	Z2=0.00000	T2=90.50000
Z3=0.00000	T3=90.50000	R3=100.0000
Avg. Concentration:	19.07	%

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999986
Constants: A=-0.00586731
B=0.131065552 C=-0.0001375
D=1.12705E-05 E=0

OXYGEN

Date: 21Jun2010	Response Unit:%	
Z1=0.00000	R1=23.20000	T1=21.16000
R2=23.20000	Z2=0.00000	T2=21.16000
Z3=0.00000	T3=21.16000	R3=23.20000
Avg. Concentration:	21.14	%

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999
Constants: A=-0.00484606
B=0.999830474 C=0
D=0 E=0

Special Notes: PART# AH095

APPROVED BY: ______________________
JEFF CROTEAU

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: 11010210
Document # : 40522095-002

Customer
AIR HYGIENE INTERNATIONAL

MIKE SCOTT
5634 S 122ND E AVE
TULSA OK 74146
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL191 **Certification Date:** 15Feb2011 **Exp. Date:** 16Aug2011
Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	4.89	PPM	+/- 1%	Direct NIST and VSL
CARBON MONOXIDE	4.92	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	4.93	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION		COMPONENT
NTRM 2629	16Aug2013	KAL003004	19.83	PPM	NITRIC OXIDE
NTRM 2635	06May2016	KAL003163	25.21	PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
ECO PHYSICS/CLD 84M/84M0359	07Feb2011	CHEMI
SIEMENS I/ULTRAMAT 6E/N1-VN-0545	25Jan2011	NDIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

NITRIC OXIDE

First Triad Analysis:
Date: 08Feb2011 Response Unit: MV
Z1=0.00000 R1=19.83000 T1=4.85900
R2=19.84000 Z2=0.00000 T2=4.86000
Z3=0.00000 T3=4.85700 R3=19.84000
Avg. Concentration: 4.889 PPM

Second Triad Analysis:
Date: 15Feb2011 Response Unit: MV
Z1=0.00000 R1=19.72000 T1=4.83700
R2=19.73000 Z2=0.00000 T2=4.83400
Z3=0.00000 T3=4.83100 R3=19.73000
Avg. Concentration: 4.891 PPM

Calibration Curve:
Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.9999
Constants: A=0.036017895
B=0.999152579 C=0
D=0 E=0

CARBON MONOXIDE

First Triad Analysis:
Date: 08Feb2011 Response Unit: MV
Z1=0.00000 R1=25.40000 T1=4.60000
R2=25.40000 Z2=0.00000 T2=4.60000
Z3=0.00000 T3=4.60000 R3=25.40000
Avg. Concentration: 4.898 PPM

Second Triad Analysis:
Date: 15Feb2011 Response Unit: MV
Z1=0.00000 R1=25.21000 T1=4.61000
R2=25.21000 Z2=0.00000 T2=4.61000
Z3=0.00000 T3=4.61000 R3=25.21000
Avg. Concentration: 4.944 PPM

Calibration Curve:
Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.9999
Constants: A=0.02020944
B=1.096985091 C=-0.0077427
D=0.000148781 E=0

Special Notes: AH070

APPROVED BY: HILARY THATCHER

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALASG-55510
Project No.: 05-86916-005

Customer

AIR LIQUIDE AMERICA L.P.

AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

P

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL13310 **Certification Date:** 22Apr2010 **Exp. Date:** 21Apr2012
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	12.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
	02Oct2010	KAL003166	25.21 PPM	CARBON MONOXIDE
NTRM 2629	01Jun2010	KAL004325	20.36 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	02Apr2010	FTIR
ECO PHYSICS/CLD 84M/84M0359	19Apr2010	CHEMI

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

CARBON MONOXIDE

First Triad Analysis			Second Triad Analysis			Calibration Curve	
Date: 14Apr2010	Response Unit:PPM		Date: 21Apr2010	Response Unit: PPM		Concentration=A+Bx+Cx2+Dx3+Ex4	
Z1=-0.05307	R1=25.30663	T1=12.10338	Z1=-0.06291	R1=25.26965	T1=12.17129	r=9.99986E-1	
R2=25.31267	Z2=-0.05306	T2=12.12388	R2=25.30621	Z2=-0.02751	T2=12.19590	Constants:	A=0.00000E+0
Z3=-0.03830	T3=12.14423	R3=25.34334	Z3=0.02191	T3=12.19939	R3=25.34779	B=8.81389E-1	C=5.84000E-4
Avg. Concentration:	12.09	PPM	Avg. Concentration:	12.15	PPM	D=1.00000E-6	E=0.00000E+0

NITRIC OXIDE

First Triad Analysis			Second Triad Analysis			Calibration Curve	
Date: 14Apr2010	Response Unit:MV		Date: 21Apr2010	Response Unit: MV		Concentration=A+Bx+Cx2+Dx3+Ex4	
Z1=0.00000	R1=20.33000	T1=12.05000	Z1=0.00000	R1=20.29000	T1=11.96000	r=0.999989	
R2=20.35000	Z2=0.00000	T2=12.05000	R2=20.28000	Z2=0.00000	T2=11.96000	Constants:	A=0.052499
Z3=0.00000	T3=12.05000	R3=20.34000	Z3=0.00000	T3=11.96000	R3=20.29000	B=0.998591	C=0.000000
Avg. Concentration:	12.11	PPM	Avg. Concentration:	12.04	PPM	D=0.000000	E=0.000000

Special Notes: AH072 Lot Number: 0586916005

APPROVED BY: ______________________
Rob. McCrandall

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott

1290 COMBERMERE STREET, TROY, MI 48083

Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-59094
Project No.: 05-91737-001

Customer

AIR LIQUIDE AMERICA L.P.

AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM041691 **Certification Date:** 28Sep2010 **Exp. Date:** 29Mar2011

Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITROGEN DIOXIDE	48.2	PPM	+/- 2%	NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2654	02Oct2012	AAL069467	487.0 PPM	NITROGEN DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
AMETEK 921/921 CE NO2/AW-921-S281	17Sep2010	UV

Special Notes: PART# AH032 RANGE: 45-50 PPM
LOT # 0591737001

APPROVED BY: ______________________
HILARY THATCHER

APPENDIX D

QUALITY ASSURANCE AND QUALITY CONTROL DATA

QA/QC PROGRAM

Air Hygiene ensures the quality and validity of its emission measurement and reporting procedures through a rigorous quality assurance (QA) program. The program is developed and administered by an internal QA team and encompasses five major areas:

1. QA reviews of reports, laboratory work, and field testing
2. Equipment calibration and maintenance
3. Chain-of-custody
4. Training
5. Knowledge of current test methods

Each of these areas is discussed individually below.

QA Reviews

Air Hygiene's review procedure includes review of each source test report, along with laboratory and fieldwork, by the QA Team. The most important review is the one that takes place before a test program begins. The QA Team works closely with technical division personnel to prepare and review test protocols. Test protocol review includes selection of appropriate test procedures, evaluation of interferences or other restrictions that might preclude use of standard test procedures, and evaluation and/or development of alternate procedures.

Equipment Calibration and Maintenance

The equipment used to conduct the emission measurements is maintained according to the manufacturer's instructions to ensure proper operation. In addition to the maintenance program, calibrations are carried out on each measurement device according to the schedule outlined by the Environmental Protection Agency. Quality control checks are also conducted in the field for each test program.

Chain-of-Custody

Air Hygiene maintains full chain-of-custody documentation on all samples and data sheets. In addition to normal documentation of changes between field sample custodians, laboratory personnel, and field test personnel, Air Hygiene documents every individual who handles any test component in the field (e.g., probe wash, impinger loading and recovery, filter loading and recovery, etc.). Samples are stored in a locked area to which only Air Hygiene personnel have access. Field data sheets are secured at Air Hygiene's offices upon return from the field.

Training

Personnel's training is essential to ensure quality testing. Air Hygiene has formal and informal training programs, which include:

1. Attendance at EPA-sponsored training courses
2. Enrollment in EPA correspondence courses
3. A requirement for all technicians to read and understand Air Hygiene's QA manual
4. In-house training and QA meetings on a regular basis
5. Maintenance of training records

Knowledge of Current Test Methods

With the constant updating of standard test methods and the wide variety of emerging test procedures, it is essential that any qualified source tester keep abreast of new developments. Air Hygiene subscribes to services, which provide updates on EPA reference methods, rules, and regulations. Additionally, source test personnel regularly attend and present papers at testing and emission-related seminars and conferences. Air Hygiene personnel maintain membership in the Air and Waste Management Association and the American Industrial Hygiene Association.

COMBUSTION TESTING QUALITY ASSURANCE ACTIVITIES

A number of quality assurance activities were undertaken before, during, and after this testing project. This section of the report combined with the documentation in Appendix C describes each of those activities.

Each instrument's response was checked and adjusted in the field prior to the collection of data via multi-point calibration. The instrument's linearity was checked by adjusting its zero and span responses to zero nitrogen and an upscale calibration gas in the range of the expected concentrations. The instrument response was then challenged with other calibration gases of known concentration and accepted as being linear if the response of the other calibration gases agreed within plus or minus two percent of the range of predicted values. NO_2 to NO conversion was checked via direct connect with an EPA Protocol certified concentration of NO_2 in a balance of nitrogen. Conversion was verified to be between 90 and 110 percent.

After each test run, the analyzers were checked for zero and span drift. This allowed each test run to be bracketed by calibrations and documents the precision of the data just collected. The criterion for acceptable data is that the instrument drift is no more than three percent of the full-scale response. The quality assurance worksheets in the following pages summarize all multipoint calibration checks and zero to span checks performed during the tests. These worksheets (as prepared from the data records of Appendix A) show that no drifts in excess of three percent occurred in the zero to span checks following each test run.

The sampling systems were leak checked by demonstrating that a vacuum greater than 10 in Hg could be held for at least one minute with a decline of less than one inch of Hg. A leak test was conducted after the sample system was set up and before the system was dismantled. This test was conducted to ensure that ambient air had not diluted the sample. Any leakage detected prior to the tests would be repaired and another leak check conducted before testing commenced. No leaks were found during the pre or post-test leak checks.

The absence of leaks in the sampling system was also verified by a sampling system bias check. The sampling system's integrity was tested by comparing the responses of the analyzers to the calibration gases introduced via two paths. The first path was directly into the analyzer and the second path via the sample system at the sample probe. Any difference in the instrument responses by these two methods was attributed to sampling system bias or leakage. The criterion for acceptance is agreement within five percent of the span of the analyzer.

The control gases used to calibrate the instruments were analyzed and certified by the compressed gas vendors to plus or minus one percent accuracy for all gases. EPA Protocol No. I was used, where applicable to assign the concentration values traceable to the National Institute of Standards and Technology (NIST), Standard Reference Materials (SRM's). The gas calibration sheets as prepared by the vendor are contained in Appendix C.

Air Hygiene collected and reported the enclosed test data in accordance with the procedures and quality assurance activities described in this test report. Air Hygiene makes no warranty as to the suitability of the test methods. Air Hygiene also assumes no liability relating to the interpretation and use of the test data.

INSTRUMENTAL ANALYSIS
QUALITY ASSURANCE DATA

Date: March 16-17, 2011
Company: Florida Power and Light
Location: Loxahatchee, Florida
Techs: JRF

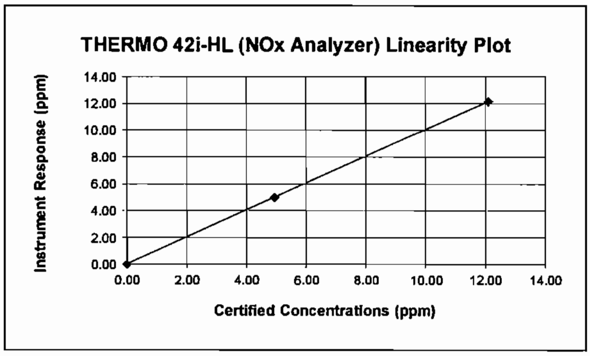
Sample System Leak Check

Date	Sample System	Leak Rate (l/min)
March 16-17, 2011	1	0

Calibration Date: March 16, 2011
Client: Florida Power and Light

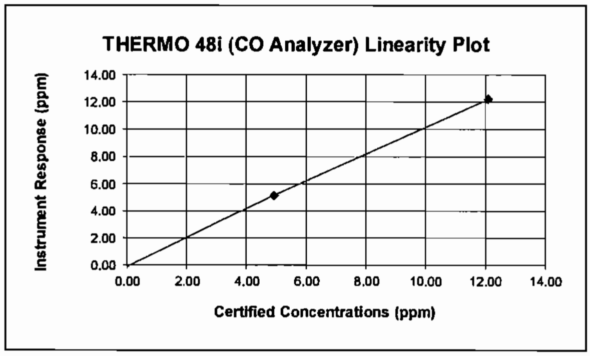
NOx Span (ppm) = 12.10

THERMO 42i-HL (NOx Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.04	0.33	0.04	YES (%)
4.93	5.00	0.58	0.07	YES (%)
12.10	12.17	0.58	0.07	YES (%)
Linearity = 0.998				



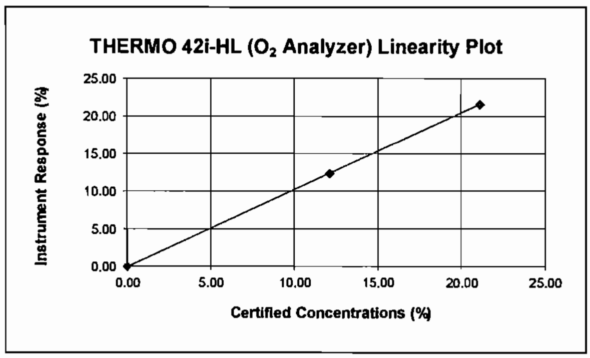
CO Span (ppm) = 12.10

THERMO 48i (CO Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	-0.10	-0.83	0.10	YES (%)
4.92	5.16	1.98	0.24	YES (%)
12.10	12.22	0.99	0.12	YES (%)
Linearity = 0.984				



O_2 Span (%) = 21.10

THERMO 42i-HL (O_2 Analyzer)				
Certified Concentration (%)	Instrument Response (%)	Calibration Error (%)	Absolute Conc. (%)	Pass or Fail (±2%, ≤0.5%)
0.00	0.01	0.05	0.01	YES (%)
12.10	12.39	1.37	0.29	YES (%)
21.10	21.57	2.23	0.47	YES (abs)
Linearity = 0.979				



NOx Converter Efficiency

Date: March 16, 2011

Analyzer: INST-N2-0001

RM 7E, (12-17-09), Sections 7.1.4; 8.2.4.1; 12.7; and 13.5 Introduce NO_2 to the analyzer and record the NOx concentration displayed. ... Calculate the converter efficiency using Equation 7E-7. The specification for converter efficiency must be met. ... Air Hygiene also references ALT-0013 for specific NO_2 concentration (40-60 ppm) and EPA Traceability Protocol requirements (±2%).

Audit Gas:	NO_2 Concentration (C_v), ppmvd	**48.20**
Converter Efficiency Calculations:		
	Analyzer Reading, NO Channel, ppmvd	**2.29**
	Analyzer Reading, NOx Channel, ppmvd	**46.76**
	Analyzer Reading, NO_2 Channel ($C_{Dir(NO2)}$), ppmvd	**44.47**
	Converter Efficiency, %	**92.26**

RM 7E, (08-15-06), 13.5 NO2 to NO Conversion Efficiency Test (as applicable). The NO2 to NO conversion efficiency, calculated according to Equation 7E-7 or Equation 7E-9, must be greater than or equal to 90 percent.

$$Eff_{NO2} = \left(\frac{C_{Dir}}{C_V}\right) \times 100 \qquad \text{Eq. 7E-7} = \frac{44.47 \text{ ppmvd}}{48.20 \text{ ppmvd}} \times 100 = 92.26\%$$

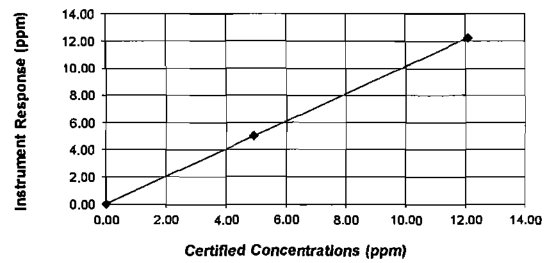
Date/Time mm/dd/yy hh:mm:ss	Elapsed Time Seconds	NOx ppmvd	NO ppmvd
03/16/11 07:01:26	1020	9.72	4.66
03/16/11 07:01:56	1050	34.26	3.23
03/16/11 07:02:26	1080	43.88	2.78
03/16/11 07:02:56	1110	45.57	2.52
03/16/11 07:03:26	1140	46.29	2.36
03/16/11 07:03:56	***1170***	***46.76***	***2.29***
03/16/11 07:04:26	1200	38.01	1.89

Calibration Date: March 17, 2011
Client: Florida Power and Light

NOx Span (ppm) = 12.10

THERMO 42i-HL (NOx Analyzer)				
Certified Concentration (ppm)	*Instrument* Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.04	0.33	0.04	YES (%)
4.93	5.02	0.74	0.09	YES (%)
12.10	12.25	1.24	0.15	YES (%)
Linearity = 0.991				

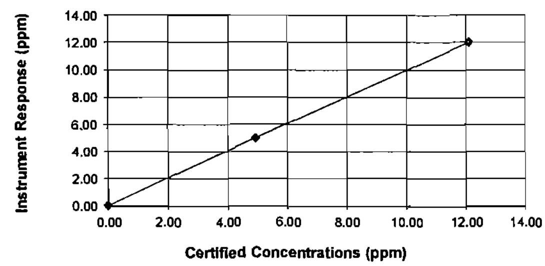
THERMO 42i-HL (NOx Analyzer) Linearity Plot



CO Span (ppm) = 12.10

THERMO 48i (CO Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.05	0.41	0.05	YES (%)
4.92	5.04	0.99	0.12	YES (%)
12.10	12.04	-0.50	0.06	YES (%)
Linearity = 1.010				

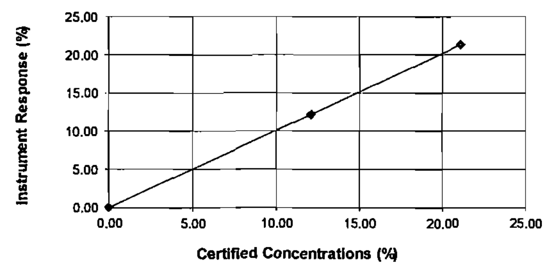
THERMO 48i (CO Analyzer) Linearity Plot



O2 Span (%) = 21.10

THERMO 42i-HL (O_2 Analyzer)				
Certified Concentration (%)	Instrument Response (%)	Calibration Error (%)	Absolute Conc. (%)	Pass or Fail (±2%, ≤0.5%)
0.00	0.01	0.05	0.01	YES (%)
12.10	12.18	0.38	0.08	YES (%)
21.10	21.40	1.42	0.30	YES (%)
Linearity = 0.987				

THERMO 42i-HL (O_2 Analyzer) Linearity Plot



NOx Converter Efficiency

Date: March 17, 2011

Analyzer: INST-N2-0001

RM 7E, (12-17-09), Sections 7.1.4; 8.2.4.1; 12.7; and 13.5 Introduce NO_2 to the analyzer and record the NOx concentration displayed. ... Calculate the converter efficiency using Equation 7E-7. The specification for converter efficiency must be met. ... Air Hygiene also references ALT-0013 for specific NO_2 concentration (40-60 ppm) and EPA Traceability Protocol requirements (±2%).

Audit Gas:	NO_2 Concentration (C_v), ppmvd	**48.20**
Converter Efficiency Calculations:		
	Analyzer Reading, NO Channel, ppmvd	**1.78**
	Analyzer Reading, NOx Channel, ppmvd	**48.74**
	Analyzer Reading, NO_2 Channel ($C_{Dir(NO2)}$), ppmvd	**46.96**
	Converter Efficiency, %	**97.43**

RM 7E, (08-15-06), 13.5 NO2 to NO Conversion Efficiency Test (as applicable). The NO2 to NO conversion efficiency, calculated according to Equation 7E-7 or Equation 7E-9, must be greater than or equal to 90 percent.

$$Eff_{NO2} = \left(\frac{C_{Dir}}{C_V}\right) \times 100 \quad \text{Eq. 7E-7} = \frac{46.96 \text{ ppmvd}}{48.20 \text{ ppmvd}} \times 100 = 97.43\%$$

Date/Time	Elapsed Time	NOx	NO
mm/dd/yy hh:mm:ss	Seconds	ppmvd	ppmvd
03/17/11 07:06:07	1410	24.33	3.36
03/17/11 07:06:37	1440	44.94	1.98
03/17/11 07:07:07	1470	47.42	1.93
03/17/11 07:07:37	1500	47.99	1.89
03/17/11 07:08:07	1530	48.32	1.87
03/17/11 07:08:37	1560	48.48	1.84
03/17/11 07:09:07	1590	48.55	1.81
03/17/11 07:09:37	1620	48.66	1.80
03/17/11 07:10:07	***1650***	***48.74***	***1.78***
03/17/11 07:10:37	1680	39.63	1.45

DRIFT AND BIAS CHECK			
Strat Test Pre and Post QA/QC Check	O2	CO	NOx
Initial Zero	0.00	0.11	0.12
Final Zero	0.02	-0.53	0.10
Avg. Zero	0.01	-0.21	0.11
Initial UpScale	12.24	5.00	4.84
Final UpScale	12.11	4.77	4.84
Avg. UpScale	12.18	4.89	4.84
Sys Resp (Zero)	0.01	-0.10	0.04
Sys Resp (Upscale)	12.39	5.16	5.00
Upscale Cal Gas	12.10	4.92	4.93
Initial Zero Bias	-0.05%	1.74%	0.66%
Final Zero Bias	0.05%	-3.55%	0.50%
Zero Drift	0.09%	5.29%	0.17%
Initial Upscale Bias	-0.71%	-1.32%	-1.32%
Final Upscale Bias	-1.33%	-3.22%	-1.32%
Upscale Drift	0.62%	1.90%	0.00%
Alternative Specification Abs Diff: Initial Zero	0.01	0.21	0.08
Final Zero	0.01	0.43	0.06
Initial Upscale	0.15	0.16	0.16
Final Upscale	0.28	0.39	0.16
Calibration Span	21.10	12.10	12.10
3% of Range (drift)	0.63	0.36	0.36
5% of Range (bias)	1.06	0.61	0.61

Respone Time (min)	0.7	1.3	1.3
Sys. Response (min)		1.3	

Date/Time mm/dd/yy hh:mm:ss	z	O2 %	s	z	CO ppm	s	z	NOx ppm	s	INJECTIONS
03/16/11 07:58:16		13.16			0.61			2.41		x
03/16/11 07:58:26		13.16			0.59			2.39		
03/16/11 07:58:36		**12.75**			0.62			2.39		
03/16/11 07:58:46		7.10			0.54			2.40		
03/16/11 07:58:56		**11.88**	x		0.44			2.23		
03/16/11 07:59:06		**12.23**		x	**0.12**			1.36		
03/16/11 07:59:16		**12.24**			**-0.01**			0.64		
03/16/11 07:59:26		**12.25**			**-0.08**			0.37		
03/16/11 07:59:36		**12.25**			-0.20		x	**0.12**		
03/16/11 07:59:46		**12.24**			-0.24			**0.10**		
03/16/11 07:59:56		**12.24**			-0.27			**0.09**		
03/16/11 08:00:06		**12.26**			-0.27			**0.09**		
03/16/11 08:00:16		**12.25**			-0.25			**0.10**		
03/16/11 08:00:26		**12.26**			-0.21			**0.09**		
03/16/11 08:00:36		**12.25**			-0.18			**0.08**		
03/16/11 08:00:46		**12.26**			-0.18			**0.07**		
03/16/11 08:00:56		**12.26**			-0.22			**0.07**		
03/16/11 08:01:06		**12.26**			-0.18			**0.07**		x
03/16/11 08:01:16		**12.25**			**-0.13**			**0.08**		
03/16/11 08:01:26		8.39			-0.21			**0.08**		
03/16/11 08:01:36	x	**0.57**			**0.30**			**0.20**		
03/16/11 08:01:46		**0.20**			1.58			0.80		
03/16/11 08:01:56		**0.16**			3.03			1.54		
03/16/11 08:02:06		**0.16**			4.04			3.22		
03/16/11 08:02:16		**0.13**			4.61			**4.66**	x	
03/16/11 08:02:26		**0.14**			**4.91**	x		**4.75**		
03/16/11 08:02:36		**0.12**			**4.90**			**4.82**		
03/16/11 08:02:46		**0.14**			**4.90**			**4.85**		
03/16/11 08:02:56		**0.11**			**4.95**			**4.86**		
03/16/11 08:03:06		**0.12**			**4.94**			**4.86**		
03/16/11 08:03:16		**0.12**			**4.96**			**4.86**		
03/16/11 08:03:26		**0.12**			**4.89**			**4.86**		
03/16/11 08:03:36		**0.11**			**4.76**			**4.86**		
03/16/11 08:03:46		**0.11**			**4.88**			**4.85**		

DRIFT AND BIAS CHECK			
Base Load, Run - 1	O_2	NOx	CO
Raw Average	13.16	2.50	0.36
Corrected Average	13.09	2.51	0.89
Initial Zero	0.02	0.10	-0.53
Final Zero	0.16	0.13	-0.65
Avg. Zero	0.09	0.12	-0.59
Initial UpScale	12.11	4.84	4.77
Final UpScale	12.23	4.76	4.56
Avg. UpScale	12.17	4.80	4.67
Sys Resp (Zero)	0.01	0.04	-0.10
Sys Resp (Upscale)	12.39	5.00	5.16
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.05%	0.50%	-3.55%
Final Zero Bias	0.71%	0.74%	-4.55%
Zero Drift	0.66%	0.25%	0.99%
Initial Upscale Bias	-1.33%	-1.32%	-3.22%
Final Upscale Bias	-0.76%	-1.98%	-4.96%
Upscale Drift	0.57%	0.66%	1.74%
Alternative Specification Abs Diff: Initial Zero	0.01	0.06	0.43
Final Zero	0.15	0.09	0.55
Initial Upscale	0.28	0.16	0.39
Final Upscale	0.16	0.24	0.60
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 2	O_2	NOx	CO
Raw Average	13.27	2.44	0.89
Corrected Average	13.10	2.46	0.91
Initial Zero	0.16	0.13	0.07
Final Zero	0.31	0.16	-0.28
Avg. Zero	0.24	0.15	-0.11
Initial UpScale	12.23	4.76	4.99
Final UpScale	12.32	4.71	5.55
Avg. UpScale	12.28	4.74	5.27
Sys Resp (Zero)	0.01	0.04	-0.10
Sys Resp (Upscale)	12.39	5.00	5.16
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.71%	0.74%	1.40%
Final Zero Bias	1.42%	0.99%	-1.49%
Zero Drift	0.71%	0.25%	2.89%
Initial Upscale Bias	-0.76%	-1.98%	-1.40%
Final Upscale Bias	-0.33%	-2.40%	3.22%
Upscale Drift	0.43%	0.41%	4.63%
Alternative Specification Abs Diff: Initial Zero	0.15	0.09	0.17
Final Zero	0.30	0.12	0.18
Initial Upscale	0.16	0.24	0.17
Final Upscale	0.07	0.29	0.39
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 3	O_2	NOx	CO
Raw Average	13.40	2.48	0.48
Corrected Average	13.21	2.51	0.67
Initial Zero	0.31	0.16	-0.28
Final Zero	0.45	0.19	-0.14
Avg. Zero	0.38	0.18	-0.21
Initial UpScale	12.32	4.71	4.96
Final UpScale	12.30	4.68	4.71
Avg. UpScale	12.31	4.70	4.84
Sys Resp (Zero)	0.01	0.04	-0.10
Sys Resp (Upscale)	12.39	5.00	5.16
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.42%	0.99%	-1.49%
Final Zero Bias	2.09%	1.24%	-0.33%
Zero Drift	0.66%	0.25%	1.16%
Initial Upscale Bias	-0.33%	-2.40%	-1.65%
Final Upscale Bias	-0.43%	-2.64%	-3.72%
Upscale Drift	0.09%	0.25%	2.07%
Alternative Specification Abs Diff: Initial Zero	0.30	0.12	0.18
Final Zero	0.44	0.15	0.04
Initial Upscale	0.07	0.29	0.20
Final Upscale	0.09	0.32	0.45
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 4	O_2	NOx	CO
Raw Average	12.88	2.41	1.17
Corrected Average	13.03	2.37	1.08
Initial Zero	0.00	0.01	0.11
Final Zero	-0.08	-0.01	0.03
Avg. Zero	-0.04	0.00	0.07
Initial UpScale	11.96	5.03	5.00
Final UpScale	11.96	4.98	5.08
Avg. UpScale	11.96	5.01	5.04
Sys Resp (Zero)	0.01	0.04	-0.10
Sys Resp (Upscale)	12.39	5.00	5.16
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.05%	-0.25%	1.74%
Final Zero Bias	-0.43%	-0.41%	1.07%
Zero Drift	0.38%	0.17%	0.66%
Initial Upscale Bias	-2.04%	0.25%	-1.32%
Final Upscale Bias	-2.04%	-0.17%	-0.66%
Upscale Drift	0.00%	0.41%	0.66%
Alternative Specification Abs Diff: Initial Zero	0.01	0.03	0.21
Final Zero	0.09	0.05	0.13
Initial Upscale	0.43	0.03	0.16
Final Upscale	0.43	0.02	0.08
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 5	O_2	NOx	CO
Raw Average	12.70	2.58	0.77
Corrected Average	12.47	2.45	0.75
Initial Zero	0.03	0.18	0.13
Final Zero	0.47	0.18	-0.16
Avg. Zero	0.25	0.18	-0.02
Initial UpScale	12.12	5.06	5.28
Final UpScale	12.54	4.96	5.01
Avg. UpScale	12.33	5.01	5.15
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.09%	1.16%	0.66%
Final Zero Bias	2.18%	1.16%	-1.74%
Zero Drift	2.09%	0.00%	2.40%
Initial Upscale Bias	-0.28%	0.33%	1.98%
Final Upscale Bias	1.71%	-0.50%	-0.25%
Upscale Drift	1.99%	0.83%	2.23%
Alternative Specification Abs Diff: Initial Zero	0.02	0.14	0.08
Alternative Specification Abs Diff: Final Zero	0.46	0.14	0.21
Alternative Specification Abs Diff: Initial Upscale	0.06	0.04	0.24
Alternative Specification Abs Diff: Final Upscale	0.36	0.06	0.03
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 6	O_2	NOx	CO
Raw Average	12.86	2.59	0.52
Corrected Average	12.36	2.50	0.73
Initial Zero	0.47	0.18	-0.16
Final Zero	0.60	0.16	-0.34
Avg. Zero	0.54	0.17	-0.25
Initial UpScale	12.54	4.96	5.01
Final UpScale	12.65	4.92	4.73
Avg. UpScale	12.60	4.94	4.87
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	2.18%	1.16%	-1.74%
Final Zero Bias	2.80%	0.99%	-3.22%
Zero Drift	0.62%	0.17%	1.49%
Initial Upscale Bias	1.71%	-0.50%	-0.25%
Final Upscale Bias	2.23%	-0.83%	-2.56%
Upscale Drift	0.52%	0.33%	2.31%
Alternative Specification Abs Diff: Initial Zero	0.46	0.14	0.21
Alternative Specification Abs Diff: Final Zero	0.59	0.12	0.39
Alternative Specification Abs Diff: Initial Upscale	0.36	0.06	0.03
Alternative Specification Abs Diff: Final Upscale	0.47	0.10	0.31
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 7	O_2	NOx	CO
Raw Average	12.15	2.70	0.64
Corrected Average	12.35	2.63	0.80
Initial Zero	0.02	0.16	-0.34
Final Zero	-0.29	0.09	-0.05
Avg. Zero	-0.14	0.13	-0.20
Initial UpScale	12.03	4.92	4.73
Final UpScale	11.78	4.98	5.13
Avg. UpScale	11.91	4.95	4.93
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.05%	0.99%	-3.22%
Final Zero Bias	-1.42%	0.41%	-0.83%
Zero Drift	1.47%	0.58%	2.40%
Initial Upscale Bias	-0.71%	-0.83%	-2.56%
Final Upscale Bias	-1.90%	-0.33%	0.74%
Upscale Drift	1.18%	0.50%	3.31%
Alternative Specification Abs Diff — Initial Zero	0.01	0.12	0.39
Final Zero	0.30	0.05	0.10
Initial Upscale	0.15	0.10	0.31
Final Upscale	0.40	0.04	0.09
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 8	O_2	NOx	CO
Raw Average	11.93	2.47	0.84
Corrected Average	12.29	2.39	0.84
Initial Zero	-0.29	0.09	-0.05
Final Zero	-0.40	0.10	-0.05
Avg. Zero	-0.35	0.10	-0.05
Initial UpScale	11.78	4.98	5.13
Final UpScale	11.71	4.99	5.17
Avg. UpScale	11.75	4.99	5.15
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-1.42%	0.41%	-0.83%
Final Zero Bias	-1.94%	0.50%	-0.83%
Zero Drift	0.52%	0.08%	0.00%
Initial Upscale Bias	-1.90%	-0.33%	0.74%
Final Upscale Bias	-2.23%	-0.25%	1.07%
Upscale Drift	0.33%	0.08%	0.33%
Alternative Specification Abs Diff — Initial Zero	0.30	0.05	0.10
Final Zero	0.41	0.06	0.10
Initial Upscale	0.40	0.04	0.09
Final Upscale	0.47	0.03	0.13
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 9	O_2	NOx	CO
Raw Average	11.94	2.41	0.88
Corrected Average	12.28	2.34	0.88
Initial Zero	-0.40	0.10	-0.05
Final Zero	-0.30	0.08	-0.09
Avg. Zero	-0.35	0.09	-0.07
Initial UpScale	11.71	4.99	5.17
Final UpScale	11.81	4.95	5.28
Avg. UpScale	11.76	4.97	5.23
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-1.94%	0.50%	-0.83%
Final Zero Bias	-1.47%	0.33%	-1.16%
Zero Drift	0.47%	0.17%	0.33%
Initial Upscale Bias	-2.23%	-0.25%	1.07%
Final Upscale Bias	-1.75%	-0.58%	1.98%
Upscale Drift	0.47%	0.33%	0.91%
Alternative Specification Abs Diff — Initial Zero	0.41	0.06	0.10
Final Zero	0.31	0.04	0.14
Initial Upscale	0.47	0.03	0.13
Final Upscale	0.37	0.07	0.24
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Wdb Load, Run - 10	O_2	NOx	CO
Raw Average	12.05	2.43	0.82
Corrected Average	12.30	2.38	0.82
Initial Zero	-0.30	0.08	-0.09
Final Zero	-0.18	0.09	-0.03
Avg. Zero	-0.24	0.09	-0.06
Initial UpScale	11.81	4.95	5.28
Final UpScale	11.88	4.92	5.08
Avg. UpScale	11.85	4.94	5.18
Sys Resp (Zero)	0.01	0.04	0.05
Sys Resp (Upscale)	12.18	5.02	5.04
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-1.47%	0.33%	-1.16%
Final Zero Bias	-0.90%	0.41%	-0.66%
Zero Drift	0.57%	0.08%	0.50%
Initial Upscale Bias	-1.75%	-0.58%	1.98%
Final Upscale Bias	-1.42%	-0.83%	0.33%
Upscale Drift	0.33%	0.25%	1.65%
Alternative Specification Abs Diff — Initial Zero	0.31	0.04	0.14
Final Zero	0.19	0.05	0.08
Initial Upscale	0.37	0.07	0.24
Final Upscale	0.30	0.10	0.04
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

APPENDIX E

STRATIFICATION TEST DATA

Source Information	
Company	Florida Power and Light
Plant Name	West County Energy Center
Equipment	Mitsubishi 501G
Location	Loxahatchee, Florida

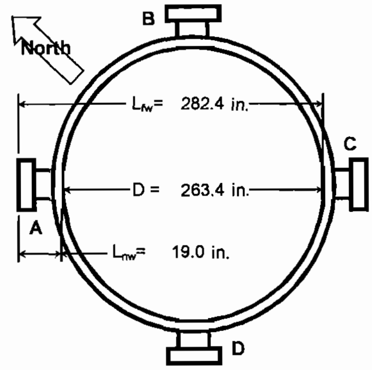
Test Information	
Date	03/16/11
Project #	bv-10-westcounty.fl-comp#2
Unit Number	3A
Load	Base Load
Number of Ports Available	4
Number of Ports Used	4

Stack and Test Type		
○ Isokinetic Traverse (Wet Chemistry Testing)		**Circular Stack**
○ Velocity Traverse (Flow and Flow RATA Test)		
◉ **Stratification Traverse (Compliance Test)**	☐ RM 20	
○ Stratification Traverse (RATA)	☐ Part 60 ☐ Part 75	

METHOD 1 - STRATIFICATION TEST FOR A CIRCULAR SOURCE

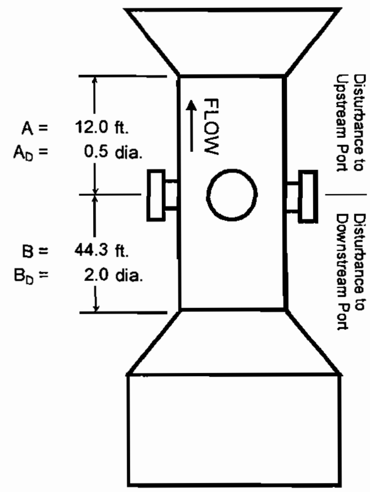
Company	Florida Power and Light	**Date**	03/16/11
Plant Name	West County Energy Center	**Project #**	bv-10-westcounty.fl-comp#2
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

Circular Stack or Duct Diameter			
Distance to Far Wall of Stack	(L_{fw})	282.38	in.
Distance to Near Wall of Stack	(L_{nw})	19.00	in.
Diameter of Stack	(D)	263.38	in.
Area of Stack	(A_s)	378.35	ft^2



Distance from Disturbances to Port			
Distance Upstream	(A)	144.00	in.
Diameters Upstream	(A_D)	0.55	diameters
Distance Downstream	(B)	531.75	in.
Diameters Downstream	(B_D)	2.02	diameters

Number of Traverse Points Required					
Diameters to Flow Disturbance		Minimum Number of[1] Traverse Points		**Minimum Number of Traverse Points**	
Down (B_D) Stream	Up (A_D) Stream	Particulate Points	Velocity Points	**Comp Stratification**	
				Criteria	**Points**
2.00-4.99	0.50-1.24	24	16	◉ RM 7E 8.1.2	12 RM1 pts
5.00-5.99	1.25-1.49	20	16	○ Alt 7E 8.1.2	3 points
6.00-6.99	1.50-1.74	16	12	12 points	
7.00-7.99	1.75-1.99	12	12		
>= 8.00	>=2.00	8 or 12[2]	8 or 12[2]	Minimum Number of Traverse Points	
Upstream Spec		24	16	RATA Stratification	
Downstream Spec		24	16		
Traverse Pts Required		24	16	Criteria	Points
[1] Check Minimum Number of Points for the Upstream and Downstream conditions, then use the largest.				○ Part75/60	12 RM1 pts
				○ 75 abrv (a)	3 points
[2] 8 for Circular Stacks 12 to 24 inches; 12 for Circular Stacks over 24 inches				○ 75 abrv (b)	6 points



Number of Traverse Points Used				
4	**Ports by**	3	**Pts / port**	***Stratification Traverse***
12	**Pts Used**	12	**Required**	**(Compliance Test)**

Traverse Point Locations			
Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	4.4%	11 5/8	30 5/8
2	14.6%	38 4/8	57 4/8
3	29.6%	78	97
4			
5			
6			
7			
8			
9			
10			
11			
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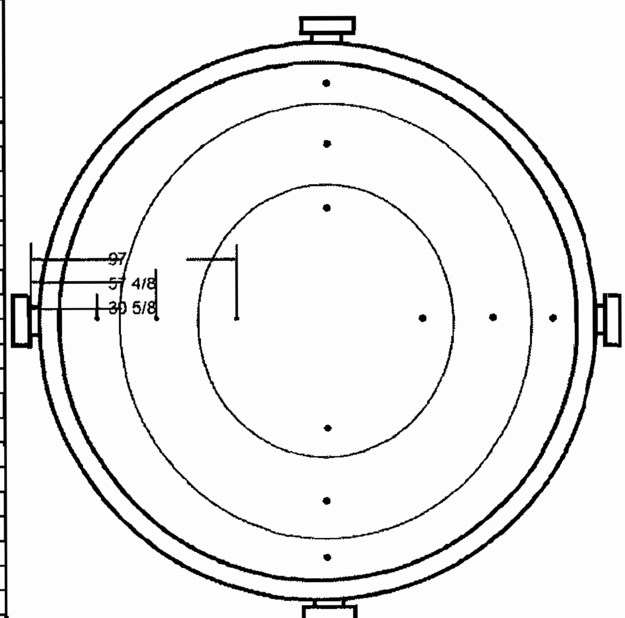
24			



STRATIFICATION TRAVERSE (COMPLIANCE TEST) RESULTS

Company	Florida Power and Light
Plant Name	West County Energy Center
Equipment	Mitsubishi 501G
Location	Loxahatchee, Florida

Date	03/16/11
Project #	bv-10-westcounty.fl-comp#2
# of Ports Available	4
# of Ports Used	4

Stack Dimensions			
Diameter or Length of Stack	(D)	263.38	in.
Width of Stack	(W)		in.
Area of Stack	(A_s)	378.35	ft^2

Traverse Data			
4	Ports by	3	Pts / port
12	Pts Used	12	Required
Run Start	8:45:56	Run End	9:28:26

Traverse Point	Time Per Point	Point Start Time	Point Stop Time (Reading)	O2	Percent Difference	CO	Percent Difference	NOx	Percent Difference
	min.	hh:mm:ss	hh:mm:ss	%	%	ppm	%	ppm	%
D-3	3.00	8:45:56	8:48:56	13.31	**0.64%**	0.59	6.63%	2.16	1.71%
D-2	3.00	8:48:56	8:51:56	13.31	**0.64%**	0.46	**16.87%**	1.95	11.26%
D-1	3.00	8:51:56	8:54:56	13.41	0.11%	0.51	7.83%	1.98	9.90%
C-3	4.50	8:54:56	8:59:26	13.35	0.34%	0.53	4.22%	1.97	10.35%
C-2	3.00	8:59:26	9:02:26	13.34	0.42%	0.49	11.45%	2.55	16.04%
C-1	3.00	9:02:26	9:05:26	13.38	0.12%	0.61	10.24%	1.79	**18.54%**
B-3	7.00	9:05:26	9:12:26	13.41	0.11%	0.61	10.24%	2.45	11.49%
B-2	3.00	9:12:26	9:15:26	13.43	0.26%	0.56	1.20%	2.39	8.76%
B-1	3.00	9:15:26	9:18:26	13.45	0.40%	0.58	4.82%	2.16	1.71%
A-3	4.00	9:18:26	9:22:26	13.45	0.40%	0.57	3.01%	2.52	14.68%
A-2	3.00	9:22:26	9:25:26	13.46	0.48%	0.59	6.63%	2.23	1.48%
A-1	3.00	9:25:26	9:28:26	13.45	0.40%	0.54	2.41%	2.22	1.02%
Average				*13.40*		*0.55*		2.20	

STRAT TEST DETERMINED SAMPLE POINTS FOR CIRCULAR STACK

Company	Florida Power and Light	**Date**	03/16/11
Plant Name	West County Energy Center	**Project #**	bv-10-westcounty.fl-comp#2
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

Stack Dimensions				**Traverse Data**			
Diameter or Length of Stack	(D)	263.38	in.	4	**Ports by**	3	**Pts / port**
Width of Stack	(W)		in.	12	**Pts Used**	12	**Required**
Area of Stack	(A_s)	378.35	ft^2	**Run Start**	8:45:56	**Run End**	9:28:26

40 CFR 60, Appendix A, Method 7E Criteria

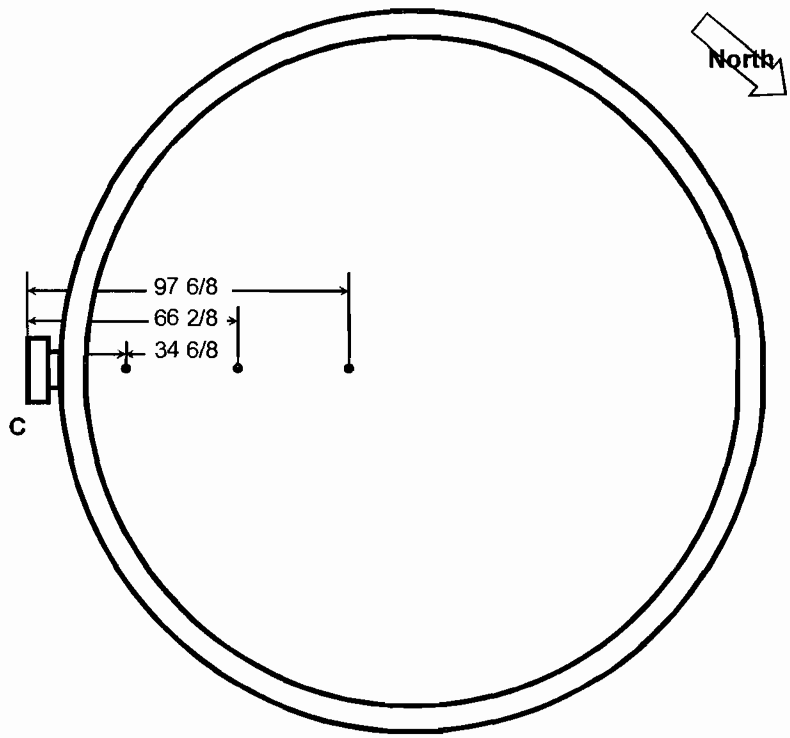
Stratification Results	
Maximum Percent Difference	18.54 % for NOx
Maximum Pollutant Conc. Diff.	0.41 ppm for NOx
Maximum Diluent Conc. Diff.	0.09 % for O2
Stack Diameter	263.38 in.

Stratification Conclusions	
Maximum % Diff.	Percent Diff. >10% Failed Stratification Test
Maximum Conc. Diff.	Conc. Diff. ≤ 0.5% Passed 3A 8.1 Three Pt. Criteria
Stack Diameter	D > 93.6 in.

Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	6.0%	15 6/8	34 6/8
2	17.9%	47 2/8	66 2/8
3	29.9%	78 6/8	97 6/8

Passed Strat. Test Under RM 7E 8.1.2 Three Pt. Criteria
Sample from the measurement line exhibiting the highest average concentration

Test Type
- ☐ Moisture, for MW
- ☐ Moisture, for wet-to-dry
- ☑ Gas
- ☐
- ☐ 6.5.6(b)(2) alt. points could apply



APPENDIX 2

40CFR75 QA CERT TEST DETAIL REPORT

ECMPS Client Tool
Version 1.0 2011 Q1

QA/Cert Test Detail Report
March 28, 2011 07:04 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL): 56407
State: FL
County: Palm Beach

Unit/Stack/Pipe ID: WCCT3A

7-Day Calibration

Component ID:	A01	**Component Type:**	NOX	**Test Completion:**	03/03/2011 15:38
Test Number:	7DAY-Q12011-A01-2	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	Low	**Span Value:**	10.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
02/16/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 15	HIGH	8.700	87	8.700	0.00		0.00	
02/21/2011 16	ZERO	0.000	0	0.100	1.00		1.00	
02/21/2011 16	HIGH	8.700	87	8.800	1.00		1.00	
02/22/2011 15	ZERO	0.000	0	0.100	1.00		1.00	
02/22/2011 15	HIGH	8.700	87	8.600	1.00		1.00	
02/25/2011 12	ZERO	0.000	0	0.000	0.00		0.00	
02/25/2011 12	HIGH	8.700	87	8.700	0.00		0.00	
03/01/2011 13	ZERO	0.000	0	0.000	0.00		0.00	
03/01/2011 13	HIGH	8.700	87	8.600	1.00		1.00	
03/02/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
03/02/2011 15	HIGH	8.700	87	8.600	1.00		1.00	
03/03/2011 15	ZERO	0.000	0	-0.100	1.00		1.00	
03/03/2011 15	HIGH	8.700	87	8.500	2.00		2.00	

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**
Facility ID (ORISPL): **56407**

Unit/Stack/Pipe ID: WCCT3A

7-Day Calibration

Component ID: A02 **Component Type:** O2 **Test Completion:** 03/03/2011 15:43
Test Number: 7DAY-Q12011-A02-3 **Reason for Test:** INITIAL **Reported Test Results:** PASSED
Span Scale Level: High **Span Value:** 25.000 **EPA Calculated Result:** PASSED

Evaluation Status: No Errors **Submission Status:** Not submitted
Submission Date/Time:

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported Results	Reported APS	Recalculated Results	Recalculated APS
02/16/2011 15	ZERO	0.000	.0	-0.050	0.10		0.10	
02/16/2011 15	HIGH	20.900	83.6	21.000	0.10		0.10	
02/21/2011 16	ZERO	0.000	0	-0.030	0.00		0.00	
02/21/2011 16	HIGH	20.900	83.6	20.910	0.00		0.00	
02/22/2011 15	ZERO	0.000	0	-0.050	0.10		0.10	
02/22/2011 15	HIGH	20.900	83.6	20.920	0.00		0.00	
02/25/2011 12	ZERO	0.000	0	-0.030	0.00		0.00	
02/25/2011 12	HIGH	20.900	83.6	20.960	0.10		0.10	
03/01/2011 13	ZERO	0.000	0	-0.040	0.00		0.00	
03/01/2011 14	HIGH	20.900	83.6	20.890	0.00		0.00	
03/02/2011 15	ZERO	0.000	0	-0.040	0.00		0.00	
03/02/2011 15	HIGH	20.900	83.6	20.930	0.00		0.00	
03/03/2011 15	ZERO	0.000	0	-0.030	0.00		0.00	
03/03/2011 15	HIGH	20.900	83.6	21.000	0.10		0.10	

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3A

7-Day Calibration

Component ID:	A01	**Component Type:**	NOX	**Test Completion:**	03/03/2011 15:41
Test Number:	7DAY-Q12011-A01-1	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported Results	Reported APS	Recalculated Results	Recalculated APS
02/16/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 15	HIGH	176.200	88.1	176.900	0.30		0.40	
02/21/2011 16	ZERO	0.000	0	0.100	0.10		0.10	
02/21/2011 16	HIGH	176.200	88.1	176.500	0.20		0.20	
02/22/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/22/2011 15	HIGH	176.200	88.1	176.000	0.10		0.10	
02/25/2011 12	ZERO	0.000	0	-0.100	0.10		0.10	
02/25/2011 12	HIGH	176.200	88.1	174.900	0.70		0.70	
03/01/2011 13	ZERO	0.000	0	-0.100	0.10		0.10	
03/01/2011 14	HIGH	176.200	88.1	175.800	0.20		0.20	
03/02/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
03/02/2011 15	HIGH	176.200	88.1	176.500	0.20		0.20	
03/03/2011 15	ZERO	0.000	0	-0.200	0.10		0.10	
03/03/2011 15	HIGH	176.200	88.1	176.000	0.10		0.10	

Additional Information:

No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Unit/Stack/Pipe ID: WCCT3A

Cycle Time Test

Component ID: A02
Component Type: O2
Test Completion: 03/19/2011 00:02
Test Number: CYCL-Q12011-A02-22
Reason for Test: INITIAL
Reported Test Results: PASSED
Span Scale Level: High
Span Value: 25.000
EPA Calculated Result: PASSED
Total Cycle Time: 3
Calculated Total Cycle Time: 3

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	23:41	23:44	ZERO	0.000	13.190	0.020	3	3
2011/03/19	00:00	00:02	HIGH	20.900	13.140	20.850	2	2

Additional Information:
No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Unit/Stack/Pipe ID: WCCT3A

Cycle Time Test

Component ID: A01
Component Type: NOX
Test Completion: 03/18/2011 23:57
Test Number: CYCL-Q12011-A01-20
Reason for Test: INITIAL
Reported Test Results: PASSED
Span Scale Level: High
Span Value: 200.000
EPA Calculated Result: PASSED
Total Cycle Time: 3
Calculated Total Cycle Time: 3

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	23:41	23:44	ZERO	0.000	2.100	-0.100	3	3
2011/03/18	23:54	23:57	HIGH	176.200	2.100	175.800	3	3

Additional Information:
No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3A

Cycle Time Test

Component ID:	A01	**Component Type:**	NOX	**Test Completion:**	03/18/2011 23:51
Test Number:	CYCL-Q12011-A01-21	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	Low	**Span Value:**	10.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	3	**Calculated Total Cycle Time:**	3		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	23:41	23:44	ZERO	0.000	2.100	-0.100	3	3
2011/03/18	23:48	23:51	HIGH	8.667	2.200	8.000	3	3

Additional Information:

No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: **WCCT3A**

Fuel Flowmeter Accuracy Test

Component ID: A06 **Component Type:** OFFM
Test Number: FFAC-Q42009-A06-95

Test Completion: 11/12/2009 12:54
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.0	0.0	0.0	12/26/2010 00

Additional Information:

No comment.

Unit/Stack/Pipe ID: **WCCT3A**

Fuel Flowmeter Accuracy Test

Component ID: A04 **Component Type:** GFFM
Test Number: FFAC-Q22010-A04-81

Test Completion: 05/11/2010 00:00
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.1	0.1	0.2	12/26/2010 00

Additional Information:

No comment.

Facility Name: **West County Energy Center**
Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report
March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3A

Linearity Check

Component ID:	A01	**Component Type:**	NOX	**Test Completion:**	03/18/2011 20:29
Test Number:	LINE-Q12011-A01-10	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	176.200	176.200	110.700	110.700	51.100	51.100
Mass CEM Value	176.567	176.567	109.300	109.300	49.767	49.767
Alt. Perf. Indicator						
Results	0.2	0.2	1.3	1.3	2.6	2.6

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/18/2011 19:52	MID	109.100	110.700	55.4%
03/18/2011 20:25	MID	109.400	110.700	55.4%
03/18/2011 20:08	MID	109.400	110.700	55.4%
03/18/2011 20:22	LOW	49.800	51.100	25.6%
03/18/2011 20:05	LOW	49.700	51.100	25.6%
03/18/2011 19:48	LOW	49.800	51.100	25.6%
03/18/2011 20:12	HIGH	176.600	176.200	88.1%
03/18/2011 19:55	HIGH	176.400	176.200	88.1%
03/18/2011 20:29	HIGH	176.700	176.200	88.1%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3A

Linearity Check

Component ID:	A02	**Component Type:**	O2	**Test Completion:**	03/18/2011 21:42
Test Number:	LINE-Q12011-A02-11	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	20.900	20.900	13.800	13.800	6.240	6.240
Mass CEM Value	20.920	20.920	13.753	13.753	6.230	6.230
Alt. Perf. Indicator						
Results	0.1	0.1	0.3	0.3	0.2	0.2

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/18/2011 21:01	HIGH	20.930	20.900	83.6%
03/18/2011 21:26	HIGH	20.930	20.900	83.6%
03/18/2011 21:42	HIGH	20.900	20.900	83.6%
03/18/2011 21:18	LOW	6.230	6.240	25.0%
03/18/2011 21:34	LOW	6.230	6.240	25.0%
03/18/2011 20:54	LOW	6.230	6.240	25.0%
03/18/2011 21:38	MID	13.760	13.800	55.2%
03/18/2011 20:57	MID	13.750	13.800	55.2%
03/18/2011 21:22	MID	13.750	13.800	55.2%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3A

Relative Accuracy Test

System ID:	A01	**System Parameter:**	NOX	**Test Completion:**	03/17/2011 15:18
Test Number:	RATA-Q12011-A01-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSAPS
# of Op. Levels:	1	**Grace Period Test?**		**EPA Calculated Result:**	PASSAPS
Evaluation Status:	No Errors			**Reported BAF:**	1.111
Submission Status:	Not submitted			**EPA Calculated BAF:**	1.111
Submission Date:				**RATA Frequency:**	4QTRS

Operating Level: High

Reference Method Used: 7E,3A: NOX RM 7E and CO2/O2 RM 3A

Summary Statistics:

	Reported	Recalculated		Reported	Recalculated
Mean of Monitoring System	0.006	0.006	**Relative Accuracy**	17.33	17.33
Mean of Reference Method Values	0.006	0.006	**Bias Adjustment Factor**	1.111	1.111
Mean of Difference	0.001	0.001	**APS Indicator**	Y	Y
Standard Deviation of Difference	0.000	0.000	**T-Value**	2.306	2.306
Confidence Coefficient	0.000	0.000	**Gross Unit Load or Velocity**	391	392

Run Data:

Run	Start Date	End Date	Run Status	Monitoring System Value	Reference Method Value	Gross Load or Velocity
1	03/16/2011 09:47	03/16/2011 10:46	RUNUSED	0.006	0.007	381
2	03/16/2011 11:03	03/16/2011 12:02	RUNUSED	0.006	0.007	377
3	03/16/2011 12:21	03/16/2011 13:20	RUNUSED	0.006	0.007	376
4	03/16/2011 18:31	03/16/2011 18:51	RUNUSED	0.006	0.007	369
5	03/17/2011 10:05	03/17/2011 11:04	RUNUSED	0.005	0.006	413
6	03/17/2011 11:25	03/17/2011 12:24	RUNUSED	0.005	0.006	400
7	03/17/2011 12:43	03/17/2011 13:42	NOTUSED	0.005	0.007	404
8	03/17/2011 13:58	03/17/2011 14:18	RUNUSED	0.006	0.006	405
9	03/17/2011 14:28	03/17/2011 14:48	RUNUSED	0.005	0.006	404
10	03/17/2011 14:58	03/17/2011 15:18	RUNUSED	0.006	0.006	403

Facility Name: **West County Energy Center**

QA/Cert Test Detail Report
March 28, 2011 07:04 PM

Facility ID (ORISPL): **56407**

Additional Information:

No comment.

*Performance Spec: RA <= 10% or Mean Difference <= +/- 2.0fps:
Reduced Frequency Spec: RA <= 7.5% or Mean Difference +/- 1.5 fps (Appendix A &3.3.4)

Unit/Stack/Pipe ID: **WCCT3A**

Transmitter Transducer Test

Component ID: A05
Component Type: GFFM
Test Completion: 03/03/2010 00:00
Test Number: FFAT-Q12010-A05-91
Reason for Test: QA
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

High Level Accuracy	High Level Accuracy Specification	Mid Level Accuracy	Mid Level Accuracy Specification	Low Level Accuracy	Low Level Accuracy Specification
0.5	AGA3	0.5	AGA3	0.5	AGA3

Additional Information:
No comment.

Unit/Stack/Pipe ID: **WCCT3A**

Primary Element Inspection

System ID:
System Type:
Test Completion: 02/19/2011 00:00
Component ID: A05
Component Type: GFFM
Reported Test Results: PASSED
Test Number: PEI-110219-A05-1
Reason for Test: INITIAL
Grace Period Test?

Evaluation Status: No Errors
Submission Status: Not submitted
Test Description:

Additional Information:

No comment.

APPENDIX 3

CEMS CALIBRATION DRIFT REPORTS

Daily Stack Calibration Report
Generated: 3/5/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/5/2011
Period End: 3/5/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable				Part75 Allowable			
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
03/05/2011	15:30	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	15:30	3A_COHIGH	CO	SPAN	1048.000	1074.600	26.600	2.2	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	09:17	3A_COHIGH	CO	ZERO	0.000	1.200	1.200	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	09:17	3A_COHIGH	CO	SPAN	1048.000	1071.000	23.000	1.9	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	15:30	3A_COLOW	CO	ZERO	0.000	-0.100	-0.100	-1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	15:30	3A_COLOW	CO	SPAN	8.500	8.500	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	09:17	3A_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	09:17	3A_COLOW	CO	SPAN	8.500	8.700	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/05/2011	15:30	3A_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/05/2011	15:30	3A_NOXHIGH	NOx	SPAN	176.200	175.800	-0.400	-0.2	20.0	10.0	PASS	0	-0.2	10.000	5.0	PASS
03/05/2011	09:17	3A_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/05/2011	09:17	3A_NOXHIGH	NOx	SPAN	176.200	176.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/05/2011	15:30	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
03/05/2011	15:30	3A_NOXLOW	NOx	SPAN	8.700	8.500	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
03/05/2011	09:17	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
03/05/2011	09:17	3A_NOXLOW	NOx	SPAN	8.700	8.600	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
03/05/2011	15:30	3A_O2	O2	ZERO	0.000	-0.040	-0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/05/2011	15:30	3A_O2	O2	SPAN	20.900	20.940	0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/05/2011	09:17	3A_O2	O2	ZERO	0.000	-0.040	-0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/05/2011	09:17	3A_O2	O2	SPAN	20.900	21.010	0.110	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 3/5/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/5/2011
Period End: 3/5/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.9	0.1%	24.8	2.1%
3A_COLOW	CO	0.1	1.0%	0.1	1.0%
3A_NOXHIGH	NOx	0.1	0.1%	0.2	0.2%
3A_NOXLOW	NOx	0.0	0.0%	0.1	1.5%
3A_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.900	- N/A -	24.800	- N/A -
3A_COLOW	CO	0.100	- N/A -	0.100	- N/A -
3A_NOXHIGH	NOx	0.100	0.1%	0.250	0.2%
3A_NOXLOW	NOx	0.000	0.0%	0.150	1.5%
3A_O2	O2	0.040	- N/A -	0.075	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 3/3/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/3/2011
Period End: 3/3/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:			
3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:			
3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
03/03/2011	15:30	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/03/2011	15:30	3A_COHIGH	CO	SPAN	1048.000	1073.400	25.400	2.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/03/2011	15:30	3A_COLOW	CO	ZERO	0.000	-0.200	-0.200	-2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/03/2011	15:30	3A_COLOW	CO	SPAN	8.500	8.400	-0.100	-1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/03/2011	15:30	3A_NOXHIGH	NOx	ZERO	0.000	-0.200	-0.200	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/03/2011	15:30	3A_NOXHIGH	NOx	SPAN	176.200	176.000	-0.200	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/03/2011	15:30	3A_NOXLOW	NOx	ZERO	0.000	-0.100	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
03/03/2011	15:30	3A_NOXLOW	NOx	SPAN	8.700	8.500	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
03/03/2011	15:30	3A_O2	O2	ZERO	0.000	-0.030	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/03/2011	15:30	3A_O2	O2	SPAN	20.900	21.000	0.100	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 3/3/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/3/2011
Period End: 3/3/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.6	0.1%	25.4	2.1%
3A_COLOW	CO	0.2	2.0%	0.1	1.0%
3A_NOXHIGH	NOx	0.2	0.1%	0.2	0.1%
3A_NOXLOW	NOx	0.1	1.0%	0.2	2.0%
3A_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.600	- N/A -	25.400	- N/A -
3A_COLOW	CO	0.200	- N/A -	0.100	- N/A -
3A_NOXHIGH	NOx	0.200	0.1%	0.200	0.1%
3A_NOXLOW	NOx	0.100	1.0%	0.200	2.0%
3A_O2	O2	0.030	- N/A -	0.100	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 3/2/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/2/2011
Period End: 3/2/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		WD	Error %	Part75 Allowable Units	Part75 Allowable %	
03/02/2011	15:30	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/02/2011	15:30	3A_COHIGH	CO	SPAN	1048.000	1066.800	18.800	1.6	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/02/2011	15:30	3A_COLOW	CO	ZERO	0.000	-0.200	-0.200	-2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/02/2011	15:30	3A_COLOW	CO	SPAN	8.500	8.300	-0.200	-2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/02/2011	15:30	3A_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
03/02/2011	15:30	3A_NOXHIGH	NOx	SPAN	176.200	176.500	0.300	0.2	20.0	10.0	PASS	0	0.2	10.000	5.0	PASS
03/02/2011	15:30	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
03/02/2011	15:30	3A_NOXLOW	NOx	SPAN	8.700	8.600	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
03/02/2011	15:30	3A_O2	O2	ZERO	0.000	-0.040	-0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/02/2011	15:30	3A_O2	O2	SPAN	20.900	20.930	0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 3/2/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/2/2011
Period End: 3/2/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3A_COHIGH	CO	0.6	0.1%	18.8	1.6%
3A_COLOW	CO	0.2	2.0%	0.2	2.0%
3A_NOXHIGH	NOx	0.0	0.0%	0.3	0.2%
3A_NOXLOW	NOx	0.0	0.0%	0.1	1.0%
3A_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3A_COHIGH	CO	0.600	- N/A -	18.800	- N/A -
3A_COLOW	CO	0.200	- N/A -	0.200	- N/A -
3A_NOXHIGH	NOx	0.000	0.0%	0.300	0.2%
3A_NOXLOW	NOx	0.000	0.0%	0.100	1.0%
3A_O2	O2	0.040	- N/A -	0.030	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 3/1/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/1/2011
Period End: 3/1/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:					Span of Analyzers:				
3A_NOXLOW	NOx	0.0	10.0	ppm	3A_NOXLOW	NOx	0.0	10.0	ppm
3A_NOXHIGH	NOx	0.0	200.0	ppm	3A_NOXHIGH	NOx	0.0	200.0	ppm
3A_O2	O2	0.00	25.00	%	3A_O2	O2	0.00	25.00	%
3A_COLOW	CO	0.0	10.0	ppm	3A_COLOW	CO	0.0	10.0	ppm
3A_COHIGH	CO	0.0	1200.0	ppm	3A_COHIGH	CO	0.0	1200.0	ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
03/01/2011	15:30	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	15:30	3A_COHIGH	CO	SPAN	1048.000	1068.600	20.600	1.7	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	13:51	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	13:51	3A_COHIGH	CO	SPAN	1048.000	1065.600	17.600	1.5	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	15:30	3A_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	15:30	3A_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	13:51	3A_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	13:51	3A_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
03/01/2011	15:30	3A_NOXHIGH	NOx	ZERO	0.000	-0.200	-0.200	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/01/2011	15:30	3A_NOXHIGH	NOx	SPAN	176.200	176.500	0.300	0.2	20.0	10.0	PASS	0	0.2	10.000	5.0	PASS
03/01/2011	13:51	3A_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
03/01/2011	13:51	3A_NOXHIGH	NOx	SPAN	176.200	175.800	-0.400	-0.2	20.0	10.0	PASS	0	-0.2	10.000	5.0	PASS
03/01/2011	15:30	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
03/01/2011	15:30	3A_NOXLOW	NOx	SPAN	8.700	8.500	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
03/01/2011	13:51	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
03/01/2011	13:51	3A_NOXLOW	NOx	SPAN	8.700	8.600	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
03/01/2011	15:30	3A_O2	O2	ZERO	0.000	-0.040	-0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/01/2011	15:30	3A_O2	O2	SPAN	20.900	20.900	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/01/2011	13:51	3A_O2	O2	ZERO	0.000	-0.040	-0.040	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
03/01/2011	13:51	3A_O2	O2	SPAN	20.900	20.890	-0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 3/1/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/1/2011
Period End: 3/1/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.6	0.1%	19.1	1.6%
3A_COLOW	CO	0.1	1.0%	0.1	1.0%
3A_NOXHIGH	NOx	0.2	0.1%	0.3	0.2%
3A_NOXLOW	NOx	0.0	0.0%	0.1	1.5%
3A_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.600	- N/A -	19.100	- N/A -
3A_COLOW	CO	0.100	- N/A -	0.100	- N/A -
3A_NOXHIGH	NOx	0.150	0.1%	0.350	0.2%
3A_NOXLOW	NOx	0.000	0.0%	0.150	1.5%
3A_O2	O2	0.040	- N/A -	0.005	- N/A -

Performance Specification

Channel		Part 60 PASS	Part 60 FAIL	Part 75 PASS	Part 75 FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/27/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/25/2011
Period End: 2/25/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3A_NOXLOW	NOx	0.0	10.0 ppm	3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm	3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %	3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm	3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm	3A_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
02/25/2011	12:17	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/25/2011	12:17	3A_COHIGH	CO	SPAN	1048.000	1059.600	11.600	1.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/25/2011	12:17	3A_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/25/2011	12:17	3A_COLOW	CO	SPAN	8.500	8.500	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/25/2011	12:17	3A_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/25/2011	12:17	3A_NOXHIGH	NOx	SPAN	176.200	174.900	-1.300	-0.6	20.0	10.0	PASS	0	-0.6	10.000	5.0	PASS
02/25/2011	12:17	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/25/2011	12:17	3A_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/25/2011	12:17	3A_O2	O2	ZERO	0.000	-0.030	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/25/2011	12:17	3A_O2	O2	SPAN	20.900	20.960	0.060	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/27/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/25/2011
Period End: 2/25/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.6	0.1%	11.6	1.0%
3A_COLOW	CO	0.1	1.0%	0.0	0.0%
3A_NOXHIGH	NOx	0.1	0.1%	1.3	0.6%
3A_NOXLOW	NOx	0.0	0.0%	0.0	0.0%
3A_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.600	- N/A -	11.600	- N/A -
3A_COLOW	CO	0.100	- N/A -	0.000	- N/A -
3A_NOXHIGH	NOx	0.100	0.1%	1.300	0.6%
3A_NOXLOW	NOx	0.000	0.0%	0.000	0.0%
3A_O2	O2	0.030	- N/A -	0.060	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
02/21/2011	16:00	3A_COHIGH	CO	ZERO	0.000	1.800	1.800	0.2	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	16:00	3A_COHIGH	CO	SPAN	1048.000	1063.200	15.200	1.3	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	16:00	3A_COLOW	CO	ZERO	0.000	1.100	1.100	11.0	2.0	20.0	**WARN**	1	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	16:00	3A_COLOW	CO	SPAN	8.500	9.300	0.800	8.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	16:00	3A_NOXHIGH	NOx	ZERO	0.000	0.100	0.100	0.1	20.0	10.0	PASS	0	0.1	10.000	5.0	PASS
02/21/2011	16:00	3A_NOXHIGH	NOx	SPAN	176.200	176.500	0.300	0.2	20.0	10.0	PASS	0	0.2	10.000	5.0	PASS
02/21/2011	16:00	3A_NOXLOW	NOx	ZERO	0.000	0.100	0.100	1.0	1.0	10.0	PASS	0	1.0	5.000	5.0	PASS
02/21/2011	16:00	3A_NOXLOW	NOx	SPAN	8.700	8.800	0.100	1.0	1.0	10.0	PASS	0	1.0	5.000	5.0	PASS
02/21/2011	16:00	3A_O2	O2	ZERO	0.000	-0.030	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/21/2011	16:00	3A_O2	O2	SPAN	20.900	20.910	0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3A_COHIGH	CO	1.8	0.2%	15.2	1.3%
3A_COLOW	CO	1.1	11.0%	0.8	8.0%
3A_NOXHIGH	NOx	0.1	0.1%	0.3	0.2%
3A_NOXLOW	NOx	0.1	1.0%	0.1	1.0%
3A_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3A_COHIGH	CO	1.800	- N/A -	15.200	- N/A -
3A_COLOW	CO	1.100	- N/A -	0.800	- N/A -
3A_NOXHIGH	NOx	0.100	0.1%	0.300	0.2%
3A_NOXLOW	NOx	0.100	1.0%	0.100	1.0%
3A_O2	O2	0.030	- N/A -	0.010	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3A_NOXLOW	NOx	0.0	10.0 ppm	3A_NOXLOW	NOx	0.0	10.0 ppm
3A_NOXHIGH	NOx	0.0	200.0 ppm	3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %	3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm	3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm	3A_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		WD	Error %	Part75 Allowable Units	Part75 Allowable %	
02/16/2011	15:30	3A_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:30	3A_COHIGH	CO	SPAN	1048.000	1050.000	2.000	0.2	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:30	3A_COLOW	CO	ZERO	0.000	0.000	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:30	3A_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:30	3A_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/16/2011	15:30	3A_NOXHIGH	NOx	SPAN	176.200	176.900	0.700	0.3	20.0	10.0	PASS	0	0.3	10.000	5.0	PASS
02/16/2011	15:30	3A_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	15:30	3A_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	15:30	3A_O2	O2	ZERO	0.000	-0.050	-0.050	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/16/2011	15:30	3A_O2	O2	SPAN	20.900	21.000	0.100	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.6	0.1%	2.0	0.2%
3A_COLOW	CO	0.0	0.0%	0.1	1.0%
3A_NOXHIGH	NOx	0.0	0.0%	0.7	0.3%
3A_NOXLOW	NOx	0.0	0.0%	0.0	0.0%
3A_O2	O2	0.1	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3A_COHIGH	CO	0.600	- N/A -	2.000	- N/A -
3A_COLOW	CO	0.000	- N/A -	0.100	- N/A -
3A_NOXHIGH	NOx	0.000	0.0%	0.700	0.3%
3A_NOXLOW	NOx	0.000	0.0%	0.000	0.0%
3A_O2	O2	0.050	- N/A -	0.100	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3A_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3A_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3A_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

APPENDIX 4

LINEARITY AND CGA SUMMARY TABLES

GGA Calibration Report
Generated: 3/19/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/18/2011
Period End: 3/19/2011
Included Calibrations: **CGA (40CFR60)**

Range of Analyzers:				Span of Analyzers:			
3A_NOXHIGH	NOx	0.0	200.0 ppm	3A_NOXHIGH	NOx	0.0	200.0 ppm
3A_O2	O2	0.00	25.00 %	3A_O2	O2	0.00	25.00 %
3A_COLOW	CO	0.0	10.0 ppm	3A_COLOW	CO	0.0	10.0 ppm
3A_COHIGH	CO	0.0	1200.0 ppm	3A_COHIGH	CO	0.0	1200.0 ppm

Date	Time	From 3 Pt.	Channel		Type	Target Units	Actual Units	Diff Units	Error %	CGA Allowable (40CFR60) Units	%		Bottle ID	Expire Date
03/18/2011	20:19	*	3A_COHIGH	CO	LOW	301.0	267.1	-33.9	-11.3	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	20:19	*	3A_COHIGH	CO	MID	662.0	607.2	-54.8	-8.3	99.3	15.0	PASS	ALM063790	1/12/2012
03/18/2011	20:02	*	3A_COHIGH	CO	LOW	301.0	266.6	-34.4	-11.4	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	20:02	*	3A_COHIGH	CO	MID	662.0	605.8	-56.2	-8.5	99.3	15.0	PASS	ALM063790	1/12/2012
03/18/2011	19:46	*	3A_COHIGH	CO	LOW	301.0	266.0	-35.0	-11.6	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	19:46	*	3A_COHIGH	CO	MID	662.0	605.7	-56.3	-8.5	99.3	15.0	PASS	ALM063790	1/12/2012
03/18/2011	22:39	*	3A_COLOW	CO	LOW	2.5	2.3	-0.2	-8.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/18/2011	22:39	*	3A_COLOW	CO	MID	5.6	5.3	-0.3	-5.4	0.8	15.0	PASS	ALM059441	8/22/2011
03/18/2011	22:22	*	3A_COLOW	CO	LOW	2.5	2.3	-0.2	-8.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/18/2011	22:22	*	3A_COLOW	CO	MID	5.6	5.3	-0.3	-5.4	0.8	15.0	PASS	ALM059441	8/22/2011
03/18/2011	22:06	*	3A_COLOW	CO	LOW	2.5	2.3	-0.2	-8.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/18/2011	22:06	*	3A_COLOW	CO	MID	5.6	5.4	-0.2	-3.6	0.8	15.0	PASS	ALM059441	8/22/2011
03/18/2011	20:19	*	3A_NOXHIGH	NOx	LOW	51.1	49.8	-1.3	-2.5	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	20:19	*	3A_NOXHIGH	NOx	MID	110.7	109.4	-1.3	-1.2	16.6	15.0	PASS	ALM063790	1/12/2012
03/18/2011	20:02	*	3A_NOXHIGH	NOx	LOW	51.1	49.7	-1.4	-2.7	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	20:02	*	3A_NOXHIGH	NOx	MID	110.7	109.4	-1.3	-1.2	16.6	15.0	PASS	ALM063790	1/12/2012
03/18/2011	19:46	*	3A_NOXHIGH	NOx	LOW	51.1	49.8	-1.3	-2.5	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	19:46	*	3A_NOXHIGH	NOx	MID	110.7	109.1	-1.6	-1.4	16.6	15.0	PASS	ALM063790	1/12/2012
03/18/2011	21:32	*	3A_O2	O2	LOW	6.2	6.2	0.0	-0.2	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	21:32	*	3A_O2	O2	MID	13.8	13.8	0.0	-0.3	2.1	15.0	PASS	ALM032282	2/17/2014
03/18/2011	21:16	*	3A_O2	O2	LOW	6.2	6.2	0.0	-0.2	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	21:16	*	3A_O2	O2	MID	13.8	13.8	-0.1	-0.4	2.1	15.0	PASS	ALM032282	2/17/2014
03/18/2011	20:51	*	3A_O2	O2	LOW	6.2	6.2	0.0	-0.2	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	20:51	*	3A_O2	O2	MID	13.8	13.8	-0.1	-0.4	2.1	15.0	PASS	ALM032282	2/17/2014

FAIL = Difference Error > Regulations Allow
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
@ Bottle is within 7 days of expiration
# Bottle has Expired - Must be Replaced

CGA Calibration Report
Generated: 3/19/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/18/2011
Period End: 3/19/2011
Included Calibrations: **CGA (40CFR60)**

Absolute Average DIFF and Absolute(Target - Average Reading)/Target) * 100

Channel		----LOW---- Diff Units	Target %	----MID---- Diff Units	Target %
3A_COHIGH	CO	34.4	11.4%	55.8	8.4%
3A_COLOW	CO	0.2	8.0%	0.3	4.8%
3A_NOXHIGH	NOx	1.3	2.6%	1.4	1.3%
3A_O2	O2	0.0	0.2%	0.0	0.3%

Performance Specification

Channel		PASS	FAIL
3A_COHIGH	CO	<=15.0%	>15.0%
3A_COLOW	CO	<=15.0%	>15.0%
3A_NOXHIGH	NOx	<=15.0%	>15.0%
3A_O2	O2	<=15.0%	>15.0%

Perf: [Part60 CGA CO] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA CO] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA CO] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA CO] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA NOx] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA NOx] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA O2] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target

APPENDIX 5

CYCLE TIME SUPPORTING DOCUMENTATION

Font11

Babcock & Wilcox Power Generation Group NetDAHS©
Average Values Report
Version 59.0
Generated: 3/19/2011 00:38

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3a

Period Start: 3/18/2011 23:40
Period End: 3/19/2011 00:07
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3A_NOX ppm	3A_O2 %	3A_MW_TOT MW
3/18/2011 23:40	2.1	13.18	215.1
3/18/2011 23:41	2.1	13.19	215.1
3/18/2011 23:42	2.0	13.18	215.5
3/18/2011 23:43	1.7	3.86	215.4
3/18/2011 23:44	-0.1	0.02	215.1
3/18/2011 23:45	-0.1	0.00	214.6
3/18/2011 23:46	0.9	8.39	214.8
3/18/2011 23:47	2.0	13.13	215.2
3/18/2011 23:48	2.2	13.15	215.2
3/18/2011 23:49	4.8	3.66	214.9
3/18/2011 23:50	8.0	0.00	214.5
3/18/2011 23:51	8.0	-0.01	215.0
3/18/2011 23:52	6.3	6.13	215.2
3/18/2011 23:53	2.1	13.10	214.9
3/18/2011 23:54	2.1	13.15	214.8
3/18/2011 23:55	71.3	3.88	214.9
3/18/2011 23:56	175.2	0.01	215.0
3/18/2011 23:57	175.8	0.00	214.8
3/18/2011 23:58	106.3	7.30	214.8
3/18/2011 23:59	2.8	13.10	214.7
3/19/2011 00:00	2.4	13.14	214.8
3/19/2011 00:01	10.3	17.40	215.4
3/19/2011 00:02	0.1	20.85	215.0
3/19/2011 00:03	0.1	20.87	215.0
3/19/2011 00:04	0.8	16.59	215.0
3/19/2011 00:05	2.0	13.22	215.1
3/19/2011 00:06	2.1	13.19	214.7
3/19/2011 00:07	2.1	13.18	214.6
Final Average*	21.3	9.53	215.0
Maximum*	2.1	13.19	215.5
Minimum*	2.1	13.18	214.5

*Does not include Invalid Averaging Periods ("N/A")

NOx H - 176.2 ppm
NOx L - 8.667 ppm
O_2 - 20.9%

CUSTOM INSTRUMENTATION SERVICES CORPORATION

40 CFR 60 CO Response Time Test

SITE NAME West County

DATE 3-19-11

UNIT NUMBER 3A

Performed by Justin Hewett

Reference Gas Cylinder:	Label Concentration	Serial Number	Expiration Date
Nitrogen:		CC274956	
CO / Low	8.543	CC340047	10-21-12

Nominal Stack Concentrations prior to test:

Oxygen: 13.3 CO: 3.01

Record the following for reference to recorded DAHS data:

Gas Injection	Time	Analyzer Response	Response Time Seconds
Start of Test (Audit On)	14:17:00	3.01	
ON: Zero Gas	14:20:00	0.405	83
OFF: Zero Gas		0.014	
ON: CO/L	14:23:00	8.15	87
OFF: CO/L		8.51	
ON: Zero Gas	14:26:00	0.409	87
OFF: Zero Gas		0.002	
ON: CO/L	14:29:00	8.19	86
OFF: CO/L		8.44	
ON: Zero Gas	14:32:00	0.381	88
OFF: Zero Gas		0.011	
ON: CO/L	14:35:00	8.15	85
OFF: CO/L		8.55	
ON: Zero Gas	14:38:00	0.324	86
OFF: Zero Gas	14:41:00	0.042	
End of Test (Audit Off)	14:44:00	3.42	

APPENDIX 6

EPA PROTOCOL GAS CERTIFICATES

CERTIFICATE OF BATCH ANALYSIS

NITROGEN - CEM-CAL ZERO

Part Number:	NI CZ15A	Reference Number:	21-110228284-2
Cylinder Analyzed:	CC274956	Cylinder Volume:	142 Cubic Feet
Laboratory:	ASO - Tampa Plant - FL	Cylinder Pressure:	2000 PSIG
Analysis Date:	Jan 27, 2011	Valve Outlet:	580
Lot #:	21-110228284-2		

Expiration Date: Jan 27, 2016

ANALYTICAL RESULTS

Component		Requested Purity		Certified Concentration
NitrogenCEM		99.9995%		99.9995%
CARBON DIOXIDE	<	1 PPM	<LDL	0.01 PPM
Moisture	<	1 PPM		0.11 PPM
NOx	<	0.1 PPM		0.1 PPM
SO2	<	0.1 PPM		0.1 PPM
THC	<	0.1 PPM	<LDL	0.01 PPM
CARBON MONOXIDE	<	0.5 PPM	<LDL	0.01 PPM
Oxygen	<	0.5 PPM		0.42 PPM

Cylinders in Batch:

CC 3[illegible]8877, CC118403, CC274956, C[illegible]278245, CC283656, CC301185, CC3015[illegible]1, CC301[illegible]81, CC301[illegible]86, CC[illegible]794, CC301821, CC301823, CC[illegible], CC316750, CC318824, CC31882[illegible], CC319234, CC319[illegible], CC3192[illegible]8, CC40152, CC96842, SGS174900BAL, XC[illegible]

Notes:

Meets Federal Register specifications Title 40 C.F.R. 72.2.

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Edward Johnson

Approved for Release

Page 1 of 21-110228284-2

Airgas

Airgas Specialty Gases
630 United Drive
Durham NC, 27713
(919) 544-3773
http://www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E15A1668	Reference Number:	122-124238078-3
Cylinder Number:	CC340047	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 21, 2010	Valve Outlet:	660

Expiration Date: Oct 21, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NOx	8.500 PPM	8.667 PPM	G1	+/- 1% NIST Traceable
NITRIC OXIDE	8.500 PPM	8.667 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	8.500 PPM	8.543 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	080609	CC255244	10.04PPM CARBON MONOXIDE/NITROGEN	Jun 15, 2012
NTRM	100603	CC280952	20.34PPM NITRIC OXIDE/NITROGEN	Feb 01, 2013
NTRM	100603	CC280952 NOX	20.34PPM NOx/NITROGEN	Feb 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Horiba APMA-360 CO (0-50ppm)	Infrared	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

Airgas

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Airgas Specialty Gases
630 United Drive
Durham, NC 27713
Phone (919) 544-3773
Fax (919) 544-3774
www.airgas.com

Part Number:	E03NI99E15A0011	Reference Number:	122-124238078-2
Cylinder Number:	CC326582	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 19, 2010	Valve Outlet:	660

Expiration Date: Oct 19, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITRIC OXIDE	175.0 PPM	176.2 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	1035 PPM	1048 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			
Total oxides of nitrogen		176.5 PPM		For Reference Only

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	090603	CC288058	250.6PPM NITRIC OXIDE/NITROGEN	Feb 01, 2011
NTRM	020502	SG9142254BAL	1488PPM CARBON MONOXIDE/NITROGEN	May 15, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 #1 CO	FTIR	Oct 04, 2010
Nicolet 6700 #1 NO	FTIR	Oct 04, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-001

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Amended Procedure G-2, August 25, 1999.

Cylinder Number: ALM016434 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
CARBON MONOXIDE	2.53 PPM	+/- 2%	NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

Special Notes: CO RANGE 2-3 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-002

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM059441 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	5.57	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE

Date: 14Feb2011 Response Unit:VOLTS
Z1=-0.03320 R1=4.84370 T1=2.69370
R2=4.85010 Z2=-0.05020 T2=2.68980
Z3=-0.03980 T3=2.69150 R3=4.84280
Avg. Concentration: 5.580 PPM

Second Triad Analysis

Date: 21Feb2011 Response Unit: VOLTS
Z1=0.02640 R1=4.86920 T1=2.72860
R2=4.87880 Z2=0.03380 T2=2.73790
Z3=0.03600 T3=2.73970 R3=4.88910
Avg. Concentration: 5.560 PPM

Calibration Curve

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999990739
Constants: A=0.0190246
B=2.077972083 C=-0.0120773
D= E=

Special Notes: 60 RANGE 5-6 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: CEM-6035
Project No.: 01-35874-002

Customer

FLORIDA P&L-MARTIN PLT-PO#-CEM ONLY

21900 SW WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM025866 Certification Date: 29Oct2010 Exp. Date: 28Oct2012

Cylinder Pressure***: 1962 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	301	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	51.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	51.4	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003888	240.8 PPM	CARBON MONOXIDE
!TRM 1683	01Nov2013	KAL003284	46.90 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	11Oct2010	FTIR
FTIR//000928781	29Oct2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
CARBON MONOXIDE		
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.01673 R1=239.9048 T1=299.7323	Z1=-0.03420 R1=240.0633 T1=299.7638	r=9.99998E-1
R2=239.9334 Z2=0.14016 T2=299.9462	R2=240.1269 Z2=0.03466 T2=299.9593	Constants: A=0.00000E+0
Z3=0.17124 T3=300.3045 R3=239.9374	Z3=0.08633 T3=300.2578 R3=240.1329	B=8.96123E-1 C=3.52000E-4
Avg. Concentration: 301.1 PPM	Avg. Concentration: 300.9 PPM	D=0.00000E+0 E=0.00000E+0
NITRIC OXIDE		
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.12887 R1=46.84412 T1=51.05194	Z1=0.07736 R1=46.70219 T1=50.89229	r=9.99999E-1
R2=46.89432 Z2=-0.07937 T2=51.14584	R2=46.79544 Z2=0.12586 T2=50.91652	Constants: A=0.00000E+0
Z3=0.01313 T3=51.15833 R3=46.98010	Z3=0.14749 T3=51.04982 R3=46.83210	B=9.82452E-1 C=1.98000E-4
Avg. Concentration: 51.11 PPM	Avg. Concentration: 51.10 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: *Michael A. Kuhns* (signature)
Michael A. Kuhns

PMA NOX/CO High/mid

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: 4500250736
Project No.: 01-19426-012

Customer
FLORIDA POWER & LIGHT

MARTIN PLANT
21900 S.W. WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM063790 **Certification Date:** 12Jan2010 **Exp. Date:** 12Jan2012
Cylinder Pressure*:** 2002 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	662	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	110.7	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	111.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1681	02Oct2010	KAL003160	970.1 PPM	CARBON MONOXIDE
ITRM 1684	15Oct2012	KAL004453	95.84 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	31Dec2009	FTIR
FTIR//000928781	04Jan2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
CARBON MONOXIDE		
Date: 06Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00836 R1=967.7358 T1=659.8589	Z1=-0.06379 R1=967.9088 T1=660.3933	r=9.99999E-1
R2=967.9701 Z2=0.17759 T2=660.2637	R2=968.2288 Z2=0.29739 T2=660.7589	Constants: A=0.00000E+0
Z3=0.50273 T3=660.5182 R3=968.5788	Z3=0.40472 T3=660.9539 R3=968.3168	B=2.58580E-1 C=1.15000E-4
Avg. Concentration: 661.6 PPM	Avg. Concentration: 662.0 PPM	D=0.00000E+0 E=0.00000E+0
NITRIC OXIDE		
Date: 05Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.29121 R1=95.73315 T1=110.4266	Z1=-0.07261 R1=96.06142 T1=111.0910	r=9.99998E-1
R2=95.81615 Z2=-0.13602 T2=110.6344	R2=96.06672 Z2=-0.05270 T2=111.1651	Constants: A=0.00000E+0
Z3=-0.12519 T3=110.9319 R3=95.98806	Z3=-0.01136 T3=111.2319 R3=96.15300	B=9.94707E-1 C=5.00000E-5
Avg. Concentration: 110.6 PPM	Avg. Concentration: 110.9 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: Michael A Kuhns
Michael A. Kuhns

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-003

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM033049 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	6.24 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2658	01Feb2016	K001907	10.03 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:MV
Z1=-0.00190 R1=4.91170 T1=3.05330
R2=4.91300 Z2=0.00000 T2=3.05350
Z3=-0.00140 T3=3.05260 R3=4.91510
Avg. Concentration: 6.240 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999996776
Constants: A=0.015250224
B=2.040162442 C=
D= E=

Special Notes: O2 RANGE 5-7.5%

APPROVED BY: JOHN OSHEA

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-004

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM032282 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	13.8 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:VOLTS
Z1=-0.00160 R1=4.58680 T1=2.72560
R2=4.58540 Z2=-0.00110 T2=2.72480
Z3=-0.00210 T3=2.72550 R3=4.58360
Avg. Concentration: 13.80 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053895951 C=
D= E=

APPROVED BY: David Ashnoff
DAVID ASHNOFF

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-005

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM008490 **Certification Date:** 15Feb2011 **Exp. Date:** 14Feb2014
Cylinder Pressure*:** 2000 PSIG **Batch No:** PLU0026512

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	22.6 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT-61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

OXYGEN
Date: 15Feb2011 Response Unit:VOLTS
Z1=-0.00240 R1=4.58780 T1=4.46640
R2=4.58950 Z2=-0.00150 T2=4.46570
Z3=-0.00120 T3=4.46700 R3=4.58940
Avg. Concentration: 22.60 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053895951 C=
D= E=

Special Notes: CO < 0.5 PPM NO < 0.1 PPM

APPROVED BY: David Ashnoff
DAVID ASHNOFF

APPENDIX 7

DAHS VERIFICATION DOCUMENTATION

B&W PGG, KVB-Enertec, INC.
Formula Verification Report
UNIT 3A
Plant Name: WEST COUNTY ENERGY CENTER
ORISPL #: 056407
Date: March 19, 2011

FORMULAS THAT PASSED VERIFICATION:

DateTime	Param	Code	ID	Conc	DilConc	Fc/F	Rate	HI	GCV	Optime	Computed	Reported
03/12/11 06:00	CO2	G-4	A01			1040		1601.5			95.2	95.2
03/12/11 22:00	NOX	F-5	A02	28.1	15.7	9004.7					0.121	0.121
03/19/11 21:00	NOXM	F-24A	A03				0.013	1914.6			24.9	24.9
03/12/11 06:00	HI	D-6	A04				15564		102900		1601.5	1601.5
03/12/11 09:00	HI	D-8	A05				29.4		19500		0.6	0.6
03/12/11 06:00	SO2	D-5	A07				0.0006	1601.5			0.9609	0.9609
03/12/11 09:00	SO2	D-2	A08	1			29.4				0.6	0.6
03/12/11 09:00	CO2	G-4	A10			1420		0.6			0	0
03/12/11 08:00	CO2	G-4A	A11			1040/1420				0.97	54.3	54.3

Certified for all Utilities reporting under 40 CFR Part 75 with B&W PGG KVB/Enertec Products NetDAHS 8.0.150 SP4 release installed

UTILITY NAME: ANY
PLANT NAME: Any
ORISPL: Any
DAHS SOFTWARE: B&W Power Generation Group - KVB/Enertec Products NetDAHS
DATE PERFORMED: 03/02/2011

I certify that the automated Data Acquisition and Handling system (DAHS) component of each CEM System identified in the attached results was tested and that proper computation of the missing data substitution procedures was verified. The results of the verification test for the missing data routine are included.

John F Downs

March 3, 2011

Signature Date

John F. Downs

Printed Name

Test Number 1

Availability >= 95% and MDP <=24 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 2

Availability = 95% and MDP <=24 hours. Boundary test.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 3

Availability >= 95% and MDP > 24 hours. HB/HA value is greater than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 4

Availability >= 95% and MDP > 24 hours and HB/HA value is less than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 5

Availability >= 90% and < 95% and MDP <= 8 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 6

Availability >= 90% and < 95% and MDP > 8 hours and HB/HA value is > 95th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 7

Availability >= 90% and < 95% and MDP > 8 hours and 95th percentile > HB/HA value.

SO2 - Passed
NOX - Passed

FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 8

Availability < 90% and MDP > 0 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 9

Maximum potential Initial missing data period. Load Range or next higher Load Range not available.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 10

Initial missing data period. 720 LookBack Period.

SO2 - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 11

< 2160 QA hours available. Initial missing data period. Next higher Load Range available.

NOX - Passed
FLOW - Passed

Test Number 12

< 2160 QA hours available. Initial missing data period. Load Range available.

NOX - Passed
FLOW - Passed

Test Number 13

NOx, Flow availability > 80% and < 90% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
MOISTURE - Passed

Test Number 14

NOx, Flow availability < 80% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Summary

Number Of Tests Passed: 73
Number Of Tests Failed: 0

Start: 3/2/2011 2:31:56 PM
End: 3/2/2011 2:35:00 PM

APPENDIX 8

40 CFR 75 MONITORING PLAN

ECMPS Client Tool
Version 1.0 2011 Q1

Monitoring Plan Printout Report
March 28, 2011 07:10 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL):	56407
Monitoring Plan Location IDs:	WCCT3A
State:	FL
County:	Palm Beach
Latitude:	26.6986
Longitude:	-80.3747

Reporting Frequency

Monitoring Plan Location IDs	Reporting Frequency	Begin Quarter	End Quarter
WCCT3A	Q - Quarterly	2010 QTR 4	

Monitoring Location Attributes

Unit/Stack/Pipe Identifier	Duct Indicator	Ground Elevation	Stack Height	Cross Area Exit	Cross Area Flow	Material Code	Shape Code	Begin Date	End Date
WCCT3A		25	150	359		OTHER	ROUND	12/26/2010	

Unit Operation Information

Unit Identifier	Commence Commercial Operation Date	Commence Operation Date	Boiler/Turbine Type			Max Heat Input		
			Code	Begin Date	End Date	Value (mmBtu)	Begin Date	End Date
WCCT3A	12/29/2010	12/26/2010	CC	12/26/2010		2761.0	12/26/2010	

Unit Type Codes: CC - Combined cycle

Unit Program Information

Unit Identifier	Program Code	Unit Class	Unit Monitor Certification Begin Date	Unit Monitor Certification Deadline
WCCT3A	ARP	P2	12/29/2010	
	CAIRNOX	A	12/29/2010	
	CAIROS	A	12/29/2010	
	CAIRSO2	A	12/29/2010	

Facility Name: **West County Energy Center**
Facility ID (ORISPL): **56407**

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Unit Fuel

Unit Identifier	Fuel Type	Fuel Indicator	Demonstration Method for GCV	Demonstration Method for Daily Sulfur	Ozone Season Indicator	Begin Date	End Date
WCCT3A	DSL	S				12/26/2010	
	PNG	P				12/26/2010	

Fuel Type Codes: PNG - Pipeline Natural Gas
DSL - Diesel Oil

Fuel Indicator Codes: S - Secondary
P - Primary

Unit Controls

Unit Identifier	Parameter	Control Equipment	Original Ind	Seasonal Ind	Installation Date	Optimization Date	Retirement Date
WCCT3A	NOX	DLNB	Y				
	NOX	H2O	Y				
	NOX	O	Y				
	NOX	SCR	Y				

Control Equipment Descriptions: SCR - Selective Catalytic Reduction
O - Other
H2O - Water Injection
DLNB - Dry Low NOx Burners

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Monitoring Method

Unit/Stack/Pipe Identifier	Parameter	Methodology	Substitute Data Approach	Bypass Approach Code	Begin Date/Hour	End Date/Hour
WCCT3A	CO2	AD	SPTS		12/26/2010 00	
	HI	AD	SPTS		12/26/2010 00	
	NOX	NOXR			12/26/2010 00	
	NOXR	CEM	SPTS		12/26/2010 00	
	OP	EXP			12/26/2010 00	
	SO2	AD	SPTS		12/26/2010 00	

Parameter Codes:
SO2 - SO2 Hourly Mass Rate (lb/hr)
OP - Opacity
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
CO2 - CO2 Hourly Mass Rate (ton/hr)

Methodology Codes:
NOXR - NOx Mass Calculated from NOx Emission Rate
EXP - Exempt
CEM - Continuous Emission Monitor
AD - Appendix D

Substitute Data Codes:
SPTS - Standard Part 75 for Missing Data

Facility Name: West County Energy Center
Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Monitoring System / Analytical Components

Unit/Stack /Pipe Identifier	System					Component								
	ID	Type	Des	Begin Date/Hour	End Date/Hour	ID	Type	SAM	BAS	Manufacturer	Model or Version	Serial Number	Begin Date/Hour	End Date/Hour
WCCT3A	A01	NOX	P	12/26/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3A	12/26/2010 00	
						A01	NOX	EXT	D	TECO	42I-LS	0934838567	12/26/2010 00	
						A02	O2	EXT	D	SERVOMEX	1440D	01440D1V 02/4246	12/26/2010 00	
						A03	PRB	EXT		CISCO	EP750	10008100-7	12/26/2010 00	
	A02	GAS	P	12/26/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3A	12/26/2010 00	
						A04	GFFM	TUR		THERMO	6500	6000297822-103	12/26/2010 00	
						A05	GFFM	ORF		ROSEMONT	305AC9	1000511	12/26/2010 00	
	A03	OILM	P	12/26/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3A	12/26/2010 00	
						A06	OFFM	COR		MICRO MOTION	CMF300M	14154628	12/26/2010 00	

System Types Descriptions:
NOX - NOx Emission Rate
GAS - Gas Fuel Flow
OILM - Mass of Oil Fuel Flow

System Designations Descriptions:
P - Primary

Sample Acquisition Method (SAM):
TUR - Turbine
ORF - Orifice
EXT - Dry Extractive
COR - Coriolis

Component Types Descriptions:
DAHS - Data Acquisition and Handling System
NOX - NOx Concentration
O2 - O2 Concentration
PRB - Probe
GFFM - Gas Fuel Flowmeter
OFFM - Oil Fuel Flowmeter

Monitoring System Fuel Flow

Unit/Stack/Pipe Identifier	System ID	Fuel Code	Max Fuel Flow Rate	Units of Measure	Source Code	Begin Date/Hour	End Date/Hour
WCCT3A	A02	PNG	30667.0	HSCF	URV	12/26/2010 00	
	A03	DSL	126880.0	LBHR	UMX	12/26/2010 00	

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

System Fuel Codes Descriptions: PNG - Pipeline Natural Gas
DSL - Diesel Oil

Units of Measure Descriptions: LBHR - Pounds / Hour
HSCF - Hundred Standard Cubic Feet / Hour

Source Codes Descriptions: URV - Upper Range Value
UMX - Unit Maximum Rate

Analyzer Range Data

Unit/Stack/Pipe Identifier	Component Type	Component ID	Range Code	Dual Range Indicator	Begin Date/Hour	End Date/Hour
WCCT3A	NOX	A01	Auto Ranging	Y	12/26/2010 00	
	O2	A02	High Range		12/26/2010 00	

Component Types Descriptions: NOX - NOx Concentration
O2 - O2 Concentration

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Emissions Formulas

Unit/Stack/Pipe Identifier	Parameter	Formula ID	Formula Code	Formula	Begin Date/Hour	End Date/Hour
WCCT3A	CO2	A01	G-4	CO2-gas = (1040 * F#(A04) * (1 / 385) * 44.0) / 2000	12/26/2010 00	
	NOXR	A02	F-5	E = 1.194 * 10 ** - 7 * S#(A01-A01) * F#(A12) * (20.9/(20.9- S#(A02-A01)))	12/26/2010 00	
	NOX	A03	F-24A	NOX_mass = F#(A02)*F#(A06)	12/26/2010 00	
	HI	A04	D-6	HI_gas = (S#(A05-A02) * GCV_gas) / 10 ** 6	12/26/2010 00	
	HI	A05	D-8	HI_oil = S#(A06-A03) * GCV_oil / 10 ** 6	12/26/2010 00	
	HI	A06	D-15A	HI_hr = (F#(A04) * T_gas + F#(A05) * T_oil)/ T_unit	12/26/2010 00	
	SO2	A07	D-5	SO2_glb/hr = 0.0006*F#(A04)	12/26/2010 00	
	SO2	A08	D-2	SO2_rate-oil = 2.0 * S#(A06-A03) * %S_oil / 100.0	12/26/2010 00	
	SO2	A09	D-12	SO2_TOTAL= ((F#(A08) * T_OIL) + (F#(A07) * T_GAS))	12/26/2010 00	
	CO2	A10	G-4	W_CO2 = 1420 * F#(A05) * 1 / 385 * 44.0 / 2000	12/26/2010 00	
	CO2	A11	G-4A	CO2_unit =((F#(A01) * T_gas) + (F#(A10) * T_oil)) / T_unit	12/26/2010 00	
	FD	A12	F-8	F_c = X_oil * 1420 + X_gas * 1040	12/26/2010 00	
	FGAS	A13	N-GAS	Gas_total = S#(A04-A02) + S#(A05-A02)	12/26/2010 00	

Parameter Codes Descriptions:

CO2 - CO2 Hourly Mass Rate (ton/hr)
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
SO2 - SO2 Hourly Mass Rate (lb/hr)
FD - F-Factor Dry-basis
FGAS - Gas Hourly Flow Rate (hscf)

Formula Codes Descriptions:

N-GAS - FGAS (net gas flow rate)
G-4A - CO2 (from CO2 rate for multiple fuels)
G-4 - CO2 (from HI, Fc)
F-8 - FD/FC/FW (from multiple fuels)
F-5 - NOXR/SO2R (from NOX or SO2 dry, O2 dry, Fd)
F-24A - NOX (from NOX rate, HI)
D-8 - HI (from oil flow rate, GCV)
D-6 - HI (from gas flow rate, GCV)
D-5 - SO2 (from gas SO2 emission rate, HI)
D-2 - SO2 (from OILM, oil sulfur content)
D-15A - HI (from HI rate for multiple fuels)
D-12 - SO2 (from SO2 rate for multiple fuels)

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Span Values

Unit/Stack /Pipe Identifier	Comp Type	Scale	Method	MPC/ MPF	MEC	Span Value	Full-Scale Range	Units of Measure	Scale Transition Point	Def. High Range Value	Flow Full Range (SCFH)	Flow Span Value (SCFH)	Begin Date/Hour	End Date/Hour
WCCT3A	NOX	H	TB	200.0	10.0	200.000	200.000	PPM	9.0				12/26/2010 00	
	NOX	L	F		10.0	10.000	10.000	PPM	9.0				12/26/2010 00	
	O2	H				25.000	25.000	PCT					12/26/2010 00	

Component Types Descriptions: NOX - NOx Concentration

O2 - O2 Concentration

Span Method Codes Descriptions: TB - Table Defaults from Part 75

F - Formula

Units of Measure Descriptions: PPM - Parts per Million

PCT - Percentage

Unit/Stack/Pipe Load or Operating Level Information

Unit/Stack/Pipe Identifier	Maximum Hourly Load	Units of Measure	Upper Bound of Range of Operation	Lower Bound of Range of Operation	Designated Normal Op. Level	Second Most Frequently Used Op. Level	Second Normal Indicator	Load Analysis Date	Begin Date/Hour	End Date/Hour
WCCT3A	417	MW	417	55	High	Mid	Yes	12/26/2010	12/26/2010 00	

Units of Measure Descriptions: MW - Megawatt

Monitoring Defaults

Unit/Stack/Pipe Identifier	Parameter	Value	Units of Measure	Purpose Code	Fuel Type	Operating Condition	Source of Value	Begin Date/Hour	End Date/Hour
WCCT3A	NORX	2.2880	LBMMBTU	MD	NFS	A	TEST	12/26/2010 00	
	O2X	19.0000	PCT	DC	NFS	A	DEF	12/26/2010 00	

Parameter Codes Descriptions: O2X - Maximum O2 Concentration (pct)

NORX - Maximum NOx Emission Rate (lb/mmBtu)

Units of Measure Descriptions: PCT - Percentage

LBMMBTU - Pounds / mmBtu

Purpose Codes Descriptions: MD - Missing Data (or Unmonitored Bypass Stack or Emergency Fuel) Default

DC - Diluent Cap

Fuel Type Codes Descriptions: NFS - Non-Fuel Specific

Operating Conditions Descriptions: A - Any Hour

Source Codes Descriptions: TEST - Unit or Stack Testing

DEF - Default Value from Part 75

APPENDIX 9

GAS AND OIL FUEL METER CERTIFICATION DOCUMENTATION

Micro Motion, Inc. Mass ..owmeter Calibration Certificat **14154628**

System Under Test

Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
CMF300H999NAFUEZZX	14154628	SSCB/CSSC	81249041	1	1	3A33MBN11CF121
2700R11BCUEZZZ	3134937	SSCB/CSSC	81249041	1	1	3A33MBN11CF121

Core Processor S/N 16163750

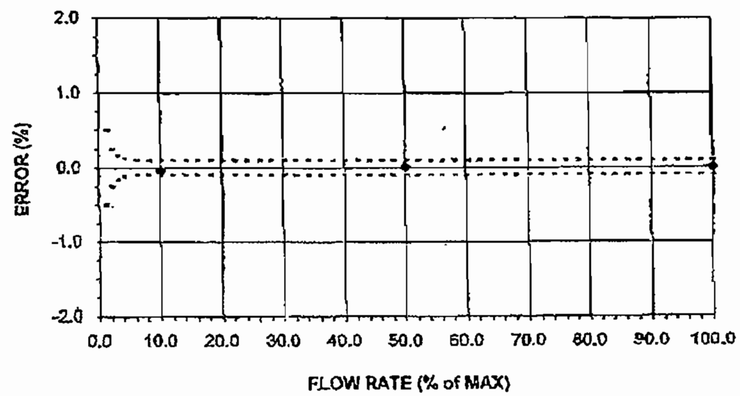
Setup

Calibration : 1.25311810
Calibration Time : 12-Nov-09
Test Stand : TSM3-A/AUTO 8 SSCB
Uncertainty : ±0.03 %
Fluid : WATER
100%Rate : 2268.00 kg/min
Pickoff : MMI
100% P/T: 167.96 kPa /22.6 ℃

Results

Status : PASSED
D1 : 0
D2 : 1
K1 : 10572.32
K2 : 12323.24
DT : 2.79
DensCal : 10572123232.79
FD : 234.44
DTG : -
DFQ1 : -
DFQ2 : -
FCF : 763.92
FT : 2.79
FlowCal : 763.922.79
FFQ : -
FTG : -

Detail



Flow (%)	Nominal Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	2268.00	1705.952	1705.971	-0.001	0.100
10.0	226.80	170.3041	170.3821	-0.046	0.100
50.0	1134.00	1140.993	1140.879	0.010	0.100
100.0	2268.00	1708.711	1708.625	0.005	0.100

Technician	Witness	
R. MEIS	H. KOMATSU	H. Komatsu

Traceable to International Standards. Details at www.micromotion.com.

EMERSON PROCESS MANAGEMENT

2009/11/23 12:32 [CSSC]

Micro Motion, Inc. Transmitter Configuration Repor **3134937**

Process Role	Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
Sensor	CMF300H999NAFUEZZX	14154628	JPN/CSSC	81249041	1	1	3A33MBN11CF121
Transmitter	2700R11BCUEZZZ	3134937	JPN/CSSC	81249041	1	1	3A33MBN11CF121

Core Processor S/N 16163750

Flow Variable Setup

Direction : FORWARD ONLY
Damping : 0.8 SEC
Mass Flow Unit : lb/h
Volume Flow Unit : ft3/h
Mass Flow Cutoff : 600.01 lb/h
Volume Flow Cutoff : 9.61 ft3/h

Density Variable Setup

Damping : 1.6 SEC
Unit : lb/ft3
Low Limit : 0 g/cm3
High Limit : 5 g/cm3

Temperature Variable Setup

Unit : DEGF
Damping : 4.8 SEC

Channel A Output Setup:(Milliamp Output 1)

LRV : 0 lb/h
URV : 150000 lb/h
Cutoff : 600.01 lb/h
Damping : 0 SEC
Variable : Mass Flow

Channel B Output Setup:(Milliamp Output 2)

LRV : 30 lb/ft3
URV : 60 lb/ft3
Cutoff : - lb/ft3
Damping : 0 SEC
Variable : Density

Channel C Output Setup:(Frequency Output)

Hz : 1 Hz
Flow Rate : 72000 lb/h
Unit Per Pulse : 20 lb/Pulse
Variable : Mass Flow

Bracket Tightened : Good

General Transmitter Setup

Fault Setting(Milliamp) : DOWN SCALE (2mA)
Fault Setting(Freq) : DOWN SCALE (0Hz)
Control Setting : –
Processing Time : 20Hz
Channel A Setting: INTERNAL
Channel B Setting: INTERNAL
Channel C Setting: EXTERNAL

Sensor Setup

D1 : 0
D2 : 1
K1 : 10572.32
K2 : 12323.24
DT : 2.79
FD : 234.44
FlowCal : 763.922.79

Special Units 1 Setup

Special Flow Unit : –
Special Total Unit : –
Base Total Unit : –
Base Time Unit : –
Conversion : –

Special Units 2 Setup

Special Flow Unit : –
Special Total Unit : –
Base Total Unit : –
Base Time Unit : –
Conversion : –

Off-Line Configuration Password (code) : 1234

Witness
H. KOMATSU H. Komatsu

FLOW ELEMENT INSPECTION / CLOSURE REPORT

WEST COUNTY POWER PARTNERS, LLC.
WEST COUNTY ENERGY CENTER - UNIT 3
FLORIDA POWER & LIGHT

Startup Package 3FGA-03
Project Number 161354

Date 2/19/11

Tag Number 3FGA- FE-2001 SN 100511 Checked By [signature]

Service Description H-B DUCT BNR FG INL FLOW ELEMENT/CALIBRATED SECTION

P&ID 3FGA-M2381 Purchase Spec. 64.0602 Installation Spec. 70.0000

AREA BLDG STRUC COL RD ROW R304 ELEV

	Accept	Reject (*see footnote*)
All shipping, storage materials, removed from FLOW ELEMENT. (ie; braces, packing material, plugs, caps, dessicant, etc.)	BG	
All Mechanical internals installed per installation instructions, and fastened correctly. (If Applicable)	BG	
All internal surfaces coated as per specifications. (If Applicable)	N/A	
All FLOW ELEMENT penetrations clear and free of obstructions.	BG	
FLOW ELEMENT is free of any debris or foreign mater. (ie; welding rods, trash, loose nuts, bolts, washers, dirt, rags, ect.)	BG	
FLOW ELEMENT gasket seating surfaces are clean and free of visible defects.	BG	

Remarks

***NOTE**: If any item is rejected, it must be corrected and reinspected prior to closing the vessel.*

Certificate of Calibration

PO Number	FPLWC 64.0602
Tag Number	3FGA-FE-2001

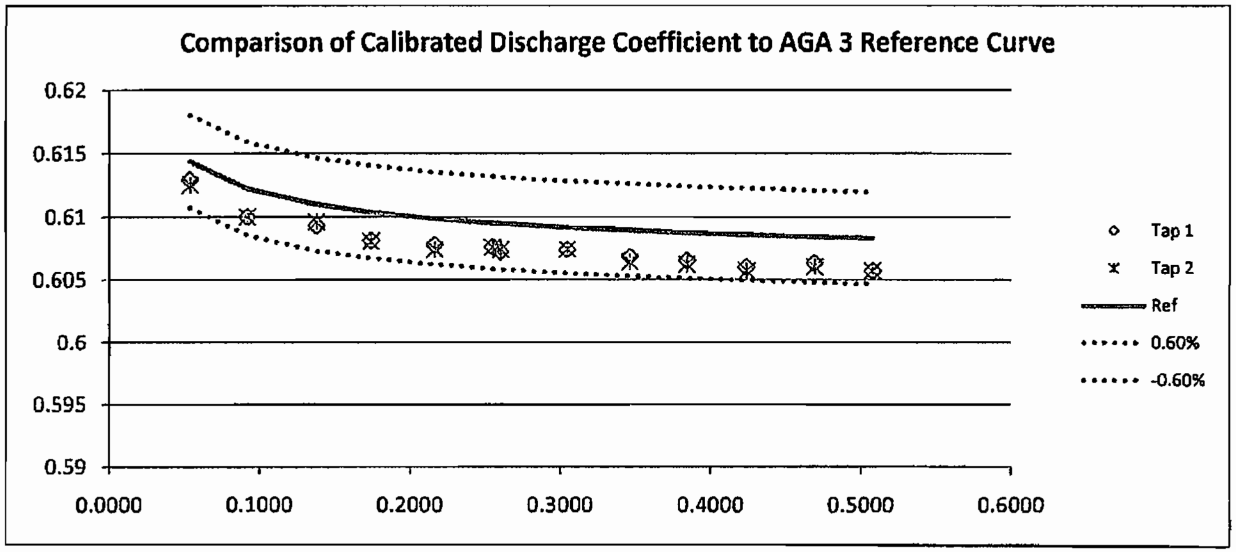
TRIAD

The flow meters for the above referenced purchase order were calibrated at a reputable flow calibration laboratory using the standard procedures of the lab. These procedures have been evaluated by the quality assurance department of Triad Measurement & Equipment, Inc. (Triad). The calibration data has been reviewed by Triad and has been presented in tabular and graphical format for review.

To intitate the test, the flow meters were installed in the laboratory flow line. Careful attention was given to align the flow element with the test line piping, and to assure no gaskets between flanged sections protruded into the flow. Vents were provided at critical locations of the test line to purge the system of air. The test technician verified proper installation of the flow element in the test line prior to introducing water into the system to equalize test line piping and primary element temperature to water temperature. Prior to the test run, the control valve was set to produce the desired flow, while the flow was directed to waste. Sufficient time was allowed to stabilze both the flow and the instrument readings, after which the weigh tank discharge valve was closed and the weigh tank scale indicator and the electric timer were both zeroed. To begin the test run, flow was diverted into the weigh tank, which automatically started the timer. At the start of water collection a computer based data acquisition system was activated to read the meter output, such that the meter output was averaged while the weigh tank was filling. At the end of the run, flow was diverted away from the weigh tank and the timer and data acquisition system were stopped to terminate the test run. The weight of water in the tank, elapsed time, water temperature, and average meter output were recorded on a data sheet. The data were entered into the computer to determine the flow and the results were plotted so that each test run was evaluated before the next run began. The control valve was then adjusted to the next flow and the procedure repeated.

The laboratory has reported that the flow measure uncertainty is within .3% of the true value for each test run. Calibrations of the test instrumentation (tempurature, time, weight and length measurements) are traceable to the National Institute of Standards and Technology (formerly the National Bureau of Standards). Triad certifies that the data included in this report is accurate and has been obtained from original laboratory documents. Based on the periodic review of lab procedures and review of the applicable lab data, the calibration for the meters listsed in the attachements has been accepted.

Michael Bibb - President



Tap 1	
Avg Coef	0.6078
Regression Calc Slope	-0.0122
Regression Calc Intercept	0.6112
Design Rn	861,800

Tap 2	
Avg Coef	0.6077
Regression Calc Slope	-0.0126
Regression Calc Intercept	0.6112
Design Rn	861,800

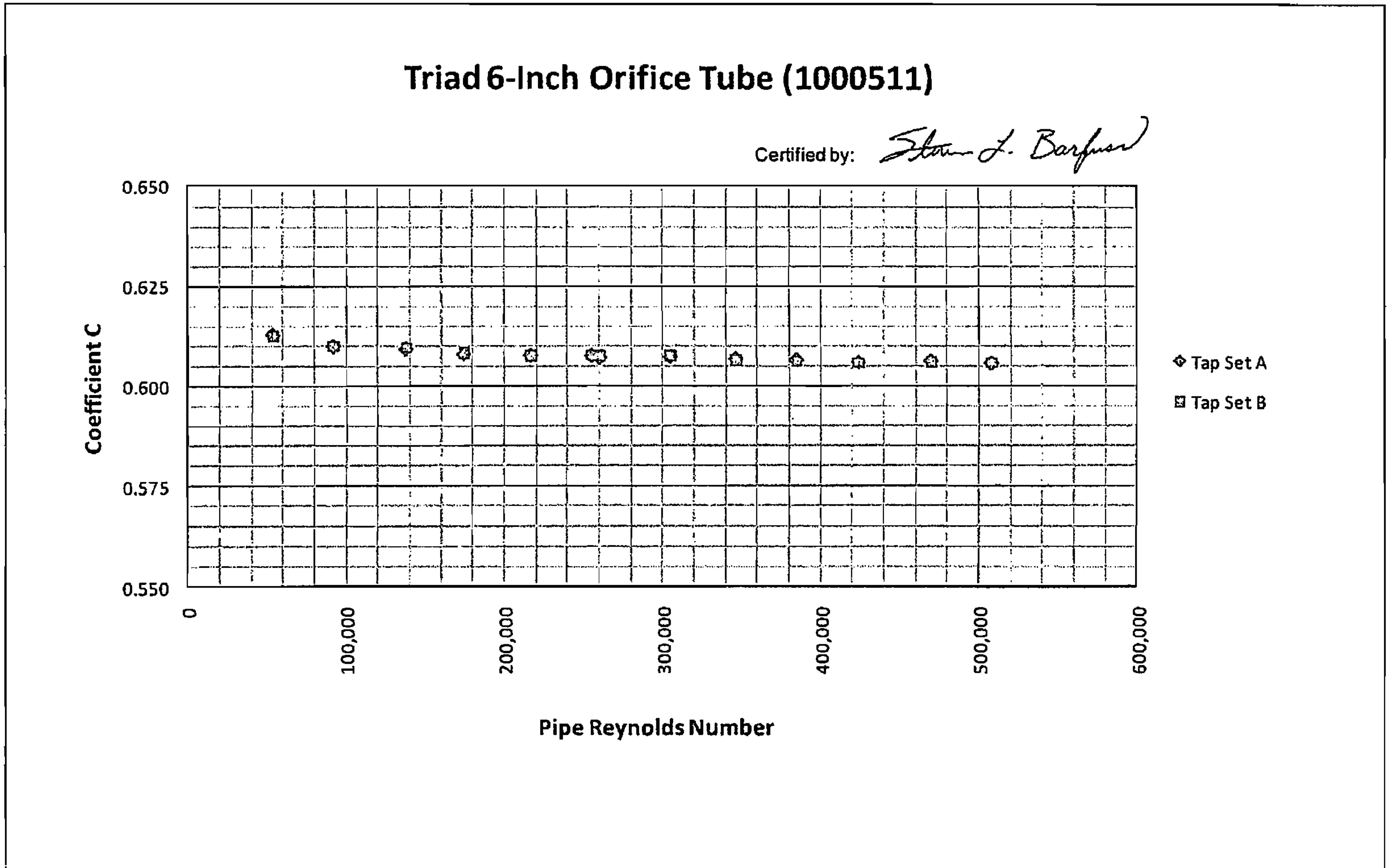


Figure 2. Discharge coefficient versus pipe Reynolds Number for 6-inch meter SN# 1000511

Table 3. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5846
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.069
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000511	Pipe Diameter (in.) =	6.065
Meter / Tag Number:	3FGA-FE-2001 / 3FGA-FE-3001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.1
	Tap Set A	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.59E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	151.7	10.63	53,674	0.6129	0.84%	0.17%
2	260.5	31.63	92,156	0.6100	0.36%	0.28%
3	389.8	71.00	137,932	0.6093	0.25%	0.26%
4	493.4	114.19	174,584	0.6081	0.05%	0.27%
5	612.6	176.25	216,762	0.6078	-0.01%	0.26%
6	736.4	255.19	260,573	0.6072	-0.11%	0.25%
7	862.1	349.38	305,033	0.6074	-0.06%	0.27%
8	979.4	451.88	346,539	0.6068	-0.17%	0.26%
9	1087.4	557.50	384,739	0.6065	-0.21%	0.26%
10	1198.7	678.75	424,135	0.6060	-0.30%	0.26%
11	1327.7	831.88	469,769	0.6063	-0.26%	0.25%
12	1436.0	975.00	508,097	0.6057	-0.35%	0.25%
6R	722.1	245.00	255,510	0.6076	-0.03%	0.29%

Average coefficient for all data : 0.6078

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

Table 4. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5846
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.0690
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000511	Pipe Diameter (in.) =	6.0650
Meter / Tag Number:	3FGA-FE-2001 / 3FGA-FE-3001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.1
	Tap Set B	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.59E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	151.7	10.64	53,674	0.6125	0.79%	0.17%
2	260.5	31.63	92,156	0.6100	0.38%	0.28%
3	389.8	70.94	137,932	0.6096	0.31%	0.26%
4	493.4	114.19	174,584	0.6081	0.07%	0.27%
5	612.6	176.44	216,762	0.6074	-0.04%	0.26%
6	736.4	255.00	260,573	0.6074	-0.05%	0.25%
7	862.1	349.38	305,033	0.6074	-0.04%	0.27%
8	979.4	452.50	346,539	0.6064	-0.22%	0.26%
9	1087.4	558.13	384,739	0.6062	-0.25%	0.26%
10	1198.7	679.38	424,135	0.6057	-0.33%	0.26%
11	1327.7	832.50	469,769	0.6060	-0.27%	0.25%
12	1436.0	975.00	508,097	0.6057	-0.33%	0.25%
6R	722.1	245.00	255,510	0.6076	-0.01%	0.29%

Average coefficient for all data : 0.6077

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

TRIAD MEASUREMENT & EQUIPMENT, INC.
PO BOX 6237 KINGWOOD, TX 77325
PH 281-359-2300 FAX 281-359-2757

FE-Sizer for Windows 95/98/Me/NT/2000/XP/2003 Server - Version 3.0, Release 3.43.1.

Service Data

Tag:	3FGA-FE-2001	Client:	WCPP LLC
Serv:	HRSG B DUCT BNR FUEL GAS INLET	Project:	West County Energy Ctr. Unit 3
Line No.:		J.O./P.O. No.:	161354.64.0602

Calculation Method & Base Conditions

Sizing Parameter:	FLOWMETER FLOW	C-Std:	API 2530/AGA 3 (1992)
Atm Press, Patm:	14.696 psia	Tap Loc:	UPSTREAM

Meter/Pipe Data

Meter Type:	ORIFICE PLATE	Meter Matl:	316/316L SS
Meter Style:	CONCENTRIC	Tap Style:	FLANGE TAPS
Nom Pipe Size:	6.00 in	Pipe Matl:	CARBON STEEL
Pipe I.D., D(ref):	6.069 in	Pipe Sched:	STD

Sizing Data

Orifice Bore, d (60.0 deg F):	3.5480 in
Maximum Differential, dPm (ref dP - H2O @ 60.0 deg F):	250.000 in WC
Normal Differential, dPm (ref dP - H2O @ 60.0 deg F):	150.000 in WC

Fluid Data

Fluid:	FUEL GAS
State-Units-Equation-Condition:	VAPOR-MASS-PVT-FLOWING
Specific Gravity, Gg:	0.6000
Compressibility (Flowing), Zf1:	1.0000
Pressure (Flowing), Pf1:	44.7000 psia
Temperature (Flowing), Tf1:	95.0 deg F
Viscosity, U:	0.01500 cPoise
Specific Heat Ratio (Cp/Cv), k:	1.4000

Calculated Results

Sizing Factor, Sm:	0.211733
Pipe Reynolds Number @ Maximum Flow, RD:	1109882
Pipe Reynolds Number @ Normal Flow, RD:	859711
Discharge Coefficient, C:	0.605699
Expansion Factor, Y1:	0.961024
Bore Expansion Factor, Fad:	1.000259
Pipe Expansion Factor, FaD:	1.000166
Permanent dP Loss:	64.58 %
Throat Velocity @ Max Flow:	496.05 ft/s
Beta, B (68.0 deg F):	0.58461
Maximum Flow, Wm:	15999.9 lb/h
Normal Flow, Wn:	12393.5 lb/h
Orifice Uncertainty, Uo:	0.50 %

Calc Memo: 14200-01-02 ASME Calibrated

Sales Order Number: 14200	Sht: ___ of ___ Chk: _____
By: Taher Fodeibou	Rev: 0 Date: 13 Oct 2010

TRIAD
CERTIFIED AS BUILT

Calibration Certificate

UKAS CALIBRATION 0555

Gas Flow

Issued by GL Flow Centre

Calibration Certificate No.	06461		
Reference No.	BA4602	Data File No.	4120
Client	Thermo Electron Corporation PID Division Ion Path Road Three Winsford Cheshire CW7 3GA		

Meter Type	Turbine Meter					
Manufacturer	Thermo Fisher Scientific					
Serial number	6000297822-103					
Size	8 (200)	in (mm)		Class		600
Year of manufacture	2010					
Meter arrival date	10 May 2010					
Calibration date(s)	13 May 2010					
Meter flow range	164	to	3273	m^3/h		
Mean Calibration Pressure	55.50	barg				
Mean Calibration Temperature	7.39	°C				
Test Specification	7	point				

Signed on behalf of GL Industrial Services UK Ltd **Date of Issue**

(Signed) **18 May 2010**

D Shepherd **Project Engineer**

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to recognised national standards, and to units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

This certificate confirms that the above instrument has been calibrated at the GL Flow Centre. The actual measurement results are stated on page 2 of this certificate.

Approved Signatories
D Shepherd
A Milne

GL Flow Centre
GL Industrial Services Ltd
Chilton Way, Ferryhill
Co.Durham, DL17 0SE
Tel: +44(0)1388 724030
Fax:+44(0)1388 721884
e-mail:flowcentre@gl-group.com

UKAS Calibration Laboratory 0555

Calibration Certificate No. 06461

Calibration Procedure used BAPM3608

freqtest Hz	qref m3/h	qind m3/h	error %	K Factor pls/m3
894.29	3273.27	3274.79	0.05	983.5565
602.91	2210.04	2207.78	-0.10	982.0981
540.12	1979.80	1977.85	-0.10	982.1356
490.68	1798.34	1796.83	-0.08	982.2659
315.50	1156.62	1155.33	-0.11	981.9993
88.39	324.82	323.69	-0.35	979.6318
44.78	164.10	164.00	-0.06	982.3766

Test Medium Natural Gas

pulses per m^3 983.099716

Reference meter(s) used T2 - 31368
T22 -70870

Test Engineer ________________ (Signed)
P Toole

Traceability Statement. All measurements and measuring equipment used are traceable to National or International standards

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95 %.
The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Error = (indicated volume - Reference volume) / Reference volume x 100%.
The uncertainty in the measurements in the flow range

20	to	40m3/hr	=	0.20%
40	to	400m3/hr	=	0.20%
400	to	2500m3/hr	=	0.19%
2500	to	6500m3/hr	=	0.20%
6500	to	13000m3/hr	=	0.22%
13000	to	19500m3/hr	=	0.23%

CUSTOM INSTRUMENTATION SERVICES CORPORATION

CISCO

CERTIFICATION REPORT
UNIT 3B
CONTINUOUS EMISSION MONITORING SYSTEM

WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA

PREPARED FOR: FLORIDA POWER AND LIGHT COMPANY

PREPARED BY: CUSTOM INSTRUMENTATION SERVICES CORPORATION

REV. 0
DATE: April 26, 2011

COPY NO _____

7841 SOUTH WHEELING COURT • ENGLEWOOD, COLORADO 80112
TEL: (303) 790-1000 FAX: (303) 790-7292

TABLE OF CONTENTS

1. INTRODUCTION

The West County Energy Center is a nominal 3,750 megawatt (MW) power plant located in Loxahatchee, Florida. Three nominal 1,250 MW gas-fired combined cycle units use ultralow sulfur (ULS) fuel oil as backup fuel. Each combined cycle unit consists of three nominal 250 MW Model 501G gas turbines with three supplementary-fired heat recovery steam generators (HRSG) and a common 500 MW steam-electric generator. Exhaust gases from each turbine are discharged into the atmosphere through stacks approximately 150 feet above grade. A dedicated CEMS monitors emissions from each unit.

Custom Instrumentation Services Corporation of Centennial, Colorado built the Continuous Emission Monitoring Systems (CEMS). This report provides information on the certification of the CEMS measuring emissions from Unit 3B. Data from the CEMS is recorded and stored on a Data Acquisition System.

The CEMS on the combustion turbines have been designed to meet the monitoring and reporting requirements of Florida Department of Environmental Protection (FDEP) and USEPA as required by 40 CFR 60 and 40 CFR 75. This report presents the results of testing on the NO_x, CO and O_2 analyzers on Unit 3B. The testing was performed to meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4/4a for CO and 40 CFR 75, Appendix A for NO_x and O_2.

Field certification testing on the CEMS occurred in February and March 2011. The tests conducted on the CEMS included Relative Accuracy, Bias Check, Calibration Error, Linearity, Cylinder Gas Audit and Cycle Time. The results of all tests are summarized in Table 1. A printout of the certification results generated by the EPA Emission Collection and Monitoring Plan System (ECMPS) is included in Appendix 2.

Air Hygiene conducted Relative Accuracy Testing for NO_x, CO and O_2. Ten runs were completed Unit 3B. The results of the RA tests are in the Air Hygiene test report. As shown, the Relative Accuracy calculations on the analyzers were within the EPA and FDEP requirements for all parameters. A detailed description of the RA testing is provided in Section 2.1 and in the Air Hygiene test report in Appendix 1.

A bias check evaluation was made on the NO_x lb/mmBtu relative accuracy results as required in 40 CFR 75. Unit 3B did not exhibit bias and no bias adjustment factor is required. The bias test results are discussed in Section 2.2. Supporting data is provided in the relative accuracy tables in the Air Hygiene test report.

The calibration error and calibration drift tests occurred over seven consecutive operating days. The results of the analyzer drift tests are summarized in Table 1. As shown, the analyzers operated well within the applicable EPA requirements. An explanation of the drift test is provided in Section 2.3 and supporting documentation is provided in Appendix 3.

Linearity tests on the high range of the NO_x analyzer and on the O_2 analyzer are a requirement of 40 CFR 75. Cycle Time tests on the NO_x analyzer and the O_2 analyzer are

also a requirement of 40 CFR 75. The tests took place on March 18, 2011. Cylinder Gas Audits and a cycle time test on the CO analyzer took place on March 18 and 19, 2011. The results of the tests are summarized in Table 1. As shown, the analyzers operated well within EPA requirements for all parameters. An explanation of the linearity and CGA tests is provided in Section 2.4. Summary tables and audit reports for the linearity and CGA tests are provided in Appendix 4. An explanation of the cycle time test is provided in Section 2.5. Supporting documents for the cycle time tests are provided in Appendix 5.

A formula verification was performed on the Data Acquisition and Handling System. The DAHS passed all the tests required by EPA. The DAHS test is described in Section 3 and supporting documents are provided in Appendix 7.

A complete 40 CFR 75 Monitoring Plan is included in Appendix 8 and the gas fuel meter certification documentation is provided in Appendix 9.

In summary, the CEMS on Unit 3B at West County Energy Center provides reliable data and operates within the requirements of the EPA as outlined in 40 CFR 60, Appendix B, Performance Specifications 2, 3, 4/4a and 40 CFR 75, Appendix A and meet the requirements of the FDEP for CEMS.

Table 1 WEST COUNTY ENERGY CENTER UNIT 3B

SUMMARY OF CEMS CERTIFICATION RESULTS

	RESULTS	STANDARD	PASS / FAIL
	RELATIVE ACCURACY		
NO_x lb/mmBtu	6.7% RA	7.5% RA*	PASS
CO ppm @15% O_2	0.2 ppm	5 ppm MD	PASS
CO lb/hr	0.2 ppm	5 ppm MD	PASS
	40 CFR 75 BIAS TEST		
Adjustment Factor	1.000	NA	No BAF Required
	7-DAY CALIBRATION ERROR NO_x High		
NO_x High (Zero)	0.1% of span	2.5% of span	PASS
NO_x High (Span)	0.4% of span	2.5% of span	PASS
	7-DAY CALIBRATION ERROR O_2		
O_2 % (Zero)	0.0 % O_2	0.5% O_2	PASS
O_2 % (Span)	0.2 % O_2	0.5% O_2	PASS
	7-DAY CALIBRATION DRIFT CO Low		
CO Low (Zero)	2.0% of span	5.0% of span	PASS
CO Low (Span)	2.0% of span	5.0% of span	PASS
	7-DAY CALIBRATION DRIFT CO High		
CO High (Zero)	0.1% of span	5.0% of span	PASS
CO High (Span)	1.3% of span	5.0% of span	PASS
	LINEARITY		
NO_x High Range	4.8%	5% LE	PASS
O_2 %	0.6%	5% LE	PASS
	CYLINDER GAS AUDIT		
CO Low Range	7.1%	15% CGA Error	PASS
CO High Range	13.1%	15% CGA Error	PASS
	CYCLE TIME		
NO_x lb/mmBtu	4 Minutes	15 Minutes	PASS
CO Low Range	80 Seconds	90 Seconds	PASS
ANALYZER SERIAL NUMBERS			
NO_x	0934838563		
CO	CM09400113		
O_2	01440DIVO2/4248		

WHERE: RA = RELATIVE ACCURACY
* = RATA RESULTS REQUIRED FOR ANNUAL RATA FREQUENCY FOR 40 CFR 75
MD = MEAN DIFFERENCE BETWEEN RM AND CEMS PLUS THE 2.5 % CONFIDENCE COEFFICIENT
DRIFT AND LINEARITY RESULTS ARE THE HIGHEST ENCOUNTERED DURING ALL TESTS

2. CEMS CERTIFICATION

Field tests and DAHS tests were performed for CEMS certification in accordance with the criteria in 40 CFR 60, Appendix B, 40 CFR 75, Appendix A, and 40 CFR 75.20. The results for all tests were determined from the data collected by the DAHS. The computer printouts for each field test are included in the Appendices.

2.1 RELATIVE ACCURACY

The relative accuracy test audit (RATA) was performed on March 19, 2011. Each test run was a minimum of 21 minutes in duration and consisted of sampling for NO_x, CO and O_2. The times during which the tests were performed are shown in the Air Hygiene test report in Appendix 1.

The reference methods used by Air Hygiene are outlined below:

CONSTITUENT	METHOD
O_2	EPA METHOD 3B
CO	EPA METHOD 10
NO_x	EPA METHOD 7E

As shown in the Relative Accuracy (RA) tables in the Air Hygiene test report, relative accuracy is reported as an error and is the sum of the absolute mean value of the differences between the reference method tests and the instrument readings, plus the 95 percent confidence interval of the differences, expressed as a percentage of the mean reference method value. As an alternative, 40 CFR 75 allows low NO_x emitters (less than 0.20 lb/mmBtu) to express relative accuracy as the difference between the average reference method value and the average CEMS value.

CO results are acceptable if the RA does not exceed 10%, if the average difference between the CEMS and reference method values plus the 2.5 percent confidence coefficient does not exceed 5.0 ppm, or if the alternative relative accuracy (ARA) does not exceed 5%.

The analyzer response was determined from the average of readings taken every minute for the duration of the time the relative accuracy tests were performed. The raw value reports from the CEMS are included in the Air Hygiene test report.

The NO_x lb/mmBtu measurement passed the relative accuracy requirements as stated in 40 CFR 75, Appendix A and the NO_x system (NO_x and O_2 analyzer) qualifies for annual RATA frequency under 40 CFR 75. The NO_x system had a relative accuracy result less than 7.5%. The CO analyzers passed the relative accuracy requirements as stated in 40 CFR 60, Appendix B, PS 4/4a.

2.2 BIAS CHECK

The relative accuracy result for NO_x lb/mmBtu on Unit 3B was checked for low bias by determining if the mean difference between the test team's values and the CEMS values is greater than the absolute value of the confidence coefficient. The CEMS on Unit 3B did not exhibit bias and no bias adjustment factor is required.

2.3 CALIBRATION ERROR/CALIBRATION DRIFT

The 7-day calibration error test on both ranges of the CO analyzer and the high ranges of the NO_x and O_2 analyzers occurred on seven consecutive days when the unit was operating at normal load. No adjustments were made to any of the analyzers during the seven day period. The calibration gases used for the calibration error test were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

The NO_x, CO and O_2 data from calibrations occurring over seven days are provided in Appendix 3. As shown, the calibration error for all analyzers was well within EPA requirements.

2.4 LINEARITY/CGA

The NO_x high range and O_2 linearity tests and the CO Cylinder Gas Audits (CGA) were performed on March 18 and 19, 2011. To perform the linearity test, the analyzers were challenged three times with each of three levels of calibration gas (low, mid and high). To perform the CGA, both ranges of the CO analyzer were challenged three times with two levels of calibration gas (low and mid).

The mean difference between the analyzer response and the calibration gas value, as a percentage of the calibration gas value, must be within 5% for linearity tests and within 15% for CGA. Results are also acceptable if the difference between the mean response and the calibration gas is within 5 ppm for NO_x and CO or 0.5% O_2. The linearity results for Unit 3B were within the requirements of 40 CFR 75, Appendix A and the CGA results met requirements of 40 CFR 60, Appendix F.

Summaries of the linearity and CGA test results are provided in tables in Appendix 4. The calibration gases used for the tests were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

2.5 CYCLE TIME/RESPONSE TIME

The cycle time tests were performed on March 18, 2011. To perform the test, both ranges of the NO_x analyzer and the O_2 analyzer were challenged with a zero gas and high level (80 to 100% of span) calibration gas. Both the upscale and down scale response times were determined. As stated in 40 CFR 75, Appendix A, the response time to reach 95% of

the gas value must be less than 15 minutes. For the NO_x system (NO_x and O_2 analyzer), the longer of the two analyzers response times is the cycle time for the system.

The response time test on the low range of the CO analyzer was performed on March 18, 2011. As stated in 40 CFR 60, Appendix B, PS 4a, the three averaged upscale and downscale response times must be less than or equal to 90 seconds. The system response times met this requirement for Unit 3B. Reports that show the analyzers response are provided in Appendix 5.

3. DAHS VERIFICATION

Each of the missing data routines and calculations performed by the DAHS was verified. All variables included in the calculations (bias adjustment factor, fuel inputs) were included. The formula verification and associated printouts are included in Appendix 7.

4. DISCUSSION OF RESULTS

The CEMS and DAHS on Unit 3B at West County Energy Center successfully met all the requirements of the EPA as outlined in 40 CFR 60 and 40 CFR 75. The certification data has been entered in the format specified by EPA for 40 CFR 75 and a printout of the results generated by ECMPS is included in Appendix 2.

APPENDIX 1

AIR HYGIENE RATA TEST REPORT

AIR HYGIENE, INC.

Testing Solutions for a Better World

RELATIVE ACCURACY TEST AUDIT

FOR THE

MITSUBISHI, MODEL 501G, UNIT 3B CEMS

PREPARED FOR

FLORIDA POWER AND LIGHT

AT THE

WEST COUNTY ENERGY CENTER

LOXAHATCHEE, FLORIDA

MARCH 19, 2011

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RELATIVE ACCURACY TEST AUDIT
FOR THE
MITSUBISHI, MODEL 501G, UNIT 3B CEMS
PREPARED FOR
FLORIDA POWER AND LIGHT
AT THE
WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA
MARCH 19, 2011

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Relative Accuracy Test Audit
Mitsubishi, Model 501G, Unit 3B CEMS
Florida Power and Light
West County Energy Center
Loxahatchee, Florida
March 19, 2011

1.0 INTRODUCTION

Air Hygiene International, Inc. (Air Hygiene) has completed the Relative Accuracy Test Audit (RATA) for nitrogen oxides (NOx), carbon monoxide (CO), and oxygen (O_2) from the exhaust of the Mitsubishi, Model 501G, Unit 3B for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. This report details the background, results, process description, and the sampling/analysis methodology of the stack sampling survey conducted on March 19, 2011.

1.1 TEST PURPOSE AND OBJECTIVES

The purpose of the test was to perform the initial certification RATA on the CEMS that serves the Mitsubishi, Model 501G, Unit 3B for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. Reference method (RM) testing followed the Code of Federal Regulations (CFR), Title 40 (40 CFR), Part 60 (40 CFR 60), Appendix A, Methods 1, 3a, 7e, 10, and 19. RM values are compared with the on-site CEMS to document performance as required in the 40 CFR 60, Appendix B, Performance Specifications (PS) and 40 CFR 75 Appendix A and B. All relative accuracies were established on-site and were governed by the following sets of rules:

In accordance with 40 CFR 75, Appendix A, Section 3.3.2(a) and (b), the NOx RATA results are acceptable if the RA does not exceed 10.0 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.02 lb/MMBtu. Passing this set of criteria requires the CEMS to be retested after no more than two operating quarters. Alternatively, in accordance with 40 CFR 75, Appendix B, Section 2.3.1.2(a) and (f), and Appendix B, Figure 2, the NOx RATA results are acceptable if the RA does not exceed 7.5 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.015 lb/MMBtu. Passing this set of criteria allows the CEMS to be retested after four operating quarters or at least within eight calendar quarters.

In accordance with 40 CFR 60, Appendix B, PS 4 and 4A, Sections 13.2 of each, the CO RA test results are acceptable if the RA does not exceed 10.0 percent, if the average difference between the CEMS and RM values plus the 2.5 percent confidence coefficient (2.5%CC) does not exceed 5.0 parts per million (ppm), or if the ARA does not exceed 5.0 percent. Part 60 further requires that the unit be operating at greater than 50 percent of normal load.

1.2 SUMMARY OF TEST PROGRAM

The following list details pertinent information related to this specific project:

1.2.1 Participating Organizations
- Florida Department of Environmental Protection (FDEP)
- Florida Power and Light
- Black and Veatch
- Custom Instrumentation Services Corporation (CiSCO)
- Air Hygiene

1.2.2 Industry
- Electric Utility / Electric Services

1.2.3 Air Permit and Federal Requirements
- Permit Number: PSD-FL396
- Emission Unit ID: 014
- 40 CFR 60, Appendix B, Performance Specifications (PS)
- 40 CFR 75, Appendix A
- 40 CFR 75, Appendix B

1.2.4 Plant Location
- West County Energy Center near Loxahatchee, Florida

1.2.5 Equipment Tested
- Mitsubishi, Model 501G, Unit 3B
- NOx Analyzer (THERMO, 42i-LS, Serial #0934838563)
- CO Analyzer (THERMO, 48i-, Serial #CM09400113)
- O_2 Analyzer (Servomex, 1440D, Serial#01440DIV02/4248)

1.2.6 Emission Points
- Exhaust from the Mitsubishi, Model 501G, Unit 3B
- For all gases, one sample point in the exhaust duct from the Mitsubishi, Model 501G, Unit 3B, determined after conducting a stratification test (refer to Appendix E)

1.2.7 Pollutants Measured
- NOx
- CO
- O_2

1.2.8 Date of Emission Test
- March 19, 2011

1.3 KEY PERSONNEL

Florida Power and Light:	John Mirino	786-242-3895
Black and Veatch:	Bill Stevenson	913-458-8549
CiSCO:	Justin Hewett	936-537-4848
Air Hygiene:	Jake Fahlenkamp	918-307-8865

2.0 SUMMARY OF TEST RESULTS

Results from the sampling conducted on Florida Power and Light's Mitsubishi, Model 501G, Unit 3B located at the West County Energy Center on March 19, 2011 are summarized in the following table.

TABLE 2.1
SUMMARY OF MITSUBISHI, 501G, UNIT 3B RATA RESULTS

Pollutant	Units	Criteria			Results	Passed / Test Frequency
		CFR	Specification / Section	Standard		
NOx	lb/MMBtu	Part 75	Appendix A, Section 3.3.2(a),(b) Appendix B, Section 2.3.1.2(a),(f), Figure 2	RA ≤ 10%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.02 lb/MMBtu Annual Incentive RA ≤ 7.5%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.015 lb/MMBtu	RA = 6.7% RM = 0.01 lb/MMBtu d = 0 lb/MMBtu BAF=1.000	YES / ANNUAL
CO	ppm@ 15%O_2	Part 60	Appendix B, Performance Specification 4, 4A, from all Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	ARA = 3.4% RA = 33.7% |d|+2.5%CC = 0.2 ppm	YES / ANNUAL
CO	lb/hr	Part 60	Appendix B, Performance Specification 4, 4A Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	ARA = 4.3% RA = 39.3% |d|+2.5%CC = 0.2 ppm	YES / ANNUAL
Load	MW	Part 60	Appendix B, Performance Specifications	> 50% max load	280.6	WITHIN TOLERANCE
Load	MW	Part 75	Appendix A and B	normal load range	280.6	WITHIN TOLERANCE

Notes: RA = relative accuracy, ARA = alternative relative accuracy, RM = reference method value, d = difference between RM and CEMS value, CC = confidence coefficient, v = velocity, BAF = bias adjustment factor

The RATA passed for all pollutants (NOx and CO) in all units (ppm@15%O_2, lb/hr, and lb/MMBtu) under all 40 CFR 60 and 40 CFR 75 criteria.

Specifically, NOx in units of lb/MMBtu passed the 40 CFR 75 alternative annual incentive criteria with an emissions rate of less than 0.2 lb/MMBtu and a difference between the RM and CEMS analyzers of less than 0.015 lb/MMBtu. Also there is a Bias Adjustment Factor of 1.000. CO, in units of ppm@15%O_2 and lb/hr, passed the 40 CFR 60 alternative relative accuracy of less than 5 percent criteria using the applicable standard.

Unit load was within the 40 CFR 60 required criteria of greater than 50 percent of the maximum load and also fell within the normal load criteria as defined by the plants Quality Control and Monitoring Plan which defined the upper and lower boundary on the unit and the normal and alternative normal load ranges.

3.0 SOURCE OPERATION

3.1 PROCESS DESCRIPTION

Florida Power and Light (FPL) owns and operates the West County Energy Center (West County) located at 20505 State Road 80 in Loxahatchee, Florida. West County is a nominal 2,500 megawatt (MW) greenfield power plant and consists of two combined cycle units (Unit 1 and 2). Each combined cycle unit consists of: three nominal 250 MW Mitsubishi Model 501G combustion turbine-electrical generator (CTGs) sets with evaporative inlet cooling systems; three supplementary-fired heat recovery steam generators (HRSGs) with selective catalytic reduction (SCR) reactors; one nominal 428 million British thermal units per hour (MMBtu/hour) based on low heat value (LHV) natural gas-fired duct burner (DB) located within each of the three HRSG's; and a common nominal 500 MW steam turbine-electrical generator (STG). The total nominal generating capacity of each of the "3 on 1" combined cycle unit is approximately 1,250 MW.

Each CTG has a nominal heat input rate of 2,333 MMBtu/hr when firing natural gas and 2,117 MMBtu/hr when firing distillate fuel oil (based on a compressor inlet air temperature of 59 degrees Fahrenheit (°F), the lower heating value (LHV) of each fuel, and 100 percent load), includes an automated gas turbine control system, and has dual-fuel capability of firing natural gas as the primary fuel or ultra low sulfur distillate (ULSD) fuel oil as a restricted alternate fuel. Each HRSG recovers exhaust, heat energy from each of the CTGs. Each Unit delivers steam to each STG. The efficient combustion of natural gas and restricted firing of ULSD fuel oil minimizes the emissions of carbon monoxide (CO), particulate matter (PM), sulfuric acid mist (H_2SO_4), sulfur dioxide (SO_2) and volatile organic compounds (VOCs). Dry Low-NOX (DLN) combustors for gas firing and water injection for oil firing reduce nitrogen oxides (NOx) emissions. A selective catalyst reduction (SCR) system further reduces NOx emissions.

3.2 SAMPLING LOCATION

The 501G stack is circular and measures 21.9 feet (ft) (263 inches) in diameter at the test ports which are approximately 138 ft above grade level with an exit elevation of approximately 150 ft above grade level. The test ports are located approximately 44.31 ft (531.75 inches) downstream and approximately 12 ft (144 inches) upstream from the nearest disturbances. All exhaust samples for gaseous emissions were continuously drawn from the exhaust system at the sample ports from a single point determined after conducting a stratification test (Appendix E). During the stratification test three points were traversed from each of the four ports. The probe was allowed to remain at a point for two times the system response time.

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 TEST METHODS

The emission test on the Mitsubishi, Model 501G, Unit 3B at the West County Energy Center was performed following United States Environmental Protection Agency (EPA) methods described by the Code of Federal Regulations (CFR). Table 4.1 outlines the specific methods performed on March 19, 2011.

TABLE 4.1
SUMMARY OF SAMPLING METHODS

Pollutant or Parameter	Sampling Method	Analysis Method
Sample Point Location	EPA Method 1	Equal Area Method
Oxygen	EPA Method 3a	Paramagnetic Cell
Nitrogen Oxides	EPA Method 7e	Chemiluminescent Analyzer
Carbon Monoxide	EPA Method 10	Nondispersive Infrared Analyzer
Stack Flow Rate	EPA Method 19	Dry Oxygen F Factor

4.2 INSTRUMENT CONFIGURATION AND OPERATIONS FOR GAS ANALYSIS

The sampling and analysis procedures used during these tests conform with the methods outlined in the Code of Federal Regulations (CFR), Title 40, Part 60, Appendix A, Methods 1, 3a, 7e, 10, and 19.

Figure 4.1 depicts the sample system used for the NOx, CO, and O_2 tests. A stainless steel probe was inserted into the sample ports of the stack to extract gas measurements from the emission stream at a single point in the stack determined after passing an initial stratification test. The gas sample was continuously pulled through the probe and transported, via heat-traced Teflon® tubing, to a stainless steel minimum-contact condenser designed to dry the sample. Transportation of the sample, through Teflon® tubing, continued into the sample manifold within the mobile laboratory via a stainless steel/Teflon® diaphragm pump. From the manifold, the sample was partitioned to the NOx, CO, and O_2 analyzers through rotameters that controlled the flow rate of the sample.

Figure 4.1 shows that the sample system was also equipped with a separate path through which a calibration gas could be delivered to the probe and back through the entire sampling system. This allowed for convenient performance of system bias checks as required by the testing methods.

All instruments were housed in an air-conditioned, trailer-mounted mobile laboratory. Gaseous calibration standards were provided in aluminum cylinders with the concentrations certified by the vendor. EPA Protocol No. 1 was used to determine the cylinder concentrations where applicable (i.e. NOx calibration gases).

Table 4.2 provides a description of the analyzers used for the instrument portion of the tests. All data from the continuous monitoring instruments were recorded on a Logic Beach Portable Data Logging System Hyperlogger which retrieves calibrated electronic data from each instrument every one second and reports an average of the collected data every 30 seconds. Data records can be found in Appendix A and B of this report.

Three test runs of approximately 60 minutes and seven test runs of approximately 21 minutes each were conducted on the Mitsubishi, Model 501G, Unit 3B for NOx, CO, and O_2. The unit operation was greater than 50 percent of capacity as required by the 40 CFR 60, Performance Specifications. The unit operation was at the normal load as required by 40 CFR 75.

The stack gas analysis for O_2 concentrations was performed in accordance with procedures set forth in EPA Method 3a. The O_2 analyzer uses a paramagnetic cell.

EPA Method 7e was used to determine concentrations of NOx. A chemiluminescent analyzer was used to determine the nitrogen oxides concentration in the gas stream. A NO_2 in nitrogen certified gas cylinder was used to verify at least a 90 percent NO_2 conversion on the day of the test.

CO emission concentrations were quantified in accordance with procedures set forth in EPA Method 10. A continuous nondispersive infrared (NDIR) analyzer was used for this purpose.

TABLE 4.2
ANALYTICAL INSTRUMENTATION

Parameter	Model and Manufacturer	Range	Sensitivity	Detection Principle
NOx	THERMO 42i-HL	User may select up to 5,000 ppm	0.1 ppm	Thermal reduction of NO_2 to NO. Chemiluminescence of reaction of NO with O_3. Detection by PMT. Inherently linear for listed ranges.
CO	THERMO 48i	User may select up to 10,000 ppm	0.1 ppm	Infrared absorption, gas filter correlation detector, microprocessor based linearization.
O_2	THERMO 42i-HL	0-25%	0.1%	Paramagnetic cell, inherently linear.

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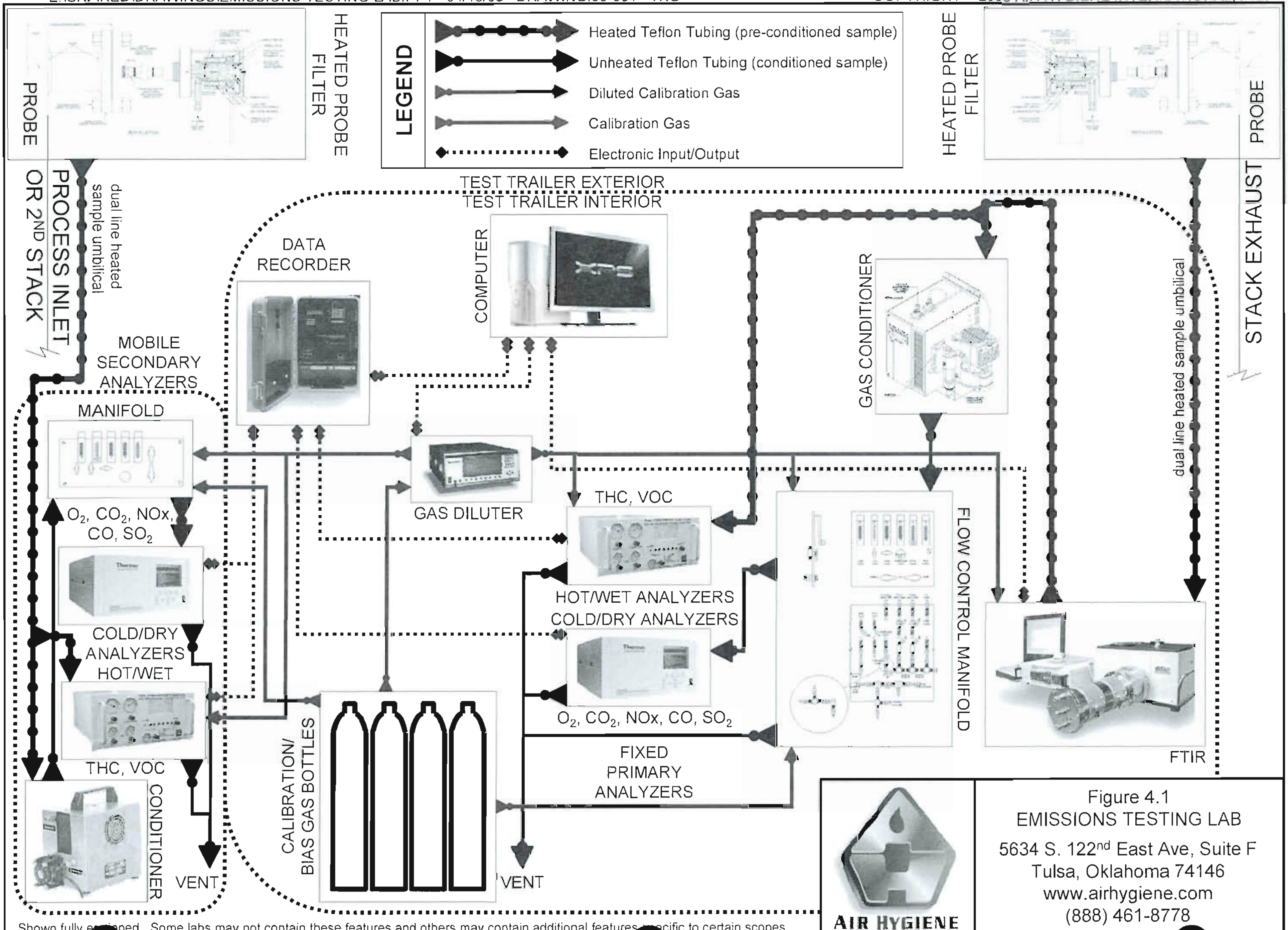

Figure 4.1
EMISSIONS TESTING LAB

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APPENDIX A

TEST RESULTS AND CALCULATIONS

TABLE A.1:
EMISSIONS TESTING SCHEDULE

Unit	Load	Test Type	Run	Date	Start	Stop	Time Sync
3B	Base Load	Stratification Test	1	03/19/11	8:47:10	9:26:40	DAHS
3B	Base	Gas RATA	1	03/19/11	9:32:10	10:31:40	DAHS
3B	Base	Gas RATA	2	03/19/11	10:45:10	11:44:40	DAHS
3B	Base	Gas RATA	3	03/19/11	12:05:10	13:04:40	DAHS
3B	Base	Gas RATA	4	03/19/11	13:17:10	13:37:40	DAHS
3B	Base	Gas RATA	5	03/19/11	13:50:10	14:10:40	DAHS
3B	Base	Gas RATA	6	03/19/11	14:21:10	14:41:40	DAHS
3B	Base	Gas RATA	7	03/19/11	14:51:10	15:11:40	DAHS
3B	Base	Gas RATA	8	03/19/11	15:21:10	15:41:40	DAHS
3B	Base	Gas RATA	9	03/19/11	15:51:10	16:11:40	DAHS
3B	Base	Gas RATA	10	03/19/11	16:21:10	16:41:40	DAHS

Note: DAHS Time (EST minus 1hr)

TEST RESULTS

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(ppm@ 15%O_2)	(ppm@ 15%O_2)	(diff)	($diff^2$)
1	09:32 - 10:31	YES	301.8	0.40	0.40	0.0000	0.00
2	10:45 - 11:44	YES	287.1	0.40	0.30	0.1000	0.01
3	12:05 - 13:04	NO	279.6	0.50	0.30		
4	13:17 - 13:37	YES	277.4	0.40	0.30	0.1000	0.01
5	13:50 - 14:10	YES	277.7	0.40	0.30	0.1000	0.01
6	14:21 - 14:41	YES	277.0	0.40	0.30	0.1000	0.01
7	14:51 - 15:11	YES	277.0	0.40	0.30	0.1000	0.01
8	15:21 - 15:41	YES	276.1	0.40	0.30	0.1000	0.01
9	15:51 - 16:11	YES	275.9	0.40	0.30	0.1000	0.01
10	16:21 - 16:41	YES	275.9	0.50	0.30	0.2000	0.04
11		NO					
12		NO					
	Total		**2525.9**	**3.70**	**2.80**	**0.9000**	**0.1100**
	Average		**280.7**	**0.41**	**0.31**	**0.1000**	
	Number of Runs			9			
	Standard Deviation			0.050			
	T-value			2.306			
	Confidence Coefficient			0.0384			

Relative Accuracy =	**33.7%**
Applicable Standard =	**4.10**
Alternative Relative Accuracy =	**3.4%**
|d (difference in ppm)| + CC =	**0.2**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD (MW)	RM (lb/hr)	CEMS (lb/hr)	RM-CEMS (diff)	RM-CEMS ($diff^2$)
1	09:32 - 10:31	YES	301.8	2.60	2.10	0.5000	0.25
2	10:45 - 11:44	YES	287.1	2.60	1.60	1.0000	1.00
3	12:05 - 13:04	NO	279.6	2.80	1.80		
4	13:17 - 13:37	YES	277.4	2.60	1.70	0.9000	0.81
5	13:50 - 14:10	YES	277.7	2.50	1.50	1.0000	1.00
6	14:21 - 14:41	YES	277.0	2.60	1.60	1.0000	1.00
7	14:51 - 15:11	YES	277.0	2.50	1.50	1.0000	1.00
8	15:21 - 15:41	YES	276.1	2.50	1.70	0.8000	0.64
9	15:51 - 16:11	YES	275.9	2.50	1.70	0.8000	0.64
10	16:21 - 16:41	YES	275.9	2.60	1.70	0.9000	0.81
11		NO					
12		NO					
	Total		**2525.9**	**23.00**	**15.10**	**7.9000**	**7.1500**
	Average		**280.7**	**2.56**	**1.68**	**0.8778**	

Number of Runs	9
Standard Deviation	0.164
T-value	2.306
Confidence Coefficient	0.1262

Relative Accuracy =	**39.3%**
Applicable Standard =	**23.20**
Alternative Relative Accuracy =	**4.3%**
|d (difference in ppm)| + CC =	**0.2**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
NOx RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD (MW)	RM (lb/MMBtu)	CEMS (lb/MMBtu)	RM-CEMS (diff)	RM-CEMS ($diff^2$)
1	09:32 - 10:31	NO	301.8	0.007	0.006		
2	10:45 - 11:44	YES	287.1	0.006	0.006	0.0000	0.0000
3	12:05 - 13:04	YES	279.6	0.006	0.005	0.0010	0.0000
4	13:17 - 13:37	YES	277.4	0.006	0.006	0.0000	0.0000
5	13:50 - 14:10	YES	277.7	0.006	0.006	0.0000	0.0000
6	14:21 - 14:41	YES	277.0	0.005	0.005	0.0000	0.0000
7	14:51 - 15:11	YES	277.0	0.006	0.006	0.0000	0.0000
8	15:21 - 15:41	YES	276.1	0.006	0.006	0.0000	0.0000
9	15:51 - 16:11	YES	275.9	0.005	0.006	-0.0010	0.0000
10	16:21 - 16:41	YES	275.9	0.006	0.006	0.0000	0.0000
11		NO					
12		NO					
		Total	**2503.7**	**0.052**	**0.052**	**0.0000**	**0.0000**
		Average	**278.2**	**0.006**	**0.006**	**0.0000**	

Number of Runs	9
Standard Deviation	0.001
T-value	2.306
Confidence Coefficient	0.0004

Relative Accuracy = 6.65%

If the mean difference is less than or equal to the absolute value of the confidence coefficient, then the Bias Test passes and the bias adjustment factor is not applicable.

Mean Difference =	0.0000
Confidence Coefficient =	0.0004

BAF = 1 + (abs. value mean difference/avg. CEMS reading)

Average CEMS Reading =	0.006
BAF =	**1.000**

Part 75, Appendix A,
3.3.2 Relative Accuracy for NOX-Diluent Continuous Emission Monitoring Systems
(a) The relative accuracy for NOX-diluent continuous emission monitoring systems shall not exceed 10.0 percent.
(b) For affected units where the average of the reference method measurements of NOX emission rate (this means lb/MMBtu) during the relative accuracy test audit is less than or equal to 0.200 lb/mmBtu, the difference between the mean value of the continuous emission monitoring system measurements and the reference method mean value shall not exceed ±0.020 lb/mmBtu, wherever the relative accuracy specification of 10.0 percent is not achieved.

7.6.5 Bias Adjustment

(b) For single-load RATAs of SO2 pollutant concentration monitors, NOX concentration monitoring systems, and NOX-diluent monitoring systems and for the single-load flow RATAs required or allowed under section 6.5.2 of this appendix and sections 2.3.1.3(b) and 2.3.1.3(c) of Appendix B to this part, the appropriate BAF is determined directly from the RATA results at normal load, using Equation A-12. Notwithstanding, when a NOX concentration CEMS or an SO2 CEMS or a NOX-diluent CEMS installed on a low-emitting affected unit (i.e., average SO2 or NOX concentration during the RATA &IE; 250 ppm or average NOX emission rate &IE; 0.200 lb/mmBtu) meets the normal 10.0 percent relative accuracy specification (as calculated using Equation A-10) or the alternate relative accuracy specification in section 3.3 of this appendix for low-emitters, but fails the bias test, the BAF may either be determined using Equation A-12, or a default BAF of 1.111 may be used.

Part 75, Appendix B,

2.3.1.2 Reduced RATA Frequencies. Relative accuracy test audits of primary and redundant backup SO2 pollutant concentration monitors, CO2 pollutant concentration monitors (including O2 monitors used to determine CO2 emissions), CO2 or O2 diluent monitors used to determine heat input, moisture monitoring systems, NOX concentration monitoring systems, flow monitors, NOX-diluent monitoring systems or SO2-diluent monitoring systems may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters) if any of the following conditions are met for the specific monitoring system involved:

(a) The relative accuracy during the audit of an SO2 or CO2 pollutant concentration monitor (including an O2 pollutant monitor used to measure CO2 using the procedures in appendix F to this part), or of a CO2 or O2 diluent monitor used to determine heat input, or of a NOX concentration monitoring system, or of a NOX-diluent monitoring system, or of an SO2-diluent continuous emissions monitoring system is ≤ 7.5 percent;

(f) For units with low NOX emission rates (average NOX emission rate measured by the reference method during the RATA ≤ 0.200 lb/mmBtu), when a NOX-diluent continuous emission monitoring system fails to achieve a relative accuracy ≤ 7.5 percent, but the monitoring system mean value from the RATA, calculated using Equation A-7 in appendix A to this part, is within ± 0.015 lb/mmBtu of the reference method mean value;

Figure 2 to Appendix B of Part 75_Relative Accuracy Test Frequency Incentive System.

RATA	Semiannual(percent)(1)	Annual(1)
SO2 or NOX(3)	7.5% < RA ≤ 10.0% or ± 15.0 ppm(2)	RA ≤ 7.5% or ± 12.0 ppm(2)
SO2-diluent	7.5% < RA ≤ 10.0% or ± 0.030 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.025 lb/mmBtu(2)
NOX-diluent	7.5% < RA ≤ 10.0% or ± 0.020 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.015 lb/mmBtu(2)
Flow	7.5% < RA ≤ 10.0% or ± 2.0 fps(2)	RA ≤ 7.5% or ± 1.5 fps
CO2 or O2	7.5% < RA ≤ 10.0% or ± 1.0% CO2/O2(2)	RA ≤ 7.5% or ± 0.7% CO2/O2(2)
Moisture	7.5% < RA ≤ 10.0% or ± 1.5% H2O(2)	RA ≤ 7.5% or ± 1.0% H2O(2)

(1) The deadline for the next RATA is the end of the second (if semiannual) or fourth (if annual) successive QA operating quarter following the quarter in which the CEMS was last tested. Exclude calendar quarters with fewer than 168 unit operating hours (or, for common stacks and bypass stacks, exclude quarters with fewer than 168 stack operating hours) in determining the RATA deadline. For SO2 monitors, QA operating quarters in which only very low sulfur fuel as defined in § 72.2, is combusted may also be excluded. However, the exclusion of calendar quarters is limited as follows: the deadline for the next RATA shall be no more than 8 calendar quarters after the quarter in which a RATA was last performed.

(2) The difference between monitor and reference method mean values applies to moisture monitors, CO2, and O2 monitors, low emitters, or low flow, only.

(3) A NOX concentration monitoring system used to determine NOX mass emissions under § 75.71.

Relative Accuracy Test Data
CEMS Results (NOx)
Mitsubishi, 501G, Unit 3B

Parameter:	Oxides of Nitrogen
Date of Test:	March 19, 2011
Reference Method:	EPA Method 7e
CEMS Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-LS
Serial #:	0934838563

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:32 - 10:31	301.8				0.006
2	10:45 - 11:44	287.1				0.006
3	12:05 - 13:04	279.6				0.005
4	13:17 - 13:37	277.4				0.006
5	13:50 - 14:10	277.7				0.006
6	14:21 - 14:41	277.0				0.005
7	14:51 - 15:11	277.0				0.006
8	15:21 - 15:41	276.1				0.006
9	15:51 - 16:11	275.9				0.006
10	16:21 - 16:41	275.9				0.006
11						
12						

Relative Accuracy Test Data
CEMS Results (CO)
Mitsubishi, 501G, Unit 3B

Parameter:	Carbon Monoxide
Date of Test:	March 19, 2011
Reference Method:	EPA Method 10
CEMS Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48*i*
Serial #:	CM09400113

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:32 - 10:31	301.8	0.50	0.40	2.10	
2	10:45 - 11:44	287.1	0.40	0.30	1.60	
3	12:05 - 13:04	279.6	0.40	0.30	1.80	
4	13:17 - 13:37	277.4	0.40	0.30	1.70	
5	13:50 - 14:10	277.7	0.40	0.30	1.50	
6	14:21 - 14:41	277.0	0.40	0.30	1.60	
7	14:51 - 15:11	277.0	0.40	0.30	1.50	
8	15:21 - 15:41	276.1	0.40	0.30	1.70	
9	15:51 - 16:11	275.9	0.40	0.30	1.70	
10	16:21 - 16:41	275.9	0.40	0.30	1.70	
11						
12						

Relative Accuracy Test Data
CEMS Results (O_2)
Mitsubishi, 501G, Unit 3B

Parameter:	Oxygen
Date of Test:	March 19, 2011
Reference Method:	EPA Method 3a
CEMS Analyzer Type:	Paramagnetic Cell
Manufacturer:	Servomex
Model #:	1440D
Serial #:	01440DIV02/4248

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:32 - 10:31	301.8	13.32
2	10:45 - 11:44	287.1	13.18
3	12:05 - 13:04	279.6	13.28
4	13:17 - 13:37	277.4	13.19
5	13:50 - 14:10	277.7	13.15
6	14:21 - 14:41	277.0	13.23
7	14:51 - 15:11	277.0	13.22
8	15:21 - 15:41	276.1	13.21
9	15:51 - 16:11	275.9	13.25
10	16:21 - 16:41	275.9	13.22
11			
12			

Relative Accuracy Test Data
Reference Method Results (NOx)
Mitsubishi, 501G, Unit 3B

Parameter:	Oxides of Nitrogen
Date of Test:	March 19, 2011
Reference Method:	EPA Method 7e
RM Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:32 - 10:31	301.8				0.007
2	10:45 - 11:44	287.1				0.006
3	12:05 - 13:04	279.6				0.006
4	13:17 - 13:37	277.4				0.006
5	13:50 - 14:10	277.7				0.006
6	14:21 - 14:41	277.0				0.005
7	14:51 - 15:11	277.0				0.006
8	15:21 - 15:41	276.1				0.006
9	15:51 - 16:11	275.9				0.005
10	16:21 - 16:41	275.9				0.006
11						
12						

Relative Accuracy Test Data
Reference Method Results (CO)
Mitsubishi, 501G, Unit 3B

Parameter:	Carbon Monoxide
Date of Test:	March 19, 2011
Reference Method:	EPA Method 10
RM Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48i
Serial #:	INST-CO-0015

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:32 - 10:31	301.8	0.58	0.44	2.59	
2	10:45 - 11:44	287.1	0.59	0.44	2.58	
3	12:05 - 13:04	279.6	0.63	0.48	2.75	
4	13:17 - 13:37	277.4	0.59	0.45	2.57	
5	13:50 - 14:10	277.7	0.58	0.44	2.49	
6	14:21 - 14:41	277.0	0.60	0.45	2.57	
7	14:51 - 15:11	277.0	0.59	0.44	2.54	
8	15:21 - 15:41	276.1	0.58	0.44	2.50	
9	15:51 - 16:11	275.9	0.58	0.44	2.50	
10	16:21 - 16:41	275.9	0.61	0.46	2.62	
11						
12						

Relative Accuracy Test Data
Reference Method Results (O_2)
Mitsubishi, 501G, Unit 3B

Parameter:	Oxygen
Date of Test:	March 19, 2011
Reference Method:	EPA Method 3a
RM Analyzer Type:	Paramagnetic Cell
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:32 - 10:31	301.8	13.09
2	10:45 - 11:44	287.1	13.09
3	12:05 - 13:04	279.6	13.14
4	13:17 - 13:37	277.4	13.12
5	13:50 - 14:10	277.7	13.09
6	14:21 - 14:41	277.0	13.09
7	14:51 - 15:11	277.0	13.08
8	15:21 - 15:41	276.1	13.10
9	15:51 - 16:11	275.9	13.08
10	16:21 - 16:41	275.9	13.09
11			
12			

CALCULATIONS

EXAMPLE CALCULATIONS (CALIBRATION)

Analyzer Calibration Error

RM 7E, (12-17-09), 12.2 Analyzer Calibration Error. For non-dilution systems, use Equation 7E-1 to calculate the analyzer calibration error for the low-, mid-, and high-level calibration gases. (calc for NOx analyzer mid gas, if applicable)

$$ACE = \left(\frac{C_{Dir} - C_V}{CS}\right) \times 100$$ Eq. 7E-1

$$ACE = \frac{5.00\text{ ppm} - 4.93\text{ ppm}}{12.10\text{ ppm}} \times 100 = 0.58\ \%$$

EXAMPLE CALCULATIONS (BIAS, DRIFT, AND CORRECTED RAW AVERAGE)

System Bias

RM 7E, (12-17-09), 12.3 System Bias. For non-dilution systems, use Equation 7E-2 to calculate the system bias separately for the low-level and upscale calibration gases. (calc for NOx analyzer upscale gas, Run 1 initial bias, if applicable)

$$SB = \left(\frac{C_S - C_{Dir}}{CS}\right) \times 100$$ Eq. 7E-2

$$SB = \frac{4.93\text{ ppm} - 5.00\text{ ppm}}{12.10\text{ ppm}} \times 100 = -0.58\ \%$$

Drift Assessment

RM 7E, (12-17-09), 12.5 Drift Assessment. Use Equation 7E-4 to separately calculate the low-level and upscale drift over each test run. (calc for NOx analyzer upscale drift, Run 1, if applicable)

$$D = \left|SB_{final} - SB_i\right|$$ Eq. 7E-4

$$D = \left| -0.58\ \% - -0.58\ \% \right| = 0.00\ \%$$

Alternative Drift and Bias

RM 7E, (12-17-09), 13.2 / 13.3 System Bias and Drift. Alternatively, the results are acceptable if |Cs – Cdir| is ≤ 0.5 ppmv or if |Cs – Cv| is ≤ 0.5 ppmv (as applicable). (calc for NOx analyzer initial upscale, Run 1, if applicable)

$$SB / D_{Alt} = \left|C_S - C_{Dir}\right|$$ Eq. Section 13.2 and 13.3

$$SB / D_{Alt} = \left| 4.93\text{ ppm} - 5.00\text{ ppm} \right| = 0.07\ \text{ppm}$$

Bias Adjusted Average

RM 7E, (12-17-09), 12.6 Effluent Gas Concentration. For each test run, calculate Cavg, the arithmetic average of all valid NOx concentration values (e.g., 1-minute averages). Then adjust the value of Cavg for bias, using Equation 7E-5b. (calc for NOx analyzer, Run 1, if applicable)

$$C_{Gas} = \left(C_{Avg} - C_O\right) \times \left(\frac{C_{MA}}{C_M - C_O}\right)$$ Eq. 7E-5b

$$C_{Gas} = \left(2.45\text{ ppm} - 0.08\text{ ppm}\right) \times \left(\frac{4.93\text{ ppm}}{4.93\text{ ppm} - 0.08\text{ ppm}}\right) = 2.41\ \text{ppm}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RUNS)

Stack Exhaust Flow (Q_S) - RM19

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1{,}000{,}000}\right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}}\right)$$

$$Q_S = \frac{8{,}710.00 \text{ SCF}}{\text{MMBtu}} \times \frac{2{,}560{,}285.91 \text{ SCF}}{\text{hr}} \times \frac{1{,}029.00 \text{ Btu}}{\text{SCF}} \times \frac{\text{MMBtu}}{10^6 \text{ Btu}} \times \left[\frac{20.90\%}{20.9\% - 13.1\ \%}\right] = 61{,}419{,}787.28 \text{ SCFH}$$

Diluent-Corrected Pollutant Concentration, O_2 Based

RM 20, (11-26-02), 7.3.1 Correction of Pollutant Concentration Using O_2 Concentration. Calculate the O_2 corrected pollutant concentration, as follows: (calc for NOx gas, Run 1, if applicable)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}}\right) \quad \text{Eq. 20-4}$$

$$C_{adj} = 2.41 \text{ ppm} \times \left(\frac{20.9\% - 15.00\ \%}{20.9\% - 13.09\ \%}\right) = 1.82 \text{ ppm@15\%}O_2$$

EXAMPLE CALCULATIONS (RUNS)

Emissions Rate (lb/hr)

Calculation for pound per hour emission rate. Calculate, as follows: (calc for NOx gas Run 1, if applicable)

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

$$E_{lb/hr} = \frac{2.41 \text{ ppm}}{10^6 \text{ ppm/part}} \times \frac{61{,}419{,}787 \text{ SCFH} \times 46.01 \text{ lb/lb-mol}}{385.23 \text{ SCF/lb-mol}} = \frac{17.65 \text{ lb}}{\text{hr}}$$

Emissions Rate (lb/MMBtu)

RM 19, (12-17-09), 12.2 Emission Rates of PM, SO_2, and NOx. Select from the following sections the applicable procedure to compute the PM, SO_2, or NOx emission rate (E) in ng/J (lb/million Btu). (calc for NOx gas Run 1, if applicable)

Oxygen Based

12.2.1 Oxygen-Based F Factor, Dry Basis. When measurements are on a dry basis for both O_2 ($\%O_2d$) and pollutant (Cd) concentrations, use the following equation:

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_C \times 20.9\%}{20.9\% - C_{Gas(O2)}} \quad \text{Eq. 19-1}$$

$$E_{lb/MMBtu} = \frac{2.41 \text{ ppm} \times 8{,}710.00 \text{ SCF/MMBtu} \times 0.0000001194 \text{ lb/ppm*ft}^3 \times 20.9\%}{20.9\% - 13.09\ \%} = \frac{0.007 \text{ lb}}{\text{MMBtu}}$$

Conversion Constant

Convc for NOx

$$Conv_c(lb/ppm \cdot ft^3) = \frac{\frac{MW}{G}}{10^6}$$

$$Conv_c = \frac{\frac{46.01 \text{ lb}}{\text{lb•mole}} \times \frac{\text{lb•mole}}{385.23 \text{ SCF}}}{10^6} = \frac{0.0000001194 \text{ lb}}{\text{ppm-ft}^3}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RATA RESULTS)

Difference (d)

40 CFR 75, App A, (12-17-09), 7.3.1 Arithmetic Mean. Calculate the arithmetic mean of the differences, d , of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$d = \sum_{i=1}^{n} d_i$$ Eq. A-7

d = 0.006 lb/MMBtu - 0.006 lb/MMBtu = 0.000 lb/MMBtu

Standard Deviation

40 CFR 75, App A, (12-17-09), 7.3.2 Standard Deviation. Calculate the standard deviation, Sd, of a data set as follows:
(calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right]}{n-1}}$$ Eq. A-8

$$S_d = \sqrt{\frac{0.000 \text{ lb/MMBtu}^2 - \frac{\left[0.000 \text{ lb/MMBtu}\right]^2}{9}}{9 - 1}} = 0.001 \text{ lb/MMBtu}$$

Confidence Coefficient

40 CFR 75, App A, (12-17-09), 7.3.3 Confidence Coefficient. Calculate the confidence coefficient (one-tailed), cc, of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$ Eq. A-9

$$CC = 2.306 \times \frac{0.001 \text{ lb/MMBtu}}{\sqrt{9}} = 0.000 \text{ lb/MMBtu}$$

T-Values	n	2	3	4	5	6	7	8	9
	$t_{0.025}$	12.706	4.303	3.182	2.776	2.571	2.447	2.365	2.306

2.5 percent confidence coefficients

Relative Accuracy

40 CFR 75, App A, (12-17-09), 7.3.4 Relative Accuracy. Calculate the relative accuracy of a data set using the following equation. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$ Eq. A-10

$$RA = \frac{|0.000 \text{ lb/MMBtu}| + |0.000 \text{ lb/MMBtu}|}{0.006 \text{ lb/MMBtu}} \times 100 = 6.65 \quad \%$$

Bias Adjustment Factor (BAF)

40 CFR 75, App A, (12-17-09), 7.6.5 Bias Adjustment. (a) If the monitor or monitoring system fails to meet the bias test requirement, adjust the value obtained from the monitor using the following equation: (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}}\right)$$ Eq. A-12

d_{AVG} = 0.000 < |CC| = 0.000 ⇨ BAF = $1 + \frac{|\quad| \text{ lb/MMBtu}}{\text{lb/MMBtu}}$ = 1.000 lb/MMBtu

Note: BAF only applies if the mean difference (d) is greater than the absolute value of the confidence coefficient.

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

RM 7E, (08-15-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

ACE = Analyzer calibration error, percent of calibration span.
B_{WS} = Moisture content of sample gas as measured by Method 4 or other approved method, percent/100.
C_{Avg} = Average unadjusted gas concentration indicated by data recorder for the test run.
C_D = Pollutant concentration adjusted to dry conditions.
C_{Dir} = Measured concentration of a calibration gas (low, mid, or high) when introduced in direct calibration mode.
C_{Gas} = Average effluent gas concentration adjusted for bias.
C_M = Average of initial and final system calibration bias (or 2-point system calibration error) check responses for the upscale calibration gas.
C_{MA} = Actual concentration of the upscale calibration gas, ppmv.
C_O = Average of the initial and final system calibration bias (or 2-point system calibration error) check responses from the low-level (or zero) calibration gas.
C_S = Measured concentration of a calibration gas (low, mid, or high) when introduced in system calibration mode.
C_{SS} = Concentration of NOx measured in the spiked sample.
C_{Spike} = Concentration of NOx in the undiluted spike gas.
C_{Calc} = Calculated concentration of NOx in the spike gas diluted in the sample.
C_V = Manufacturer certified concentration of a calibration gas (low, mid, or high).
C_W = Pollutant concentration measured under moist sample conditions, wet basis.
CS = Calibration span.
D = Drift assessment, percent of calibration span.
E_p = The predicted response for the low-level and mid-level gases based on a linear response line between the zero and high-level response.
Eff_{NO2} = NO_2 to NO converter efficiency, percent.
H = High calibration gas, designator.
L = Low calibration gas, designator.
M = Mid calibration gas, designator.
NOFinal = The average NO concentration observed with the analyzer in the NO mode during the converter efficiency test in Section 16.2.2.
NOxCorr = The NOx concentration corrected for the converter efficiency.
NOxFinal = The final NOx concentration observed during the converter efficiency test in Section 16.2.2.
NOxPeak = The highest NOx concentration observed during the converter efficiency test in Section 16.2.2.
Q_{Spike} = Flow rate of spike gas introduced in system calibration mode, L/min.
Q_{Total} = Total sample flow rate during the spike test, L/min.
R = Spike recovery, percent.
SB = System bias, percent of calibration span.
SB_i = Pre-run system bias, percent of calibration span.
SB_f = Post-run system bias, percent of calibration span.
SB / D_{Alt} = Alternative absolute difference criteria to pass bias and/or drift checks.
SCE = System calibration error, percent of calibration span.
SCE_i = Pre-run system calibration error, percent of calibration span.
SCE_{final} = Post-run system calibration error, percent of calibration span.
Z = Zero calibration gas, designator.

40CFR60.355(b)(1), (09-20-06), Nomenclature. The terms used in the equations are defined as follows:

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg
P_o = observed combustor inlet absolute pressure at test, mm Hg
H_o = observed humidity of ambient air, g H_2O/g air
e = transcendental constant, 2.718
T_a = ambient temperature, K

RM 19, (07-29-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

AdjFactor = Percent oxygen or carbon dioxide adjustment applied to a target pollutant
B_{wa} = Moisture fraction of ambient air, percent.
Btu = British thermal unit
$\%_C$ = Concentration of carbon from an ultimate analysis of fuel, weight percent.
$\%_{CO2d}$,$\%_{CO2w}$ = Concentration of carbon dioxide on a dry and wet basis, respectively, percent.
CIP / CDP = Combustor inlet pressure / compressor discharge pressure (mm Hg); note, some manufactures reference as PCD.
E = Pollutant emission rate, ng/J (lb/million Btu).
E_a = Average pollutant rate for the specified performance test period, ng/J (lb/million Btu).
E_{ao}, E_{ai} = Average pollutant rate of the control device, outlet and inlet, respectively, for the performance test period, ng/J (lb/million Btu).
E_{bi} = Pollutant rate from the steam generating unit, ng/J (lb/million Btu).
E_{bo} = Pollutant emission rate from the steam generating unit, ng/J (lb/million Btu).
E_{ci} = Pollutant rate in combined effluent, ng/J (lb/million Btu).
E_{co} = Pollutant emission rate in combined effluent, ng/J (lb/million Btu).
E_d = Average pollutant rate for each sampling period (e.g.,24-hr Method 6B sample or 24-hr fuel sample) or for each fuel lot (e.g., amount of fuel bunkered), ng/J (lb/million Btu).
E_{di} = Average inlet SO_2 rate for each sampling period d, ng/J (lb/million Btu).
E_g = Pollutant rate from gas turbine, ng/J (lb/million Btu).
E_{ga} = Daily geometric average pollutant rate, ng/J (lbs/million Btu) or ppm corrected to 7 percent O_2.
E_{jo},E_{ji} = Matched pair hourly arithmetic average pollutant rate, outlet and inlet, respectively, ng/J (lb/million Btu) or ppm corrected to 7 percent O_2.
E_h = Hourly average pollutant, ng/J (lb/million Btu).
E_{hj} = Hourly arithmetic average pollutant rate for hour "j," ng/J (lb/million Btu) or ppm corrected to 7 percent O_2.
EXP = Natural logarithmic base (2.718) raised to the value enclosed by brackets.
Fc = Ratio of the volume of carbon dioxide produced to the gross calorific value of the fuel from Method 19
F_d, F_w, F_c = Volumes of combustion components per unit of heat content, scm/J (scf/million Btu).
ft^3 = cubic feet
G = ideal gas conversion factor
(385.23 SCF/lb-mol at 68 deg F & 14.696 psia)
GCM = gross Btu per SCF (constant, compound based)
GCV = Gross calorific value of the fuel consistent with the ultimate analysis, kJ/kg (Btu/lb).
GCV_p, GCV_r = Gross calorific value for the product and raw fuel lots, respectively, dry basis, kJ/kg (Btu/lb).
$\%_H$ = Concentration of hydrogen from an ultimate analysis of fuel, weight percent.
H_b = Heat input rate to the steam generating unit from fuels fired in the steam generating unit, J/hr (million Btu/hr).
H_g = Heat input rate to gas turbine from all fuels fired in the gas turbine, J/hr (million Btu/hr).
$\%_{H2O}$ = Concentration of water from an ultimate analysis of fuel, weight percent.
H_r = Total numbers of hours in the performance test period (e.g., 720 hours for 30-day performance test period).
K = volume of combustion component per pound of component (constant)
K = Conversion factor, 10^{-5} (kJ/J)/(%) [10^6 Btu/million Btu].
K_c = (9.57 scm/kg)/% [(1.53 scf/lb)/%].
K_{cc} = (2.0 scm/kg)/% [(0.321 scf/lb)/%].
K_{hd} = (22.7 scm/kg)/% [(3.64 scf/lb)/%].
K_{hw} = (34.74 scm/kg)/% [(5.57 scf/lb)/%].
K_n = (0.86 scm/kg)/% [(0.14 scf/lb)/%].
K_o = (2.85 scm/kg)/% [(0.46 scf/lb)/%].
K_s = (3.54 scm/kg)/% [(0.57 scf/lb)/%].
K_{sulfur} = $2x10^4$ Btu/wt%-MMBtu
K_w = (1.30 scm/kg)/% [(0.21 scf/lb)/%].
lb = pound
ln = Natural log of indicated value.
L_p,L_r = Weight of the product and raw fuel lots, respectively, metric ton (ton).
$\%_N$ = Concentration of nitrogen from an ultimate analysis of fuel, weight percent.
$M_{\%}$ = mole percent
mol = mole
MW = molecular weight (lb/lb-mol)
MW_{AIR} = molecular weight of air (28.9625 lb/lb-mole)[1]
NCM = net Btu per SCF (constant based on compound)
$\%_O$ = Concentration of oxygen from an ultimate analysis of fuel, weight percent.
$\%_{O2d}$, $\%_{O2w}$ = Concentration of oxygen on a dry and wet basis, respectively, percent.
P_B = barometirc pressure, in Hg
P_s = Potential SO2 emissions, percent.
$\%_S$ = Sulfur content of as-fired fuel lot, dry basis, weight percent.
S_e = Standard deviation of the hourly average pollutant rates for each performance test period, ng/J (lb/million Btu).
$\%_{Sf}$ = Concentration of sulfur from an ultimate analysis of fuel, weight percent.
S(wt%) = weight percent of sulfur, per lab analysis by appropriate ASTM standard
S_i = Standard deviation of the hourly average inlet pollutant rates for each performance test period, ng/J (lb/million Btu).
S_o = Standard deviation of the hourly average emission rates for each performance test period, ng/J (lb/million Btu).
$\%S_p$, $\%S_r$ = Sulfur content of the product and raw fuel lots respectively, dry basis, weight percent.
SCF = standard cubic feet
SH = specific humidity, pounds of water per pound of air
$t_{0.95}$ = Values shown in Table 19-3 for the indicated number of data points n.
T_{amb} = ambient temperature, °F
W/D Factor = 1.0236 = conv. at 14.696 psia and
68 deg F (ref. Civil Eng. Ref. Manual, 7th Ed.)
X_{CO2}=CO_2 Correction factor, percent.
X_k = Fraction of total heat input from each type of fuel k.

Calculations, Formulas, and Constants

The following information supports the spreadsheets for this testing project.

Given Data:

Ideal Gas Conversion Factor = 385.23 SCF/lb-mol at 68 deg F & 14.696 psia

Fuel Heating Value is based upon Air Hygiene's fuel gas calculation sheet. All calculations are based upon a correction to 68 deg F & 14.696 psia

High Heating Values (HHV) are used for the Fuel Heating Value, F-Factor, and Fuel Flow Data per EPA requirements.

ASTM D 3588

Molecular Weight of NOx (lb/lb-mole) = 46.01

Molecular Weight of CO (lb/lb-mole) = 28.00

Molecular Weight of SO_2 (lb/lb-mole) = 64.00

Molecular Weight of THC (propane) (lb/lb-mole) = 44.00

Molecular Weight of VOC (methane) (lb/lb-mole) = 16.00

Molecular Weight of NH_3 (lb/lb-mole) = 17.03

Molecular Weight of HCHO (lb/lb-mole) = 30.03

40CFR60, App. A., RM 19, Table 19-1

Conversion Constant for NOx = 0.0000001194351

Conversion Constant for CO = 0.0000000726839

Conversion Constant for SO_2 = 0.0000001661345

Conversion Constant for THC = 0.0000001142175

Conversion Constant for VOC (methane) = 0.0000000415336

Conversion Constant for NH_3 = 0.0000000442074

Conversion Constant for HCHO = 0.0000000779534

NOTE: units are lb/ppm*ft^3

Formulas:

1. Corrected Raw Average (C_{Gas}), 40CFR60, App. A, RM 7E, Eq. 7E-5 (08/15/06)

$$C_{Gas} = \left(C_{Avg} - C_O\right) \times \left(\frac{C_{MA}}{C_M - C_O}\right)$$

2. Correction to % O_2, 40CFR60, App. A, RM 20, Eq. 20-5 (11/26/02)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}}\right)$$

3. Correction to % O_2 and ISO Conditions

$$C_{ISO} = C_{Adj} \times \sqrt{\frac{P_r}{P_a}} \times e^{(19 \cdot (H_o - 0.00633))} \times \left(\frac{288}{T_a}\right)^{1.53}$$

4. Method 19 stack exhaust flow (scfh)

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1{,}000{,}000}\right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}}\right)$$

5. Emission Rate in lb/hr

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

6. Emission Rate in tons per year

$$E_{tons/yr} = \frac{E_{lb/hr} \times hr_{year}}{2000}$$

7. Emission Concentration in lb/MMBtu (O_2 based)

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_C \times 20.9\%}{20.9\% - C_{Gas(O2)}}$$

8. Emission Concentration in g/hp*hr

$$E_{g/hp\text{-}hr} = \frac{E_{lb/hr} \times 453.6}{mw \times 1314.022} \ or \ \frac{E_{lb/hr} \times 453.6}{hp}$$

RATA SHEET CALCULATIONS

d = Reference Method Data - CEMS Data

S_d = Standard Deviation

CC = Confident Coefficient

n = number of runs

$t_{0.025}$ = 2.5 percent confidence coefficent T-values

RA = relative accuracy

ARA = alternative relative accuracy

BAF = Bias adjustment factor

n	t	n	t	n	t
2	12.706	7	2.447	12	2.201
3	4.303	8	2.365	13	2.179
4	3.182	9	2.306	14	2.160
5	2.776	10	2.262	15	2.145
6	2.571	11	2.228	16	2.131

1. Difference

$$d = \sum_{i=1}^{n} d_i$$

2. Standard Deviation

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right]}{n-1}}$$

3. Confident Coefficient

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$

4. Relative Accuracy

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$

5. Alternative Relative Accuracy

$$ARA = \frac{|d_{AVG}| + |CC|}{AS} \times 100$$

5. Bias Adjustment Factor

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}}\right)$$

APPENDIX B

CEMS AND REFERENCE METHOD DATA

Florida Power and Light

Air Permit # :	PSD-FL-396
Plant Name or Location:	West County Energy Center
Date:	March 19, 2011
Project Number:	cis-10-westcounty.fl-rata#1
Manufacturer & Equipment:	Mitsubishi
Model:	501G
Unit Number:	3B
Test Load:	Base
Tester(s) / Test Unit(s):	JF/127/206

		RUN									
	UNITS	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Start Time	hh:mm:ss	09:32:10	10:45:10	12:05:10	13:17:10	13:50:10	14:21:10	14:51:10	15:21:10	15:51:10	16:21:10
End Time	hh:mm:ss	10:31:40	11:44:40	13:04:40	13:37:40	14:10:40	14:41:40	15:11:40	15:41:40	16:11:40	16:41:40
Bar. Pressure	in. Hg	30.25	30.23	30.25	30.22	30.22	30.22	30.20	30.18	30.17	30.17
Amb. Temp.	°F	75	71	81	82	82	82	83	82	80	80
Rel. Humidity	%	52	58	39	43	42	42	43	43	43	42
Spec. Humidity	lb water / lb air	0.009505	0.009268	0.008678	0.009913	0.009679	0.009679	0.010251	0.009926	0.009294	0.009075
Turbine Fuel Flow	lb/min	1,866	1,842	1,812	1,812	1,806	1,806	1,806	1,800	1,806	1,806
Total Fuel Flow	SCFH	2,560,286	2,527,356	2,486,194	2,486,194	2,477,962	2,477,962	2,477,962	2,469,729	2,477,962	2,477,962
Power Output	megawatts	301.8	287.1	279.6	277.4	277.7	277.0	277.0	276.1	275.9	275.9
O_2 CEMS Data	%	13.32	13.18	13.28	13.19	13.15	13.23	13.22	13.21	13.25	13.22
NOx CEMS Data	lb/MMBtu	0.006	0.006	0.005	0.006	0.006	0.005	0.006	0.006	0.006	0.006
CO CEMS Data	ppmvd	0.50	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	ppm@15%O_2	0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	lb/hr	2.10	1.60	1.80	1.70	1.50	1.60	1.50	1.70	1.70	1.70

CEMS AND REFERENCE METHOD DATA

CEMS Data

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 9:32
Period End: 3/19/2011 10:31
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 9:32	31.3	0.006	0.4	0.3	1.80	13.07	312.1
3/19/2011 9:33	31.2	0.006	0.3	0.2	1.30	13.06	311.4
3/19/2011 9:34	31.2	0.006	0.4	0.3	1.80	13.07	311.6
3/19/2011 9:35	31.4	0.007	0.4	0.3	1.80	13.28	311.5
3/19/2011 9:36	31.2	0.007	0.3	0.2	1.50	13.71	311.6
3/19/2011 9:37	31.4	0.008	0.4	0.4	2.10	14.37	310.9
3/19/2011 9:38	31.1	0.006	0.4	0.3	1.80	13.34	311.1
3/19/2011 9:39	31.2	0.006	0.3	0.2	1.30	13.54	310.7
3/19/2011 9:40	31.3	0.007	0.4	0.4	2.10	14.49	305.4
3/19/2011 9:41	31.2	0.006	0.4	0.3	1.80	13.48	304.1
3/19/2011 9:42	31.2	0.005	0.3	0.2	1.30	13.34	303.4
3/19/2011 9:43	31.1	0.005	0.4	0.3	1.80	13.10	303.1
3/19/2011 9:44	31.3	0.006	0.4	0.3	1.80	13.07	302.5
3/19/2011 9:45	31.0	0.006	0.3	0.2	1.30	13.07	302.1
3/19/2011 9:46	31.3	0.006	0.3	0.2	1.30	13.07	301.5
3/19/2011 9:47	31.3	0.006	0.4	0.3	1.80	13.08	300.7
3/19/2011 9:48	31.3	0.006	0.4	0.3	1.80	13.10	301.9
3/19/2011 9:49	31.0	0.006	0.3	0.2	1.30	13.08	302.8
3/19/2011 9:50	31.4	0.006	0.4	0.3	1.80	13.07	302.7
3/19/2011 9:51	31.0	0.006	0.4	0.3	1.80	13.07	302.7
3/19/2011 9:52	31.2	0.006	0.4	0.3	1.80	13.07	302.3
3/19/2011 9:53	31.3	0.006	0.4	0.3	1.80	13.08	301.7
3/19/2011 9:54	31.2	0.006	0.4	0.3	1.80	13.09	302.0
3/19/2011 9:55	31.2	0.006	0.4	0.3	1.80	13.34	302.7
3/19/2011 9:56	31.3	0.007	0.4	0.3	1.80	13.57	302.3
3/19/2011 9:57	31.2	0.007	0.3	0.3	1.50	13.99	301.6
3/19/2011 9:58	31.1	0.006	0.4	0.3	1.80	13.40	302.0
3/19/2011 9:59	31.2	0.005	0.4	0.3	1.80	13.74	302.2
3/19/2011 10:00	31.4	0.005	0.4	0.3	1.80	13.43	302.1
3/19/2011 10:01	31.2	0.005	0.3	0.2	1.30	13.09	301.6
3/19/2011 10:02	30.9	0.005	0.4	0.3	1.80	13.09	301.6
3/19/2011 10:03	31.1	0.006	0.4	0.3	1.80	13.66	301.6
3/19/2011 10:04	31.3	0.006	0.5	0.4	2.30	13.35	300.9
3/19/2011 10:05	31.0	0.005	0.6	0.5	2.80	13.60	299.1
3/19/2011 10:06	30.9	0.005	0.4	0.3	1.80	13.39	297.8
3/19/2011 10:07	31.0	0.004	0.6	0.5	2.80	13.59	299.0
3/19/2011 10:08	30.9	0.005	0.5	0.4	2.00	13.07	300.3
3/19/2011 10:09	31.1	0.006	0.4	0.4	2.10	14.25	300.2
3/19/2011 10:10	30.9	0.005	0.7	0.5	3.10	13.06	298.8
3/19/2011 10:11	30.9	0.004	0.5	0.4	2.00	13.09	298.6
3/19/2011 10:12	30.9	0.004	0.6	0.5	2.60	13.13	300.1
3/19/2011 10:13	31.0	0.005	0.5	0.4	2.10	13.09	300.8
3/19/2011 10:14	31.2	0.006	0.4	0.3	1.80	13.06	300.1
3/19/2011 10:15	31.0	0.006	0.5	0.4	2.10	13.06	298.3
3/19/2011 10:16	30.8	0.006	0.4	0.3	1.80	13.15	298.0
3/19/2011 10:17	30.9	0.006	0.5	0.4	2.30	13.44	298.1
3/19/2011 10:18	30.9	0.005	0.6	0.5	2.60	13.26	299.7
3/19/2011 10:19	31.1	0.006	0.8	0.6	3.60	13.29	299.7
3/19/2011 10:20	30.8	0.006	1.4	1.1	6.10	13.09	297.9
3/19/2011 10:21	31.0	0.005	0.5	0.4	2.10	13.12	297.7
3/19/2011 10:22	31.1	0.005	0.4	0.3	1.80	13.32	299.1
3/19/2011 10:23	31.2	0.006	0.3	0.2	1.30	13.45	300.0
3/19/2011 10:24	31.0	0.006	0.4	0.3	1.80	13.07	298.4
3/19/2011 10:25	30.8	0.006	0.8	0.7	3.80	13.69	296.0
3/19/2011 10:26	30.5	0.006	0.6	0.5	2.80	13.83	295.9
3/19/2011 10:27	30.8	0.005	0.9	0.7	3.80	13.23	297.3
3/19/2011 10:28	30.8	0.004	0.5	0.4	2.00	13.11	298.3
3/19/2011 10:29	31.2	0.005	0.5	0.4	2.10	13.07	298.7
3/19/2011 10:30	30.9	0.005	0.4	0.3	1.80	13.09	296.3
3/19/2011 10:31	30.6	0.005	0.4	0.3	1.80	13.12	296.2
Final Average*	31.1	0.006	0.5	0.4	2.10	13.32	301.8
Maximum*	31.4	0.008	1.4	1.1	6.10	14.49	312.1
Minimum*	30.5	0.004	0.3	0.2	1.30	13.06	295.9

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 10:45
Period End: 3/19/2011 11:44
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 10:45	30.9	0.006	0.4	0.3	1.80	13.11	297.3
3/19/2011 10:46	30.9	0.006	0.3	0.2	1.30	13.06	296.8
3/19/2011 10:47	31.3	0.005	0.5	0.4	2.30	13.15	295.3
3/19/2011 10:48	30.2	0.005	0.4	0.3	1.70	13.23	296.5
3/19/2011 10:49	31.3	0.006	0.3	0.2	1.30	13.28	294.0
3/19/2011 10:50	31.3	0.005	0.4	0.3	1.80	13.40	293.8
3/19/2011 10:51	32.2	0.005	0.3	0.2	1.30	13.22	293.3
3/19/2011 10:52	30.6	0.005	0.4	0.3	1.80	13.09	292.9
3/19/2011 10:53	30.7	0.005	0.4	0.3	1.80	13.10	291.7
3/19/2011 10:54	30.7	0.006	0.3	0.2	1.30	13.07	290.1
3/19/2011 10:55	31.1	0.005	0.5	0.4	2.30	13.15	290.4
3/19/2011 10:56	30.4	0.006	0.3	0.2	1.30	13.08	289.4
3/19/2011 10:57	30.7	0.006	0.4	0.3	1.80	13.13	289.1
3/19/2011 10:58	30.2	0.006	0.4	0.3	1.70	13.14	289.2
3/19/2011 10:59	30.8	0.006	0.3	0.2	1.30	13.13	288.7
3/19/2011 11:00	30.7	0.006	0.3	0.2	1.50	13.70	287.5
3/19/2011 11:01	31.0	0.005	0.4	0.3	1.80	13.25	288.4
3/19/2011 11:02	30.6	0.006	0.3	0.2	1.50	13.78	288.5
3/19/2011 11:03	30.7	0.006	0.3	0.2	1.50	13.72	287.0
3/19/2011 11:04	30.6	0.005	0.3	0.2	1.30	13.22	288.1
3/19/2011 11:05	31.2	0.005	0.3	0.2	1.30	13.18	286.9
3/19/2011 11:06	30.7	0.005	0.4	0.3	1.80	13.15	288.2
3/19/2011 11:07	30.1	0.005	0.3	0.2	1.20	13.13	289.1
3/19/2011 11:08	30.8	0.006	0.3	0.2	1.30	13.11	287.6
3/19/2011 11:09	31.3	0.005	0.3	0.2	1.30	13.12	288.5
3/19/2011 11:10	30.5	0.006	0.3	0.2	1.30	13.19	287.6
3/19/2011 11:11	30.8	0.005	0.3	0.2	1.30	13.16	286.4
3/19/2011 11:12	31.2	0.005	0.3	0.2	1.30	13.09	285.2
3/19/2011 11:13	30.4	0.005	0.5	0.4	2.30	13.15	285.5
3/19/2011 11:14	31.3	0.005	0.4	0.3	1.80	13.13	286.6
3/19/2011 11:15	31.1	0.005	0.4	0.3	1.80	13.10	287.1
3/19/2011 11:16	30.5	0.006	0.4	0.3	1.80	13.12	287.9
3/19/2011 11:17	30.4	0.006	0.3	0.2	1.30	13.07	286.1
3/19/2011 11:18	30.9	0.006	0.4	0.3	1.80	13.14	285.2
3/19/2011 11:19	30.5	0.006	0.3	0.2	1.30	13.10	286.2
3/19/2011 11:20	30.7	0.006	0.3	0.2	1.30	13.11	286.3
3/19/2011 11:21	30.2	0.006	0.3	0.2	1.20	13.15	286.6
3/19/2011 11:22	30.7	0.006	0.3	0.2	1.30	13.06	287.4
3/19/2011 11:23	30.6	0.006	0.3	0.2	1.30	13.10	286.2
3/19/2011 11:24	30.8	0.006	0.3	0.2	1.30	13.40	286.8
3/19/2011 11:25	31.4	0.006	0.3	0.2	1.30	13.51	287.6
3/19/2011 11:26	30.8	0.006	0.3	0.2	1.30	13.11	286.3
3/19/2011 11:27	30.5	0.006	0.2	0.2	0.80	13.05	282.9
3/19/2011 11:28	30.3	0.005	0.5	0.4	2.30	13.17	283.1
3/19/2011 11:29	30.2	0.005	0.4	0.3	1.70	13.09	282.9
3/19/2011 11:30	31.1	0.005	0.3	0.2	1.30	13.05	282.9
3/19/2011 11:31	30.9	0.005	0.3	0.2	1.30	13.04	281.0
3/19/2011 11:32	30.3	0.005	0.6	0.5	2.50	13.20	280.7
3/19/2011 11:33	30.0	0.005	0.8	0.6	3.50	13.16	280.9
3/19/2011 11:34	30.3	0.005	0.4	0.3	1.80	13.10	282.3
3/19/2011 11:35	30.5	0.006	0.5	0.4	2.30	13.51	283.2
3/19/2011 11:36	30.1	0.006	0.4	0.3	1.70	13.20	283.4
3/19/2011 11:37	30.5	0.006	0.3	0.2	1.30	13.15	284.4
3/19/2011 11:38	31.2	0.006	0.4	0.3	1.80	13.13	285.8
3/19/2011 11:39	30.6	0.006	0.3	0.2	1.30	13.09	284.9
3/19/2011 11:40	29.7	0.006	0.2	0.1	0.70	13.03	281.6
3/19/2011 11:41	30.3	0.005	0.3	0.2	1.30	13.07	281.0
3/19/2011 11:42	30.6	0.005	0.4	0.3	1.80	13.07	280.9
3/19/2011 11:43	30.4	0.005	0.4	0.3	1.80	13.09	281.3
3/19/2011 11:44	30.6	0.005	0.4	0.3	1.80	13.03	280.7
Final Average*	30.7	0.006	0.4	0.3	1.60	13.18	287.1
Maximum*	32.2	0.006	0.8	0.6	3.50	13.78	297.3
Minimum*	29.7	0.005	0.2	0.1	0.70	13.03	280.7

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 12:05
Period End: 3/19/2011 13:04
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 12:05	30.8	0.005	0.4	0.3	1.80	13.07	282.7
3/19/2011 12:06	30.5	0.005	0.3	0.2	1.30	13.05	282.7
3/19/2011 12:07	30.9	0.005	0.4	0.3	1.80	13.13	282.4
3/19/2011 12:08	30.7	0.005	0.5	0.4	2.30	13.15	283.5
3/19/2011 12:09	30.9	0.006	0.3	0.2	1.30	13.05	282.1
3/19/2011 12:10	30.4	0.006	0.3	0.2	1.50	13.67	281.6
3/19/2011 12:11	30.4	0.005	0.5	0.4	2.30	13.41	282.7
3/19/2011 12:12	30.4	0.006	0.3	0.2	1.30	13.40	283.1
3/19/2011 12:13	29.5	0.006	0.3	0.2	1.50	13.73	282.9
3/19/2011 12:14	30.3	0.006	0.2	0.2	0.80	13.07	281.4
3/19/2011 12:15	30.8	0.005	0.5	0.4	2.30	13.18	282.4
3/19/2011 12:16	30.0	0.005	0.4	0.3	1.70	13.15	282.0
3/19/2011 12:17	30.1	0.005	0.3	0.2	1.20	13.02	280.6
3/19/2011 12:18	29.9	0.005	0.3	0.2	1.20	13.07	277.9
3/19/2011 12:19	30.1	0.005	0.8	0.7	3.70	13.65	278.9
3/19/2011 12:20	30.8	0.005	0.7	0.5	3.10	13.25	280.5
3/19/2011 12:21	29.7	0.006	0.5	0.4	2.20	13.20	279.3
3/19/2011 12:22	30.2	0.006	0.4	0.3	1.70	13.08	279.4
3/19/2011 12:23	31.1	0.005	0.3	0.2	1.30	13.10	282.7
3/19/2011 12:24	29.9	0.005	0.4	0.3	1.70	13.13	281.4
3/19/2011 12:25	30.4	0.006	0.3	0.2	1.30	12.98	279.5
3/19/2011 12:26	30.4	0.006	0.3	0.2	1.30	13.02	277.9
3/19/2011 12:27	29.4	0.005	0.7	0.5	2.90	13.30	278.0
3/19/2011 12:28	31.0	0.005	0.9	0.7	4.10	13.52	277.9
3/19/2011 12:29	30.6	0.007	0.5	0.4	2.30	13.93	278.1
3/19/2011 12:30	29.4	0.006	0.4	0.4	1.90	14.22	279.1
3/19/2011 12:31	29.9	0.005	0.5	0.4	2.20	13.86	278.9
3/19/2011 12:32	30.0	0.005	0.3	0.2	1.50	13.71	280.2
3/19/2011 12:33	30.7	0.005	0.3	0.2	1.30	13.23	279.8
3/19/2011 12:34	29.5	0.004	0.4	0.3	1.70	13.09	279.2
3/19/2011 12:35	29.8	0.005	0.5	0.4	2.20	13.18	279.9
3/19/2011 12:36	30.6	0.005	0.6	0.5	2.50	13.16	280.3
3/19/2011 12:37	30.5	0.005	0.3	0.2	1.30	13.08	280.4
3/19/2011 12:38	29.6	0.006	0.3	0.2	1.20	13.05	280.3
3/19/2011 12:39	30.0	0.006	0.3	0.2	1.20	13.07	278.4
3/19/2011 12:40	29.3	0.005	0.4	0.3	1.70	13.09	278.8
3/19/2011 12:41	30.0	0.005	0.4	0.3	1.70	13.07	279.1
3/19/2011 12:42	29.8	0.005	0.4	0.3	1.70	13.13	278.5
3/19/2011 12:43	29.8	0.005	0.6	0.5	2.50	13.15	279.1
3/19/2011 12:44	30.8	0.005	0.5	0.4	2.30	13.16	280.5
3/19/2011 12:45	30.5	0.006	0.4	0.3	1.80	13.13	280.4
3/19/2011 12:46	30.7	0.006	0.3	0.2	1.30	13.09	280.4
3/19/2011 12:47	29.9	0.007	0.3	0.2	1.20	13.05	278.8
3/19/2011 12:48	29.4	0.007	0.3	0.3	1.50	14.27	276.8
3/19/2011 12:49	29.5	0.006	0.4	0.3	1.70	13.81	276.9
3/19/2011 12:50	29.4	0.005	0.4	0.3	1.70	13.16	276.2
3/19/2011 12:51	30.5	0.005	0.8	0.6	3.50	13.29	277.4
3/19/2011 12:52	29.6	0.006	0.5	0.4	2.20	13.32	276.8
3/19/2011 12:53	30.3	0.006	0.4	0.3	1.80	13.64	277.3
3/19/2011 12:54	29.4	0.005	0.3	0.2	1.20	13.11	277.7
3/19/2011 12:55	30.3	0.005	0.3	0.2	1.30	13.07	279.3
3/19/2011 12:56	29.7	0.005	0.3	0.2	1.20	13.11	279.1
3/19/2011 12:57	30.2	0.006	0.3	0.3	1.50	13.98	278.8
3/19/2011 12:58	30.5	0.005	0.4	0.3	1.80	13.39	277.9
3/19/2011 12:59	29.9	0.005	0.4	0.3	1.70	13.13	277.5
3/19/2011 13:00	30.5	0.005	0.3	0.2	1.30	13.08	278.2
3/19/2011 13:01	30.0	0.005	0.4	0.3	1.70	13.08	278.0
3/19/2011 13:02	30.4	0.005	0.5	0.4	2.30	13.17	279.6
3/19/2011 13:03	30.1	0.006	0.4	0.3	1.70	13.10	278.8
3/19/2011 13:04	30.5	0.006	0.3	0.2	1.30	13.04	278.9
Final Average*	30.2	0.005	0.4	0.3	1.80	13.28	279.6
Maximum*	31.1	0.007	0.9	0.7	4.10	14.27	283.5
Minimum*	29.3	0.004	0.2	0.2	0.80	12.98	276.2

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 13:17
Period End: 3/19/2011 13:37
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 13:17	30.5	0.005	0.4	0.3	2.00	13.87	277.5
3/19/2011 13:18	30.8	0.005	0.3	0.2	1.30	13.55	278.1
3/19/2011 13:19	30.7	0.005	0.3	0.2	1.30	13.49	276.6
3/19/2011 13:20	29.6	0.005	0.5	0.4	2.20	13.43	276.8
3/19/2011 13:21	30.1	0.005	0.5	0.4	2.00	13.14	276.7
3/19/2011 13:22	29.7	0.005	0.3	0.2	1.20	13.08	276.6
3/19/2011 13:23	29.7	0.005	0.6	0.5	2.50	13.17	277.2
3/19/2011 13:24	30.2	0.006	0.5	0.4	2.20	13.15	277.3
3/19/2011 13:25	29.9	0.006	0.4	0.3	1.70	13.10	277.7
3/19/2011 13:26	30.1	0.006	0.3	0.2	1.20	13.06	279.4
3/19/2011 13:27	30.0	0.006	0.3	0.2	1.20	13.06	278.7
3/19/2011 13:28	29.8	0.006	0.3	0.2	1.20	13.03	277.5
3/19/2011 13:29	29.9	0.006	0.4	0.3	1.70	13.14	276.4
3/19/2011 13:30	29.8	0.006	0.6	0.5	2.50	13.14	277.0
3/19/2011 13:31	30.0	0.006	0.3	0.2	1.20	13.05	278.0
3/19/2011 13:32	30.5	0.006	0.4	0.3	1.80	13.15	276.8
3/19/2011 13:33	30.7	0.006	0.5	0.4	2.00	13.09	277.7
3/19/2011 13:34	30.1	0.006	0.3	0.2	1.20	13.03	279.0
3/19/2011 13:35	30.1	0.006	0.2	0.2	0.70	13.13	277.1
3/19/2011 13:36	30.6	0.006	0.4	0.3	1.80	13.12	276.0
3/19/2011 13:37	30.7	0.005	0.4	0.3	1.80	13.08	276.7
Final Average*	30.2	0.006	0.4	0.3	1.70	13.19	277.4
Maximum*	30.8	0.006	0.6	0.5	2.50	13.87	279.4
Minimum*	29.6	0.005	0.2	0.2	0.70	13.03	276.0

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 13:50
Period End: 3/19/2011 14:10
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 13:50	30.7	0.005	0.4	0.3	1.80	13.09	278.1
3/19/2011 13:51	30.6	0.006	0.3	0.2	1.30	13.11	278.2
3/19/2011 13:52	30.1	0.006	0.3	0.2	1.20	13.03	277.6
3/19/2011 13:53	29.7	0.005	0.3	0.2	1.20	13.08	276.2
3/19/2011 13:54	29.6	0.005	0.4	0.3	1.70	13.10	276.3
3/19/2011 13:55	29.8	0.005	0.6	0.5	2.50	13.13	277.2
3/19/2011 13:56	29.8	0.005	0.5	0.4	2.20	13.23	278.0
3/19/2011 13:57	29.9	0.006	0.4	0.3	1.70	13.17	278.5
3/19/2011 13:58	30.5	0.006	0.4	0.3	1.80	13.65	278.6
3/19/2011 13:59	31.0	0.006	0.4	0.3	1.80	13.08	278.3
3/19/2011 14:00	30.0	0.006	0.3	0.2	1.20	13.26	277.8
3/19/2011 14:01	30.1	0.006	0.4	0.3	1.70	13.47	278.1
3/19/2011 14:02	30.3	0.006	0.3	0.2	1.30	13.11	278.3
3/19/2011 14:03	30.2	0.005	0.3	0.2	1.20	13.08	277.7
3/19/2011 14:04	30.0	0.005	0.3	0.2	1.20	13.06	277.9
3/19/2011 14:05	29.9	0.006	0.3	0.2	1.20	13.06	277.7
3/19/2011 14:06	30.0	0.006	0.3	0.2	1.20	13.07	277.9
3/19/2011 14:07	30.2	0.006	0.4	0.3	1.70	13.09	277.6
3/19/2011 14:08	29.9	0.005	0.4	0.3	1.70	13.21	278.2
3/19/2011 14:09	29.7	0.006	0.3	0.2	1.20	12.99	276.9
3/19/2011 14:10	29.9	0.005	0.4	0.3	1.70	13.05	277.0
Final Average*	30.1	0.006	0.4	0.3	1.50	13.15	277.7
Maximum*	31.0	0.006	0.6	0.5	2.50	13.65	278.6
Minimum*	29.6	0.005	0.3	0.2	1.20	12.99	276.2

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 14:21
Period End: 3/19/2011 14:41
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 14:21	30.6	0.005	0.4	0.3	1.80	13.25	278.0
3/19/2011 14:22	30.3	0.005	0.3	0.2	1.30	13.07	277.9
3/19/2011 14:23	30.0	0.005	0.3	0.2	1.20	13.05	276.5
3/19/2011 14:24	29.9	0.005	0.4	0.3	1.70	13.08	276.8
3/19/2011 14:25	30.1	0.005	0.3	0.2	1.20	13.05	278.0
3/19/2011 14:26	30.1	0.005	0.3	0.2	1.20	13.02	277.6
3/19/2011 14:27	30.3	0.006	0.3	0.2	1.30	13.44	276.8
3/19/2011 14:28	29.9	0.005	0.4	0.3	1.70	13.15	276.8
3/19/2011 14:29	30.3	0.005	0.4	0.3	1.80	13.04	276.4
3/19/2011 14:30	29.7	0.005	0.4	0.3	1.70	13.06	276.2
3/19/2011 14:31	30.0	0.006	0.5	0.4	2.20	13.75	276.9
3/19/2011 14:32	30.7	0.006	0.5	0.4	2.30	13.24	277.4
3/19/2011 14:33	29.8	0.006	0.4	0.3	1.70	13.10	278.4
3/19/2011 14:34	30.4	0.007	0.3	0.3	1.50	14.00	278.8
3/19/2011 14:35	29.9	0.007	0.3	0.3	1.50	14.11	278.1
3/19/2011 14:36	30.2	0.005	0.3	0.2	1.20	13.06	277.9
3/19/2011 14:37	30.3	0.005	0.3	0.2	1.30	13.03	276.0
3/19/2011 14:38	29.8	0.005	0.3	0.2	1.20	13.04	276.6
3/19/2011 14:39	30.2	0.005	0.3	0.2	1.20	13.07	276.6
3/19/2011 14:40	29.6	0.005	0.3	0.2	1.20	13.01	275.0
3/19/2011 14:41	29.9	0.005	0.6	0.5	2.50	13.14	275.0
Final Average*	30.1	0.005	0.4	0.3	1.60	13.23	277.0
Maximum*	30.7	0.007	0.6	0.5	2.50	14.11	278.8
Minimum*	29.6	0.005	0.3	0.2	1.20	13.01	275.0

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 14:51
Period End: 3/19/2011 15:11
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 14:51	30.1	0.006	0.3	0.2	1.20	13.02	276.8
3/19/2011 14:52	30.2	0.006	0.3	0.2	1.20	13.00	275.7
3/19/2011 14:53	29.7	0.005	0.5	0.4	2.00	13.07	276.4
3/19/2011 14:54	30.3	0.005	0.4	0.3	1.80	13.04	277.4
3/19/2011 14:55	29.9	0.006	0.4	0.3	1.70	13.04	277.2
3/19/2011 14:56	30.3	0.006	0.5	0.4	2.00	13.09	277.7
3/19/2011 14:57	30.1	0.006	0.3	0.2	1.20	13.00	277.5
3/19/2011 14:58	30.4	0.006	0.3	0.2	1.30	13.02	277.3
3/19/2011 14:59	29.7	0.006	0.3	0.2	1.20	13.02	276.4
3/19/2011 15:00	30.3	0.005	0.5	0.4	2.00	13.06	277.2
3/19/2011 15:01	29.9	0.006	0.4	0.3	1.70	13.05	278.2
3/19/2011 15:02	30.3	0.006	0.3	0.2	1.30	13.07	277.6
3/19/2011 15:03	30.0	0.006	0.4	0.3	1.70	13.10	276.7
3/19/2011 15:04	29.9	0.006	0.4	0.3	1.70	13.61	277.6
3/19/2011 15:05	30.4	0.006	0.3	0.2	1.30	13.50	276.8
3/19/2011 15:06	29.7	0.005	0.4	0.3	1.70	13.07	276.8
3/19/2011 15:07	30.1	0.005	0.4	0.3	1.70	13.67	277.5
3/19/2011 15:08	30.0	0.006	0.3	0.2	1.20	13.45	276.9
3/19/2011 15:09	30.1	0.006	0.3	0.2	1.20	13.59	275.7
3/19/2011 15:10	30.1	0.005	0.4	0.3	1.70	13.65	277.0
3/19/2011 15:11	30.4	0.005	0.3	0.2	1.30	13.55	276.4
Final Average*	30.1	0.006	0.4	0.3	1.50	13.22	277.0
Maximum*	30.4	0.006	0.5	0.4	2.00	13.67	278.2
Minimum*	29.7	0.005	0.3	0.2	1.20	13.00	275.7

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 15:21
Period End: 3/19/2011 15:41
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 15:21	30.2	0.006	0.4	0.3	1.70	13.08	276.0
3/19/2011 15:22	30.1	0.006	0.4	0.3	1.70	13.05	276.7
3/19/2011 15:23	30.1	0.006	0.3	0.2	1.20	13.01	276.3
3/19/2011 15:24	30.1	0.006	0.3	0.2	1.20	13.00	275.4
3/19/2011 15:25	29.5	0.006	0.4	0.3	1.70	13.07	273.7
3/19/2011 15:26	29.9	0.005	0.9	0.7	3.70	13.20	273.6
3/19/2011 15:27	29.8	0.006	0.5	0.4	2.00	13.11	274.5
3/19/2011 15:28	29.9	0.006	0.5	0.4	2.00	13.12	274.7
3/19/2011 15:29	30.4	0.006	0.4	0.3	1.80	13.05	275.3
3/19/2011 15:30	30.1	0.006	0.3	0.2	1.20	13.07	276.6
3/19/2011 15:31	30.0	0.006	0.4	0.3	1.70	13.06	277.7
3/19/2011 15:32	30.2	0.006	0.4	0.3	1.70	13.16	278.6
3/19/2011 15:33	30.4	0.006	0.3	0.2	1.30	13.12	279.3
3/19/2011 15:34	30.1	0.007	0.3	0.2	1.20	13.02	278.2
3/19/2011 15:35	29.9	0.006	0.3	0.2	1.20	13.05	276.2
3/19/2011 15:36	30.2	0.006	0.3	0.2	1.20	13.03	276.6
3/19/2011 15:37	29.9	0.006	0.3	0.3	1.50	14.08	275.2
3/19/2011 15:38	29.8	0.005	0.4	0.3	1.70	13.51	275.0
3/19/2011 15:39	30.0	0.005	0.5	0.4	2.20	13.65	275.6
3/19/2011 15:40	30.3	0.005	0.4	0.3	1.80	13.21	276.4
3/19/2011 15:41	29.9	0.005	0.3	0.2	1.50	13.68	276.0
Final Average*	30.0	0.006	0.4	0.3	1.70	13.21	276.1
Maximum*	30.4	0.007	0.9	0.7	3.70	14.08	279.3
Minimum*	29.5	0.005	0.3	0.2	1.20	13.00	273.6

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 15:51
Period End: 3/19/2011 16:11
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 15:51	30.0	0.006	0.3	0.2	1.20	12.97	275.1
3/19/2011 15:52	30.0	0.005	0.5	0.4	2.00	13.10	274.2
3/19/2011 15:53	30.0	0.006	0.5	0.4	2.50	14.06	275.0
3/19/2011 15:54	30.1	0.005	0.5	0.4	2.20	13.46	275.5
3/19/2011 15:55	30.1	0.005	0.4	0.3	1.70	13.64	276.3
3/19/2011 15:56	30.0	0.005	0.3	0.2	1.50	13.66	276.7
3/19/2011 15:57	30.0	0.005	0.4	0.3	1.70	13.08	276.3
3/19/2011 15:58	30.2	0.005	0.4	0.3	1.70	13.08	277.2
3/19/2011 15:59	30.4	0.005	0.3	0.2	1.30	13.02	276.9
3/19/2011 16:00	30.2	0.006	0.4	0.3	1.70	13.01	276.6
3/19/2011 16:01	30.1	0.006	0.3	0.2	1.20	13.07	275.4
3/19/2011 16:02	30.1	0.005	0.4	0.3	1.70	13.06	276.0
3/19/2011 16:03	30.2	0.006	0.3	0.2	1.20	13.00	276.5
3/19/2011 16:04	29.9	0.006	0.4	0.3	1.70	13.03	275.5
3/19/2011 16:05	29.9	0.006	0.4	0.3	1.70	13.06	275.1
3/19/2011 16:06	29.9	0.006	0.4	0.3	1.70	13.01	275.8
3/19/2011 16:07	29.8	0.006	0.3	0.2	1.20	13.00	275.3
3/19/2011 16:08	29.9	0.006	0.4	0.3	1.70	13.08	274.8
3/19/2011 16:09	30.1	0.006	0.5	0.4	2.20	13.73	276.0
3/19/2011 16:10	30.3	0.006	0.4	0.3	1.80	13.71	277.1
3/19/2011 16:11	30.1	0.006	0.3	0.2	1.20	13.41	276.5
Final Average*	30.1	0.006	0.4	0.3	1.70	13.25	275.9
Maximum*	30.4	0.006	0.5	0.4	2.50	14.06	277.2
Minimum*	29.8	0.005	0.3	0.2	1.20	12.97	274.2

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/19/2011 16:21
Period End: 3/19/2011 16:41
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_CT_GAS #/sec	3BNOXMMBTU #/MBTU	3B_CO ppm	3B_COCORR ppm	3B_COLBHR #/Hr	3B_O2 %	3B_MW_TOT MW
3/19/2011 16:21	29.9	0.006	0.5	0.4	2.00	13.12	275.2
3/19/2011 16:22	30.0	0.006	0.6	0.5	2.50	13.12	275.8
3/19/2011 16:23	30.1	0.006	0.4	0.3	1.70	13.06	275.8
3/19/2011 16:24	30.1	0.006	0.3	0.2	1.20	13.02	276.7
3/19/2011 16:25	30.3	0.006	0.3	0.2	1.30	12.99	275.8
3/19/2011 16:26	29.9	0.006	0.4	0.3	1.70	13.03	275.7
3/19/2011 16:27	30.1	0.006	0.4	0.3	1.70	13.04	276.5
3/19/2011 16:28	30.1	0.006	0.4	0.3	1.70	13.02	276.6
3/19/2011 16:29	30.0	0.006	0.4	0.3	1.70	13.05	275.7
3/19/2011 16:30	30.2	0.006	0.4	0.3	1.70	13.03	276.5
3/19/2011 16:31	30.1	0.006	0.3	0.2	1.20	13.04	275.1
3/19/2011 16:32	30.1	0.006	0.5	0.4	2.20	13.39	275.6
3/19/2011 16:33	30.2	0.006	0.5	0.4	2.00	13.08	276.6
3/19/2011 16:34	30.2	0.006	0.4	0.3	1.70	13.06	277.3
3/19/2011 16:35	30.1	0.006	0.3	0.2	1.20	13.02	276.3
3/19/2011 16:36	30.1	0.006	0.3	0.2	1.20	13.20	275.6
3/19/2011 16:37	30.1	0.006	0.3	0.2	1.20	13.54	275.4
3/19/2011 16:38	29.9	0.006	0.3	0.3	1.50	13.88	274.5
3/19/2011 16:39	30.1	0.005	0.5	0.4	2.20	13.64	275.7
3/19/2011 16:40	30.1	0.005	0.4	0.3	1.70	13.73	275.7
3/19/2011 16:41	30.1	0.005	0.5	0.4	2.20	13.47	276.7
Final Average*	30.1	0.006	0.4	0.3	1.70	13.22	275.9
Maximum*	30.3	0.006	0.6	0.5	2.50	13.88	277.3
Minimum*	29.9	0.005	0.3	0.2	1.20	12.99	274.5

*Does not include Invalid Averaging Periods ("N/A")

CEMS AND REFERENCE METHOD DATA

Reference Method Data

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,866	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	52	%
Ambient Temperature	75	°F
Specific Humidity	0.009505	lb H_2O / lb air

Unit Data

Unit Load	301.8	megawatts
Stack Exhaust Flow (M19)	61,419,787	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 09:32:10	9300	13.16	2.93	0.53
03/19/11 09:32:40	9330	13.16	3.02	0.45
03/19/11 09:33:10	9360	13.14	3.10	0.48
03/19/11 09:33:40	9390	13.18	3.28	0.50
03/19/11 09:34:10	9420	13.19	3.36	0.51
03/19/11 09:34:40	9450	13.16	3.39	0.47
03/19/11 09:35:10	9480	13.15	3.41	0.46
03/19/11 09:35:40	9510	13.15	3.49	0.44
03/19/11 09:36:10	9540	13.15	3.55	0.48
03/19/11 09:36:40	9570	13.14	3.54	0.43
03/19/11 09:37:10	9600	13.15	3.52	0.47
03/19/11 09:37:40	9630	13.15	3.40	0.51
03/19/11 09:38:10	9660	13.15	3.29	0.49
03/19/11 09:38:40	9690	13.15	3.14	0.51
03/19/11 09:39:10	9720	13.15	3.00	0.46
03/19/11 09:39:40	9750	13.16	2.91	0.49
03/19/11 09:40:10	9780	13.16	2.93	0.48
03/19/11 09:40:40	9810	13.17	2.98	0.52
03/19/11 09:41:10	9840	13.15	2.96	0.47
03/19/11 09:41:40	9870	13.15	2.88	0.56
03/19/11 09:42:10	9900	13.16	2.79	0.47
03/19/11 09:42:40	9930	13.18	2.76	0.58
03/19/11 09:43:10	9960	13.18	2.78	0.44
03/19/11 09:43:40	9990	13.17	2.75	0.48
03/19/11 09:44:10	10020	13.16	2.81	0.49
03/19/11 09:44:40	10050	13.16	2.90	0.51
03/19/11 09:45:10	10080	13.16	2.98	0.52
03/19/11 09:45:40	10110	13.15	3.01	0.48
03/19/11 09:46:10	10140	13.15	3.08	0.49
03/19/11 09:46:40	10170	13.16	3.11	0.44
03/19/11 09:47:10	10200	13.16	3.11	0.54
03/19/11 09:47:40	10230	13.17	3.11	0.47
03/19/11 09:48:10	10260	13.17	3.09	0.45
03/19/11 09:48:40	10290	13.18	3.09	0.59
03/19/11 09:49:10	10320	13.17	3.09	0.54
03/19/11 09:49:40	10350	13.16	3.14	0.53
03/19/11 09:50:10	10380	13.16	3.16	0.48
03/19/11 09:50:40	10410	13.16	3.26	0.54
03/19/11 09:51:10	10440	13.16	3.26	0.49
03/19/11 09:51:40	10470	13.15	3.29	0.46
03/19/11 09:52:10	10500	13.16	3.31	0.49
03/19/11 09:52:40	10530	13.16	3.26	0.48
03/19/11 09:53:10	10560	13.15	3.27	0.49
03/19/11 09:53:40	10590	13.16	3.20	0.49
03/19/11 09:54:10	10620	13.17	3.18	0.47
03/19/11 09:54:40	10650	13.18	2.97	0.53
03/19/11 09:55:10	10680	13.17	2.49	0.47
03/19/11 09:55:40	10710	13.16	2.42	0.54
03/19/11 09:56:10	10740	13.17	2.46	0.50
03/19/11 09:56:40	10770	13.17	2.43	0.53
03/19/11 09:57:10	10800	13.16	2.40	0.49
03/19/11 09:57:40	10830	13.16	2.37	0.51
03/19/11 09:58:10	10860	13.18	2.32	0.49
03/19/11 09:58:40	10890	13.19	2.25	0.58
03/19/11 09:59:10	10920	13.17	2.10	0.54
03/19/11 09:59:40	10950	13.17	2.07	0.55

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,866	lb/min
Duct Burner Fuel Flow	0	*lb/min*

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	52	%
Ambient Temperature	75	°F
Specific Humidity	0.009505	lb H_2O / lb air

Unit Data

Unit Load	301.8	megawatts
Stack Exhaust Flow (M19)	61,419,787	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 10:00:10	10980	13.17	2.08	0.53
03/19/11 10:00:40	11010	13.16	2.10	0.48
03/19/11 10:01:10	11040	13.16	2.07	0.51
03/19/11 10:01:40	11070	13.17	2.06	0.56
03/19/11 10:02:10	11100	13.16	2.04	0.49
03/19/11 10:02:40	11130	13.16	2.06	0.52
03/19/11 10:03:10	11160	13.16	2.07	0.50
03/19/11 10:03:40	11190	13.17	2.10	0.57
03/19/11 10:04:10	11220	13.16	2.11	0.59
03/19/11 10:04:40	11250	13.15	2.14	0.59
03/19/11 10:05:10	11280	13.12	2.07	0.95
03/19/11 10:05:40	11310	13.14	2.09	0.60
03/19/11 10:06:10	11340	13.13	2.02	0.55
03/19/11 10:06:40	11370	13.23	1.94	0.63
03/19/11 10:07:10	11400	13.22	1.80	0.81
03/19/11 10:07:40	11430	13.17	1.76	0.61
03/19/11 10:08:10	11460	13.15	1.81	0.56
03/19/11 10:08:40	11490	13.16	1.88	0.56
03/19/11 10:09:10	11520	13.14	1.98	0.51
03/19/11 10:09:40	11550	13.14	2.07	0.59
03/19/11 10:10:10	11580	13.14	2.12	0.89
03/19/11 10:10:40	11610	13.16	2.10	0.70
03/19/11 10:11:10	11640	13.18	1.99	0.64
03/19/11 10:11:40	11670	13.18	1.91	0.59
03/19/11 10:12:10	11700	13.24	1.95	0.62
03/19/11 10:12:40	11730	13.21	1.90	0.64
03/19/11 10:13:10	11760	13.19	1.96	0.62
03/19/11 10:13:40	11790	13.19	1.95	0.53
03/19/11 10:14:10	11820	13.18	1.97	0.58
03/19/11 10:14:40	11850	13.15	2.06	0.46
03/19/11 10:15:10	11880	13.16	2.16	0.69
03/19/11 10:15:40	11910	13.16	2.20	0.64
03/19/11 10:16:10	11940	13.18	2.14	0.54
03/19/11 10:16:40	11970	13.19	2.07	0.58
03/19/11 10:17:10	12000	13.17	1.97	0.62
03/19/11 10:17:40	12030	13.21	1.96	0.76
03/19/11 10:18:10	12060	13.23	1.91	0.70
03/19/11 10:18:40	12090	13.19	1.87	0.67
03/19/11 10:19:10	12120	13.18	1.96	0.65
03/19/11 10:19:40	12150	13.13	2.03	1.05
03/19/11 10:20:10	12180	13.16	2.05	2.46
03/19/11 10:20:40	12210	13.22	2.04	0.97
03/19/11 10:21:10	12240	13.21	2.01	0.67
03/19/11 10:21:40	12270	13.19	1.97	0.65
03/19/11 10:22:10	12300	13.24	2.01	0.52
03/19/11 10:22:40	12330	13.23	1.93	0.62
03/19/11 10:23:10	12360	13.20	1.93	0.60
03/19/11 10:23:40	12390	13.17	2.00	0.55
03/19/11 10:24:10	12420	13.16	2.06	0.49
03/19/11 10:24:40	12450	13.16	2.10	0.64
03/19/11 10:25:10	12480	13.18	2.08	1.25
03/19/11 10:25:40	12510	13.12	2.03	0.67
03/19/11 10:26:10	12540	13.22	2.03	0.45
03/19/11 10:26:40	12570	13.22	1.87	1.00
03/19/11 10:27:10	12600	13.18	1.66	1.34
03/19/11 10:27:40	12630	13.19	1.62	0.87

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,866	lb/min
Duct Burner Fuel Flow	*0*	*lb/min*

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	52	%
Ambient Temperature	75	°F
Specific Humidity	*0.009505*	lb H_2O / lb air

Unit Data

Unit Load	301.8	megawatts
Stack Exhaust Flow (M19)	61,419,787	SCFH

Base Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 10:28:10	12660	13.21	1.64	0.66
03/19/11 10:28:40	12690	13.22	1.69	0.60
03/19/11 10:29:10	12720	13.20	1.74	0.59
03/19/11 10:29:40	12750	13.17	1.82	0.68
03/19/11 10:30:10	12780	13.16	1.91	0.56
03/19/11 10:30:40	12810	13.19	1.98	0.57
03/19/11 10:31:10	12840	13.22	1.96	0.55
03/19/11 10:31:40	12870	13.22	1.91	0.59
RAW AVERAGE		**13.17**	**2.45**	**0.59**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.01	0.09	0.02
Bias	Final Zero	0.04	0.07	-0.03
Bias	Avg. Zero	0.03	0.08	-0.01
Bias	Initial UpScale	12.15	4.93	5.06
Bias	Final UpScale	12.20	4.93	5.07
Bias	Avg. UpScale	12.18	4.93	5.07
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	2.41	0.58
Concentration (ppm@ 15%O_2)	N/A	1.82	0.44
Emission Rate (lb/hr)	N/A	17.65	2.59
Emission Rate (lb/MMBtu)	N/A	0.007	0.001

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.23	in. Hg
Relative Humidity	58	%
Ambient Temperature	71	°F
Specific Humidity	0.009268	lb H_2O / lb air

Unit Data

Unit Load	287.1	megawatts
Stack Exhaust Flow (M19)	60,636,559	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 10:45:10	13680	13.22	2.10	0.49
03/19/11 10:45:40	13710	13.24	2.08	0.57
03/19/11 10:46:10	13740	13.17	2.03	0.58
03/19/11 10:46:40	13770	13.18	2.11	0.55
03/19/11 10:47:10	13800	13.24	2.12	0.59
03/19/11 10:47:40	13830	13.27	1.99	0.72
03/19/11 10:48:10	13860	13.21	1.90	0.72
03/19/11 10:48:40	13890	13.20	1.92	0.54
03/19/11 10:49:10	13920	13.20	2.01	0.53
03/19/11 10:49:40	13950	13.25	2.02	0.46
03/19/11 10:50:10	13980	13.29	1.95	0.62
03/19/11 10:50:40	14010	13.27	1.85	0.56
03/19/11 10:51:10	14040	13.21	1.86	0.63
03/19/11 10:51:40	14070	13.21	1.93	0.59
03/19/11 10:52:10	14100	13.21	2.00	0.52
03/19/11 10:52:40	14130	13.22	1.97	0.57
03/19/11 10:53:10	14160	13.23	1.99	0.47
03/19/11 10:53:40	14190	13.22	1.99	0.52
03/19/11 10:54:10	14220	13.17	1.98	0.43
03/19/11 10:54:40	14250	13.22	2.02	0.53
03/19/11 10:55:10	14280	13.30	1.98	0.63
03/19/11 10:55:40	14310	13.26	1.91	0.57
03/19/11 10:56:10	14340	13.21	1.96	0.47
03/19/11 10:56:40	14370	13.20	2.03	0.57
03/19/11 10:57:10	14400	13.25	2.08	0.45
03/19/11 10:57:40	14430	13.28	2.08	0.52
03/19/11 10:58:10	14460	13.28	2.03	0.57
03/19/11 10:58:40	14490	13.26	2.03	0.53
03/19/11 10:59:10	14520	13.25	2.07	0.54
03/19/11 10:59:40	14550	13.25	2.11	0.51
03/19/11 11:00:10	14580	13.24	2.12	0.43
03/19/11 11:00:40	14610	13.24	2.12	0.49
03/19/11 11:01:10	14640	13.27	2.11	0.47
03/19/11 11:01:40	14670	13.28	1.99	0.51
03/19/11 11:02:10	14700	13.26	1.90	0.60
03/19/11 11:02:40	14730	13.22	1.89	0.48
03/19/11 11:03:10	14760	13.22	1.95	0.50
03/19/11 11:03:40	14790	13.25	1.91	0.53
03/19/11 11:04:10	14820	13.29	1.85	0.52
03/19/11 11:04:40	14850	13.24	1.75	0.52
03/19/11 11:05:10	14880	13.21	1.76	0.46
03/19/11 11:05:40	14910	13.26	1.82	0.48
03/19/11 11:06:10	14940	13.28	1.79	0.55
03/19/11 11:06:40	14970	13.28	1.93	0.52
03/19/11 11:07:10	15000	13.27	2.01	0.53
03/19/11 11:07:40	15030	13.25	2.06	0.51
03/19/11 11:08:10	15060	13.24	2.18	0.43
03/19/11 11:08:40	15090	13.24	2.26	0.35
03/19/11 11:09:10	15120	13.25	2.30	0.52
03/19/11 11:09:40	15150	13.26	2.26	0.48
03/19/11 11:10:10	15180	13.22	2.22	0.45
03/19/11 11:10:40	15210	13.25	2.25	0.46
03/19/11 11:11:10	15240	13.25	2.25	0.55
03/19/11 11:11:40	15270	13.20	2.20	0.51
03/19/11 11:12:10	15300	13.18	2.26	0.42
03/19/11 11:12:40	15330	13.28	2.24	0.50

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.23	in. Hg
Relative Humidity	58	%
Ambient Temperature	71	°F
Specific Humidity	0.009268	lb H_2O / lb air

Unit Data

Unit Load	287.1	megawatts
Stack Exhaust Flow (M19)	60,636,559	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 11:13:10	15360	13.34	2.08	0.62
03/19/11 11:13:40	15390	13.24	1.94	0.65
03/19/11 11:14:10	15420	13.25	1.97	0.46
03/19/11 11:14:40	15450	13.29	2.07	0.52
03/19/11 11:15:10	15480	13.23	2.11	0.48
03/19/11 11:15:40	15510	13.25	2.19	0.56
03/19/11 11:16:10	15540	13.26	2.25	0.49
03/19/11 11:16:40	15570	13.27	2.31	0.56
03/19/11 11:17:10	15600	13.22	2.34	0.53
03/19/11 11:17:40	15630	13.21	2.43	0.43
03/19/11 11:18:10	15660	13.28	2.50	0.41
03/19/11 11:18:40	15690	13.30	2.35	0.49
03/19/11 11:19:10	15720	13.26	2.21	0.51
03/19/11 11:19:40	15750	13.24	2.19	0.51
03/19/11 11:20:10	15780	13.27	2.27	0.50
03/19/11 11:20:40	15810	13.24	2.28	0.49
03/19/11 11:21:10	15840	13.30	2.33	0.58
03/19/11 11:21:40	15870	13.29	2.25	0.52
03/19/11 11:22:10	15900	13.25	2.23	0.59
03/19/11 11:22:40	15930	13.17	2.32	0.54
03/19/11 11:23:10	15960	13.23	2.37	0.46
03/19/11 11:23:40	15990	13.29	2.41	0.47
03/19/11 11:24:10	16020	13.30	2.33	0.48
03/19/11 11:24:40	16050	13.28	2.26	0.50
03/19/11 11:25:10	16080	13.27	2.25	0.49
03/19/11 11:25:40	16110	13.27	2.29	0.43
03/19/11 11:26:10	16140	13.26	2.26	0.45
03/19/11 11:26:40	16170	13.18	2.24	0.43
03/19/11 11:27:10	16200	13.15	2.32	0.45
03/19/11 11:27:40	16230	13.26	2.31	0.37
03/19/11 11:28:10	16260	13.34	2.13	0.63
03/19/11 11:28:40	16290	13.32	1.91	0.72
03/19/11 11:29:10	16320	13.28	1.87	0.56
03/19/11 11:29:40	16350	13.20	1.93	0.54
03/19/11 11:30:10	16380	13.20	2.06	0.52
03/19/11 11:30:40	16410	13.21	2.72	0.50
03/19/11 11:31:10	16440	13.17	2.84	0.48
03/19/11 11:31:40	16470	13.21	2.80	0.41
03/19/11 11:32:10	16500	13.29	2.71	0.60
03/19/11 11:32:40	16530	13.41	2.57	0.84
03/19/11 11:33:10	16560	13.33	2.39	1.06
03/19/11 11:33:40	16590	13.28	2.53	0.73
03/19/11 11:34:10	16620	13.23	2.74	0.49
03/19/11 11:34:40	16650	13.25	2.80	0.57
03/19/11 11:35:10	16680	13.29	2.84	0.55
03/19/11 11:35:40	16710	13.30	2.83	0.63
03/19/11 11:36:10	16740	13.28	2.89	0.54
03/19/11 11:36:40	16770	13.25	2.93	0.47
03/19/11 11:37:10	16800	13.21	2.94	0.48
03/19/11 11:37:40	16830	13.26	2.96	0.44
03/19/11 11:38:10	16860	13.32	3.01	0.53
03/19/11 11:38:40	16890	13.27	2.87	0.47
03/19/11 11:39:10	16920	13.26	2.87	0.47
03/19/11 11:39:40	16950	13.23	3.00	0.44
03/19/11 11:40:10	16980	13.17	3.16	0.42
03/19/11 11:40:40	17010	13.23	3.25	0.41

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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.23	in. Hg
Relative Humidity	58	%
Ambient Temperature	71	°F
Specific Humidity	0.009268	lb H_2O / lb air

Unit Data

Unit Load	287.1	megawatts
Stack Exhaust Flow (M19)	60,636,559	SCFH

Base Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 11:41:10	17040	13.24	3.02	0.50
03/19/11 11:41:40	17070	13.24	2.76	0.51
03/19/11 11:42:10	17100	13.24	2.62	0.52
03/19/11 11:42:40	17130	13.26	2.56	0.49
03/19/11 11:43:10	17160	13.23	2.50	0.54
03/19/11 11:43:40	17190	13.28	2.55	0.54
03/19/11 11:44:10	17220	13.23	2.50	0.60
03/19/11 11:44:40	17250	13.19	2.59	0.52
RAW AVERAGE		**13.25**	**2.26**	**0.53**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.04	0.07	-0.03
Bias	**Final Zero**	0.13	0.07	-0.15
Bias	**Avg. Zero**	0.09	0.07	-0.09
Bias	**Initial UpScale**	12.20	4.93	5.07
Bias	**Final UpScale**	12.30	4.90	5.08
Bias	**Avg. UpScale**	12.25	4.92	5.08
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	2.23	0.59
Concentration (ppm@ 15%O_2)	N/A	1.69	0.44
Emission Rate (lb/hr)	N/A	16.17	2.58
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	39	%
Ambient Temperature	81	°F
Specific Humidity	0.008678	lb H_2O / lb air

Unit Data

Unit Load	279.6	megawatts
Stack Exhaust Flow (M19)	60,016,087	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 12:05:10	18480	13.29	2.63	0.51
03/19/11 12:05:40	18510	13.27	2.68	0.48
03/19/11 12:06:10	18540	13.26	2.79	0.40
03/19/11 12:06:40	18570	13.28	2.84	0.40
03/19/11 12:07:10	18600	13.31	2.93	0.42
03/19/11 12:07:40	18630	13.40	2.83	0.53
03/19/11 12:08:10	18660	13.40	2.67	0.62
03/19/11 12:08:40	18690	13.35	2.67	0.52
03/19/11 12:09:10	18720	13.29	2.79	0.49
03/19/11 12:09:40	18750	13.27	2.89	0.40
03/19/11 12:10:10	18780	13.33	3.01	0.45
03/19/11 12:10:40	18810	13.43	2.89	0.57
03/19/11 12:11:10	18840	13.40	2.69	0.65
03/19/11 12:11:40	18870	13.39	2.68	0.58
03/19/11 12:12:10	18900	13.38	2.67	0.48
03/19/11 12:12:40	18930	13.34	2.72	0.45
03/19/11 12:13:10	18960	13.34	2.85	0.42
03/19/11 12:13:40	18990	13.31	2.95	0.46
03/19/11 12:14:10	19020	13.27	2.99	0.40
03/19/11 12:14:40	19050	13.36	2.99	0.34
03/19/11 12:15:10	19080	13.43	2.69	0.53
03/19/11 12:15:40	19110	13.45	2.43	0.61
03/19/11 12:16:10	19140	13.42	2.38	0.64
03/19/11 12:16:40	19170	13.39	2.49	0.50
03/19/11 12:17:10	19200	13.31	2.64	0.50
03/19/11 12:17:40	19230	13.26	2.85	0.31
03/19/11 12:18:10	19260	13.24	2.92	0.37
03/19/11 12:18:40	19290	13.40	2.82	0.44
03/19/11 12:19:10	19320	13.49	2.50	0.75
03/19/11 12:19:40	19350	13.48	2.31	0.86
03/19/11 12:20:10	19380	13.50	2.38	0.79
03/19/11 12:20:40	19410	13.51	2.48	0.71
03/19/11 12:21:10	19440	13.48	2.68	0.60
03/19/11 12:21:40	19470	13.46	2.88	0.56
03/19/11 12:22:10	19500	13.38	3.02	0.55
03/19/11 12:22:40	19530	13.32	3.09	0.48
03/19/11 12:23:10	19560	13.32	2.93	0.39
03/19/11 12:23:40	19590	13.38	2.89	0.45
03/19/11 12:24:10	19620	13.42	2.83	0.46
03/19/11 12:24:40	19650	13.37	2.84	0.54
03/19/11 12:25:10	19680	13.27	3.00	0.45
03/19/11 12:25:40	19710	13.23	3.20	0.28
03/19/11 12:26:10	19740	13.23	3.13	0.29
03/19/11 12:26:40	19770	13.33	3.03	0.40
03/19/11 12:27:10	19800	13.45	2.44	0.60
03/19/11 12:27:40	19830	13.56	1.91	1.07
03/19/11 12:28:10	19860	13.55	1.88	1.21
03/19/11 12:28:40	19890	13.49	2.02	0.89
03/19/11 12:29:10	19920	13.42	2.21	0.59
03/19/11 12:29:40	19950	13.43	2.34	0.57
03/19/11 12:30:10	19980	13.34	2.28	0.62
03/19/11 12:30:40	20010	13.42	2.21	0.44
03/19/11 12:31:10	20040	13.46	2.07	0.59
03/19/11 12:31:40	20070	13.39	1.90	0.60
03/19/11 12:32:10	20100	13.33	1.86	0.41
03/19/11 12:32:40	20130	13.30	1.92	0.47

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	39	%
Ambient Temperature	81	°F
Specific Humidity	0.008678	lb H_2O / lb air

Unit Data

Unit Load	279.6	megawatts
Stack Exhaust Flow (M19)	60,016,087	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 12:33:10	20160	13.29	1.95	0.40
03/19/11 12:33:40	20190	13.33	1.93	0.37
03/19/11 12:34:10	20220	13.41	1.87	0.47
03/19/11 12:34:40	20250	13.33	1.73	0.50
03/19/11 12:35:10	20280	13.41	1.79	0.57
03/19/11 12:35:40	20310	13.49	1.78	0.68
03/19/11 12:36:10	20340	13.45	1.75	0.79
03/19/11 12:36:40	20370	13.41	1.88	0.59
03/19/11 12:37:10	20400	13.35	2.00	0.42
03/19/11 12:37:40	20430	13.35	2.10	0.44
03/19/11 12:38:10	20460	13.34	2.18	0.37
03/19/11 12:38:40	20490	13.30	2.22	0.40
03/19/11 12:39:10	20520	13.30	2.30	0.42
03/19/11 12:39:40	20550	13.36	2.31	0.34
03/19/11 12:40:10	20580	13.37	2.17	0.48
03/19/11 12:40:40	20610	13.35	2.08	0.49
03/19/11 12:41:10	20640	13.35	2.06	0.43
03/19/11 12:41:40	20670	13.31	2.05	0.47
03/19/11 12:42:10	20700	13.32	2.09	0.37
03/19/11 12:42:40	20730	13.46	2.12	0.45
03/19/11 12:43:10	20760	13.42	2.03	0.63
03/19/11 12:43:40	20790	13.41	2.09	0.69
03/19/11 12:44:10	20820	13.44	2.14	0.57
03/19/11 12:44:40	20850	13.42	2.18	0.63
03/19/11 12:45:10	20880	13.40	2.25	0.57
03/19/11 12:45:40	20910	13.37	2.36	0.52
03/19/11 12:46:10	20940	13.35	2.40	0.47
03/19/11 12:46:40	20970	13.34	2.35	0.36
03/19/11 12:47:10	21000	13.32	2.30	0.39
03/19/11 12:47:40	21030	13.31	2.36	0.33
03/19/11 12:48:10	21060	13.28	2.34	0.35
03/19/11 12:48:40	21090	13.32	2.26	0.37
03/19/11 12:49:10	21120	13.35	2.13	0.42
03/19/11 12:49:40	21150	13.35	1.91	0.41
03/19/11 12:50:10	21180	13.35	1.75	0.49
03/19/11 12:50:40	21210	13.50	1.69	0.52
03/19/11 12:51:10	21240	13.58	1.62	1.01
03/19/11 12:51:40	21270	13.55	1.70	0.91
03/19/11 12:52:10	21300	13.45	1.89	0.64
03/19/11 12:52:40	21330	13.48	2.06	0.54
03/19/11 12:53:10	21360	13.44	2.12	0.54
03/19/11 12:53:40	21390	13.39	2.11	0.47
03/19/11 12:54:10	21420	13.39	2.08	0.41
03/19/11 12:54:40	21450	13.41	1.95	0.47
03/19/11 12:55:10	21480	13.35	1.87	0.41
03/19/11 12:55:40	21510	13.37	1.89	0.39
03/19/11 12:56:10	21540	13.39	1.92	0.40
03/19/11 12:56:40	21570	13.34	1.93	0.35
03/19/11 12:57:10	21600	13.36	1.97	0.37
03/19/11 12:57:40	21630	13.45	1.96	0.48
03/19/11 12:58:10	21660	13.41	1.83	0.54
03/19/11 12:58:40	21690	13.33	1.79	0.43
03/19/11 12:59:10	21720	13.46	1.82	0.49
03/19/11 12:59:40	21750	13.38	1.69	0.57
03/19/11 13:00:10	21780	13.33	1.72	0.44
03/19/11 13:00:40	21810	13.38	1.78	0.37

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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.25	in. Hg
Relative Humidity	39	%
Ambient Temperature	81	°F
Specific Humidity	0.008678	lb H_2O / lb air

Unit Data

Unit Load	279.6	megawatts
Stack Exhaust Flow (M19)	60,016,087	SCFH

Base Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 13:01:10	21840	13.37	1.82	0.49
03/19/11 13:01:40	21870	13.37	1.83	0.44
03/19/11 13:02:10	21900	13.47	1.90	0.40
03/19/11 13:02:40	21930	13.46	1.84	0.56
03/19/11 13:03:10	21960	13.43	1.89	0.50
03/19/11 13:03:40	21990	13.37	2.00	0.47
03/19/11 13:04:10	22020	13.37	2.08	0.34
03/19/11 13:04:40	22050	13.33	2.07	0.32
RAW AVERAGE		**13.38**	**2.30**	**0.51**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.13	0.07	-0.15
Bias	Final Zero	0.25	0.06	-0.16
Bias	Avg. Zero	0.19	0.07	-0.16
Bias	Initial UpScale	12.30	4.90	5.08
Bias	Final UpScale	12.37	4.85	4.96
Bias	Avg. UpScale	12.34	4.88	5.02
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.14	2.29	0.63
Concentration (ppm@ 15%O_2)	N/A	1.74	0.48
Emission Rate (lb/hr)	N/A	16.40	2.75
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,812	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	43	%
Ambient Temperature	82	°F
Specific Humidity	0.009913	lb H_2O / lb air

Unit Data

Unit Load	277.4	megawatts
Stack Exhaust Flow (M19)	59,870,616	SCFH

Base Load, Run - 4

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 13:17:10	22800	13.43	1.76	0.44
03/19/11 13:17:40	22830	13.37	1.69	0.51
03/19/11 13:18:10	22860	13.38	1.71	0.44
03/19/11 13:18:40	22890	13.35	1.73	0.42
03/19/11 13:19:10	22920	13.32	1.73	0.34
03/19/11 13:19:40	22950	13.37	1.77	0.29
03/19/11 13:20:10	22980	13.46	1.75	0.59
03/19/11 13:20:40	23010	13.46	1.65	0.65
03/19/11 13:21:10	23040	13.47	1.73	0.54
03/19/11 13:21:40	23070	13.42	1.71	0.63
03/19/11 13:22:10	23100	13.34	1.79	0.47
03/19/11 13:22:40	23130	13.41	1.89	0.35
03/19/11 13:23:10	23160	13.53	1.89	0.65
03/19/11 13:23:40	23190	13.44	1.82	0.62
03/19/11 13:24:10	23220	13.48	1.97	0.48
03/19/11 13:24:40	23250	13.46	1.98	0.52
03/19/11 13:25:10	23280	13.43	2.01	0.46
03/19/11 13:25:40	23310	13.40	2.06	0.48
03/19/11 13:26:10	23340	13.37	2.10	0.47
03/19/11 13:26:40	23370	13.38	2.17	0.41
03/19/11 13:27:10	23400	13.34	2.18	0.32
03/19/11 13:27:40	23430	13.39	2.21	0.42
03/19/11 13:28:10	23460	13.37	2.19	0.36
03/19/11 13:28:40	23490	13.34	2.18	0.36
03/19/11 13:29:10	23520	13.40	2.20	0.39
03/19/11 13:29:40	23550	13.52	2.07	0.50
03/19/11 13:30:10	23580	13.47	1.92	0.73
03/19/11 13:30:40	23610	13.46	1.98	0.50
03/19/11 13:31:10	23640	13.36	2.01	0.47
03/19/11 13:31:40	23670	13.36	2.05	0.34
03/19/11 13:32:10	23700	13.41	2.10	0.44
03/19/11 13:32:40	23730	13.53	2.07	0.63
03/19/11 13:33:10	23760	13.43	2.01	0.61
03/19/11 13:33:40	23790	13.38	2.09	0.52
03/19/11 13:34:10	23820	13.34	2.15	0.45
03/19/11 13:34:40	23850	13.34	2.22	0.30
03/19/11 13:35:10	23880	13.30	2.29	0.24
03/19/11 13:35:40	23910	13.31	2.33	0.36
03/19/11 13:36:10	23940	13.42	2.23	0.39
03/19/11 13:36:40	23970	13.42	2.01	0.57
03/19/11 13:37:10	24000	13.39	1.88	0.46
03/19/11 13:37:40	24030	13.38	1.90	0.52
RAW AVERAGE		**13.40**	**1.98**	**0.47**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.25	0.06	-0.16
	Final Zero	0.28	0.06	-0.13
	Avg. Zero	0.27	0.06	-0.15
	Initial UpScale	12.37	4.85	4.96
	Final UpScale	12.39	4.82	4.97
	Avg. UpScale	12.38	4.84	4.97
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.12	1.98	0.59
Concentration (ppm@ 15%O_2)	N/A	1.50	0.45
Emission Rate (lb/hr)	N/A	14.18	2.57
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	42	%
Ambient Temperature	82	°F
Specific Humidity	0.009679	lb H_2O / lb air

Unit Data

Unit Load	277.7	megawatts
Stack Exhaust Flow (M19)	59,443,765	SCFH

Base Load, Run - 5

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 13:50:10	24780	13.43	1.84	0.51
03/19/11 13:50:40	24810	13.37	1.82	0.49
03/19/11 13:51:10	24840	13.32	1.88	0.38
03/19/11 13:51:40	24870	13.29	1.97	0.35
03/19/11 13:52:10	24900	13.33	2.05	0.30
03/19/11 13:52:40	24930	13.32	2.01	0.46
03/19/11 13:53:10	24960	13.27	1.96	0.45
03/19/11 13:53:40	24990	13.31	1.96	0.40
03/19/11 13:54:10	25020	13.36	1.89	0.39
03/19/11 13:54:40	25050	13.43	1.80	0.53
03/19/11 13:55:10	25080	13.44	1.73	0.61
03/19/11 13:55:40	25110	13.41	1.78	0.59
03/19/11 13:56:10	25140	13.39	1.86	0.53
03/19/11 13:56:40	25170	13.41	1.94	0.52
03/19/11 13:57:10	25200	13.44	1.96	0.51
03/19/11 13:57:40	25230	13.48	2.00	0.51
03/19/11 13:58:10	25260	13.41	2.04	0.50
03/19/11 13:58:40	25290	13.35	2.11	0.35
03/19/11 13:59:10	25320	13.40	2.20	0.34
03/19/11 13:59:40	25350	13.38	2.17	0.50
03/19/11 14:00:10	25380	13.32	2.11	0.44
03/19/11 14:00:40	25410	13.35	2.15	0.37
03/19/11 14:01:10	25440	13.44	2.10	0.40
03/19/11 14:01:40	25470	13.39	1.95	0.60
03/19/11 14:02:10	25500	13.34	1.94	0.43
03/19/11 14:02:40	25530	13.35	1.97	0.31
03/19/11 14:03:10	25560	13.37	1.97	0.40
03/19/11 14:03:40	25590	13.40	1.96	0.44
03/19/11 14:04:10	25620	13.37	1.90	0.46
03/19/11 14:04:40	25650	13.37	1.94	0.35
03/19/11 14:05:10	25680	13.39	1.99	0.34
03/19/11 14:05:40	25710	13.35	1.97	0.43
03/19/11 14:06:10	25740	13.36	1.97	0.40
03/19/11 14:06:40	25770	13.41	1.98	0.45
03/19/11 14:07:10	25800	13.39	1.94	0.47
03/19/11 14:07:40	25830	13.41	1.97	0.41
03/19/11 14:08:10	25860	13.39	1.96	0.46
03/19/11 14:08:40	25890	13.32	1.94	0.40
03/19/11 14:09:10	25920	13.30	2.02	0.32
03/19/11 14:09:40	25950	13.30	2.06	0.35
03/19/11 14:10:10	25980	13.36	2.06	0.40
03/19/11 14:10:40	26010	13.36	1.93	0.41
RAW AVERAGE		**13.37**	**1.97**	**0.43**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.28	0.06	-0.13
Bias	**Final Zero**	0.28	0.06	-0.20
Bias	**Avg. Zero**	0.28	0.06	-0.17
Bias	**Initial UpScale**	12.39	4.82	4.97
Bias	**Final UpScale**	12.37	4.81	4.94
Bias	**Avg. UpScale**	12.38	4.82	4.96
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	1.98	0.58
Concentration (ppm@ 15%O_2)	N/A	1.50	0.44
Emission Rate (lb/hr)	N/A	14.07	2.49
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	42	%
Ambient Temperature	82	°F
Specific Humidity	0.009679	lb H_2O / lb air

Unit Data

Unit Load	277.0	megawatts
Stack Exhaust Flow(M19)	59,416,932	SCFH

Base Load, Run - 6

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 14:21:10	26640	13.37	1.69	0.44
03/19/11 14:21:40	26670	13.36	1.69	0.40
03/19/11 14:22:10	26700	13.35	1.74	0.37
03/19/11 14:22:40	26730	13.38	1.80	0.39
03/19/11 14:23:10	26760	13.34	1.84	0.44
03/19/11 14:23:40	26790	13.36	1.86	0.37
03/19/11 14:24:10	26820	13.44	1.89	0.40
03/19/11 14:24:40	26850	13.33	1.77	0.46
03/19/11 14:25:10	26880	13.34	1.82	0.36
03/19/11 14:25:40	26910	13.36	1.82	0.43
03/19/11 14:26:10	26940	13.34	1.82	0.42
03/19/11 14:26:40	26970	13.32	1.85	0.42
03/19/11 14:27:10	27000	13.34	1.90	0.37
03/19/11 14:27:40	27030	13.32	1.90	0.45
03/19/11 14:28:10	27060	13.33	1.91	0.37
03/19/11 14:28:40	27090	13.35	1.91	0.33
03/19/11 14:29:10	27120	13.34	1.86	0.37
03/19/11 14:29:40	27150	13.33	1.83	0.47
03/19/11 14:30:10	27180	13.34	1.84	0.41
03/19/11 14:30:40	27210	13.37	1.87	0.43
03/19/11 14:31:10	27240	13.39	1.85	0.56
03/19/11 14:31:40	27270	13.46	1.89	0.56
03/19/11 14:32:10	27300	13.45	1.89	0.60
03/19/11 14:32:40	27330	13.41	2.01	0.53
03/19/11 14:33:10	27360	13.38	2.10	0.47
03/19/11 14:33:40	27390	13.36	2.13	0.39
03/19/11 14:34:10	27420	13.38	2.16	0.35
03/19/11 14:34:40	27450	13.35	2.17	0.37
03/19/11 14:35:10	27480	13.32	2.17	0.42
03/19/11 14:35:40	27510	13.32	2.18	0.25
03/19/11 14:36:10	27540	13.34	2.09	0.32
03/19/11 14:36:40	27570	13.28	1.94	0.43
03/19/11 14:37:10	27600	13.30	1.89	0.35
03/19/11 14:37:40	27630	13.33	1.83	0.35
03/19/11 14:38:10	27660	13.35	1.76	0.37
03/19/11 14:38:40	27690	13.30	1.72	0.34
03/19/11 14:39:10	27720	13.33	1.75	0.41
03/19/11 14:39:40	27750	13.30	1.76	0.35
03/19/11 14:40:10	27780	13.25	1.77	0.36
03/19/11 14:40:40	27810	13.35	1.84	0.41
03/19/11 14:41:10	27840	13.46	1.78	0.61
03/19/11 14:41:40	27870	13.40	1.75	0.78
RAW AVERAGE		**13.35**	**1.88**	**0.42**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.28	0.06	-0.20
	Final Zero	0.25	0.06	-0.20
	Avg. Zero	0.27	0.06	-0.20
	Initial UpScale	12.37	4.81	4.94
	Final UpScale	12.36	4.82	4.93
	Avg. UpScale	12.37	4.82	4.94
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	1.89	0.60
Concentration (ppm@ 15%O_2)	N/A	1.43	0.45
Emission Rate (lb/hr)	N/A	13.41	2.57
Emission Rate (lb/MMBtu)	N/A	0.005	0.001

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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.20	in. Hg
Relative Humidity	43	%
Ambient Temperature	83	°F
Specific Humidity	0.010251	lb H_2O / lb air

Unit Data

Unit Load	277.0	megawatts
Stack Exhaust Flow (M19)	59,337,548	SCFH

Base Load, Run - 7

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 14:51:10	28440	13.28	2.14	0.30
03/19/11 14:51:40	28470	13.30	2.14	0.36
03/19/11 14:52:10	28500	13.26	2.04	0.33
03/19/11 14:52:40	28530	13.31	2.04	0.34
03/19/11 14:53:10	28560	13.37	1.97	0.48
03/19/11 14:53:40	28590	13.34	1.86	0.64
03/19/11 14:54:10	28620	13.34	1.90	0.47
03/19/11 14:54:40	28650	13.32	1.93	0.51
03/19/11 14:55:10	28680	13.32	1.95	0.37
03/19/11 14:55:40	28710	13.36	2.00	0.49
03/19/11 14:56:10	28740	13.41	2.00	0.54
03/19/11 14:56:40	28770	13.36	1.99	0.60
03/19/11 14:57:10	28800	13.32	2.07	0.49
03/19/11 14:57:40	28830	13.27	2.12	0.46
03/19/11 14:58:10	28860	13.32	2.21	0.39
03/19/11 14:58:40	28890	13.32	2.14	0.40
03/19/11 14:59:10	28920	13.28	2.09	0.37
03/19/11 14:59:40	28950	13.36	2.10	0.42
03/19/11 15:00:10	28980	13.34	2.00	0.65
03/19/11 15:00:40	29010	13.37	1.97	0.46
03/19/11 15:01:10	29040	13.36	2.00	0.44
03/19/11 15:01:40	29070	13.33	2.07	0.46
03/19/11 15:02:10	29100	13.33	2.19	0.46
03/19/11 15:02:40	29130	13.35	2.22	0.40
03/19/11 15:03:10	29160	13.33	2.18	0.47
03/19/11 15:03:40	29190	13.38	2.19	0.42
03/19/11 15:04:10	29220	13.34	2.11	0.40
03/19/11 15:04:40	29250	13.29	2.13	0.50
03/19/11 15:05:10	29280	13.31	2.18	0.36
03/19/11 15:05:40	29310	13.34	2.13	0.41
03/19/11 15:06:10	29340	13.33	1.98	0.39
03/19/11 15:06:40	29370	13.37	1.95	0.47
03/19/11 15:07:10	29400	13.39	1.86	0.53
03/19/11 15:07:40	29430	13.38	1.84	0.56
03/19/11 15:08:10	29460	13.30	1.90	0.48
03/19/11 15:08:40	29490	13.25	2.00	0.38
03/19/11 15:09:10	29520	13.31	2.04	0.31
03/19/11 15:09:40	29550	13.34	1.89	0.51
03/19/11 15:10:10	29580	13.29	1.76	0.49
03/19/11 15:10:40	29610	13.29	1.73	0.41
03/19/11 15:11:10	29640	13.31	1.76	0.41
03/19/11 15:11:40	29670	13.27	1.74	0.37
RAW AVERAGE		**13.33**	**2.01**	**0.45**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.25	0.06	-0.20
	Final Zero	0.26	0.06	-0.14
	Avg. Zero	0.26	0.06	-0.17
	Initial UpScale	12.36	4.82	4.93
	Final UpScale	12.34	4.82	5.00
	Avg. UpScale	12.35	4.82	4.97
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.08	2.02	0.59
Concentration (ppm@ 15%O_2)	N/A	1.52	0.44
Emission Rate (lb/hr)	N/A	14.33	2.54
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,800	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.18	in. Hg
Relative Humidity	43	%
Ambient Temperature	82	°F
Specific Humidity	0.009926	lb H_2O / lb air

Unit Data

Unit Load	276.1	megawatts
Stack Exhaust Flow (M19)	59,315,799	SCFH

Base Load, Run - 8

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 15:21:10	30240	13.34	2.09	0.43
03/19/11 15:21:40	30270	13.33	2.05	0.41
03/19/11 15:22:10	30300	13.34	2.03	0.43
03/19/11 15:22:40	30330	13.32	2.04	0.46
03/19/11 15:23:10	30360	13.28	2.08	0.41
03/19/11 15:23:40	30390	13.31	2.18	0.37
03/19/11 15:24:10	30420	13.28	2.16	0.40
03/19/11 15:24:40	30450	13.29	2.15	0.42
03/19/11 15:25:10	30480	13.30	2.07	0.46
03/19/11 15:25:40	30510	13.38	2.02	0.52
03/19/11 15:26:10	30540	13.52	1.92	0.90
03/19/11 15:26:40	30570	13.45	1.85	0.93
03/19/11 15:27:10	30600	13.39	2.01	0.64
03/19/11 15:27:40	30630	13.41	2.12	0.52
03/19/11 15:28:10	30660	13.42	2.20	0.65
03/19/11 15:28:40	30690	13.39	2.19	0.62
03/19/11 15:29:10	30720	13.35	2.20	0.52
03/19/11 15:29:40	30750	13.32	2.19	0.50
03/19/11 15:30:10	30780	13.31	2.13	0.40
03/19/11 15:30:40	30810	13.41	2.10	0.40
03/19/11 15:31:10	30840	13.37	2.06	0.59
03/19/11 15:31:40	30870	13.34	2.06	0.48
03/19/11 15:32:10	30900	13.45	2.16	0.52
03/19/11 15:32:40	30930	13.44	2.08	0.62
03/19/11 15:33:10	30960	13.41	2.09	0.50
03/19/11 15:33:40	30990	13.39	2.18	0.46
03/19/11 15:34:10	31020	13.31	2.24	0.42
03/19/11 15:34:40	31050	13.27	2.34	0.41
03/19/11 15:35:10	31080	13.30	2.38	0.31
03/19/11 15:35:40	31110	13.35	2.29	0.34
03/19/11 15:36:10	31140	13.31	2.15	0.42
03/19/11 15:36:40	31170	13.29	2.03	0.41
03/19/11 15:37:10	31200	13.27	2.02	0.40
03/19/11 15:37:40	31230	13.27	2.00	0.37
03/19/11 15:38:10	31260	13.37	1.94	0.45
03/19/11 15:38:40	31290	13.39	1.75	0.61
03/19/11 15:39:10	31320	13.35	1.66	0.59
03/19/11 15:39:40	31350	13.33	1.66	0.53
03/19/11 15:40:10	31380	13.37	1.67	0.46
03/19/11 15:40:40	31410	13.27	1.66	0.54
03/19/11 15:41:10	31440	13.25	1.66	0.34
03/19/11 15:41:40	31470	13.25	1.72	0.37
RAW AVERAGE		**13.34**	**2.04**	**0.49**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.26	0.06	-0.14
Bias	Final Zero	0.25	0.06	-0.08
Bias	Avg. Zero	0.26	0.06	-0.11
Bias	Initial UpScale	12.34	4.82	5.00
Bias	Final UpScale	12.35	4.81	4.93
Bias	Avg. UpScale	12.35	4.82	4.97
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.10	2.05	0.58
Concentration (ppm@ 15%O_2)	N/A	1.55	0.44
Emission Rate (lb/hr)	N/A	14.53	2.50
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
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Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.17	in. Hg
Relative Humidity	43	%
Ambient Temperature	80	°F
Specific Humidity	0.009294	lb H_2O / lb air

Unit Data

Unit Load	275.9	megawatts
Stack Exhaust Flow (M19)	59,385,570	SCFH

Base Load, Run - 9

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 15:51:10	32040	13.25	1.83	0.38
03/19/11 15:51:40	32070	13.24	2.03	0.31
03/19/11 15:52:10	32100	13.40	2.01	0.37
03/19/11 15:52:40	32130	13.38	1.86	0.75
03/19/11 15:53:10	32160	13.32	1.83	0.60
03/19/11 15:53:40	32190	13.34	1.89	0.52
03/19/11 15:54:10	32220	13.36	1.89	0.53
03/19/11 15:54:40	32250	13.36	1.87	0.59
03/19/11 15:55:10	32280	13.32	1.82	0.49
03/19/11 15:55:40	32310	13.32	1.83	0.44
03/19/11 15:56:10	32340	13.31	1.83	0.45
03/19/11 15:56:40	32370	13.32	1.87	0.45
03/19/11 15:57:10	32400	13.34	1.89	0.43
03/19/11 15:57:40	32430	13.38	1.82	0.55
03/19/11 15:58:10	32460	13.36	1.75	0.55
03/19/11 15:58:40	32490	13.37	1.79	0.50
03/19/11 15:59:10	32520	13.28	1.84	0.47
03/19/11 15:59:40	32550	13.34	1.95	0.38
03/19/11 16:00:10	32580	13.32	1.97	0.40
03/19/11 16:00:40	32610	13.25	2.00	0.45
03/19/11 16:01:10	32640	13.28	2.10	0.38
03/19/11 16:01:40	32670	13.36	2.07	0.44
03/19/11 16:02:10	32700	13.33	1.94	0.54
03/19/11 16:02:40	32730	13.34	1.91	0.52
03/19/11 16:03:10	32760	13.29	1.92	0.47
03/19/11 16:03:40	32790	13.26	1.96	0.36
03/19/11 16:04:10	32820	13.30	2.06	0.40
03/19/11 16:04:40	32850	13.32	2.04	0.47
03/19/11 16:05:10	32880	13.30	2.02	0.52
03/19/11 16:05:40	32910	13.36	2.03	0.50
03/19/11 16:06:10	32940	13.30	1.96	0.57
03/19/11 16:06:40	32970	13.26	2.00	0.55
03/19/11 16:07:10	33000	13.26	2.07	0.50
03/19/11 16:07:40	33030	13.28	2.10	0.46
03/19/11 16:08:10	33060	13.31	2.09	0.43
03/19/11 16:08:40	33090	13.35	2.05	0.60
03/19/11 16:09:10	33120	13.39	2.01	0.62
03/19/11 16:09:40	33150	13.36	2.01	0.66
03/19/11 16:10:10	33180	13.31	2.08	0.50
03/19/11 16:10:40	33210	13.29	2.07	0.39
03/19/11 16:11:10	33240	13.29	2.08	0.48
03/19/11 16:11:40	33270	13.31	2.10	0.36
RAW AVERAGE		**13.32**	**1.96**	**0.48**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.25	0.06	-0.08
Bias	Final Zero	0.22	0.06	-0.15
Bias	Avg. Zero	0.24	0.06	-0.12
Bias	Initial UpScale	12.35	4.81	4.93
Bias	Final UpScale	12.32	4.82	5.03
Bias	Avg. UpScale	12.34	4.82	4.98
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.08	1.97	0.58
Concentration (ppm@ 15%O_2)	N/A	1.49	0.44
Emission Rate (lb/hr)	N/A	13.96	2.50
Emission Rate (lb/MMBtu)	N/A	0.005	0.001

Florida Power and Light
March 19, 2011
Mitsubishi, 501G, Unit 3B
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,806	lb/min
Duct Burner Fuel Flow	0	lb/min

Weather Data

Barometric Pressure	30.17	in. Hg
Relative Humidity	42	%
Ambient Temperature	80	°F
Specific Humidity	0.009075	lb H_2O / lb air

Unit Data

Unit Load	275.9	megawatts
Stack Exhaust Flow (M19)	59,413,263	SCFH

Base Load, Run - 10

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/19/11 16:21:10	33840	13.31	1.95	0.44
03/19/11 16:21:40	33870	13.41	2.00	0.59
03/19/11 16:22:10	33900	13.38	1.97	0.75
03/19/11 16:22:40	33930	13.36	2.04	0.59
03/19/11 16:23:10	33960	13.33	2.10	0.60
03/19/11 16:23:40	33990	13.30	2.13	0.50
03/19/11 16:24:10	34020	13.26	2.21	0.43
03/19/11 16:24:40	34050	13.27	2.25	0.41
03/19/11 16:25:10	34080	13.25	2.27	0.44
03/19/11 16:25:40	34110	13.25	2.27	0.36
03/19/11 16:26:10	34140	13.29	2.20	0.39
03/19/11 16:26:40	34170	13.29	2.08	0.51
03/19/11 16:27:10	34200	13.30	2.00	0.48
03/19/11 16:27:40	34230	13.30	2.02	0.53
03/19/11 16:28:10	34260	13.29	2.00	0.48
03/19/11 16:28:40	34290	13.27	2.03	0.50
03/19/11 16:29:10	34320	13.27	2.08	0.41
03/19/11 16:29:40	34350	13.35	2.13	0.50
03/19/11 16:30:10	34380	13.29	2.07	0.58
03/19/11 16:30:40	34410	13.28	2.11	0.45
03/19/11 16:31:10	34440	13.25	2.16	0.48
03/19/11 16:31:40	34470	13.32	2.21	0.40
03/19/11 16:32:10	34500	13.37	2.12	0.61
03/19/11 16:32:40	34530	13.34	2.01	0.62
03/19/11 16:33:10	34560	13.33	2.04	0.61
03/19/11 16:33:40	34590	13.33	2.04	0.56
03/19/11 16:34:10	34620	13.31	2.04	0.59
03/19/11 16:34:40	34650	13.32	2.06	0.47
03/19/11 16:35:10	34680	13.28	2.11	0.38
03/19/11 16:35:40	34710	13.25	2.18	0.43
03/19/11 16:36:10	34740	13.29	2.23	0.45
03/19/11 16:36:40	34770	13.33	2.15	0.51
03/19/11 16:37:10	34800	13.25	2.06	0.49
03/19/11 16:37:40	34830	13.26	2.08	0.39
03/19/11 16:38:10	34860	13.24	2.05	0.39
03/19/11 16:38:40	34890	13.28	1.95	0.37
03/19/11 16:39:10	34920	13.33	1.83	0.56
03/19/11 16:39:40	34950	13.28	1.72	0.53
03/19/11 16:40:10	34980	13.28	1.73	0.52
03/19/11 16:40:40	35010	13.34	1.70	0.60
03/19/11 16:41:10	35040	13.33	1.65	0.59
03/19/11 16:41:40	35070	13.33	1.68	0.63
RAW AVERAGE		**13.30**	**2.04**	**0.50**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.22	0.06	-0.15
Bias	**Final Zero**	0.21	0.07	-0.12
Bias	**Avg. Zero**	0.22	0.07	-0.14
Bias	**Initial UpScale**	12.32	4.82	5.03
Bias	**Final UpScale**	12.31	4.83	5.04
Bias	**Avg. UpScale**	12.32	4.83	5.04
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	13.09	2.05	0.61
Concentration (ppm@ 15%O_2)	N/A	1.55	0.46
Emission Rate (lb/hr)	N/A	14.52	2.62
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

APPENDIX C

CALIBRATION GAS CERTIFICATIONS

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-55510
Project No.: 05-86523-002

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM019345 **Certification Date:** 05Apr2010 **Exp. Date:** 04Apr2013
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	8.91 %	+/- 1%	Direct NIST and VSL
OXYGEN	12.1 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	01Apr2010	NDIR
CAI/110P/V03018	17Mar2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

CARBON DIOXIDE

First Triad Analysis:

Date: 09Apr2010	Response Unit:MV	
Z1=0.00000	R1=100.0000	T1=56.20000
R2=100.0000	Z2=0.00000	T2=56.16000
Z3=0.00000	T3=56.24000	R3=100.1600
Avg. Concentration:	8.916	%

Calibration Curve:

Concentration=A+Bx+Cx2+Dx3+Ex4	
r=0.999989193	
Constants:	A=-0.00227705
B=0.142642211	C=-0.0004667
D=0.0000133988	E=0

OXYGEN

First Triad Analysis:

Date: 09Apr2010	Response Unit:%	
Z1=0.00000	R1=23.20000	T1=12.11000
R2=23.20000	Z2=0.00000	T2=12.10000
Z3=0.00000	T3=12.09000	R3=23.19000
Avg. Concentration:	12.08	%

Calibration Curve:

Concentration=A+Bx+Cx2+Dx3+Ex4	
r=0.9999996852	
Constants:	A=-0.0380151
B=1.001181065	C=0
D=0	E=0

APPROVED BY: aOru

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

RATA CLASS

Dual-Analyzed Calibration Standard

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: ALAS-56936

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-88735-006
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM004185 **Certification Date:** 21Jun2010 **Exp. Date:** 20Jun2013
Cylinder Pressure***:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	19.1 %	+/- 1%	Direct NIST and VSL
OXYGEN	21.1 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	07Jun2010	NDIR
CAI/110P/V03018	11Jun2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | Second Triad Analysis | Calibration Curve

CARBON DIOXIDE

Date: 21Jun2010 Response Unit:MV
Z1=0.00000 R1=100.0000 T1=90.42000
R2=100.0000 Z2=0.00000 T2=90.50000
Z3=0.00000 T3=90.50000 R3=100.0000
Avg. Concentration: 19.07 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999986
Constants: A=-0.00586731
B=0.131065552 C=-0.0001375
D=1.12705E-06 E=0

OXYGEN

Date: 21Jun2010 Response Unit:%
Z1=0.00000 R1=23.20000 T1=21.15000
R2=23.20000 Z2=0.00000 T2=21.15000
Z3=0.00000 T3=21.15000 R3=23.20000
Avg. Concentration: 21.14 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999
Constants: A=-0.00484606
B=0.999830474 C=0
D=0 E=0

Special Notes: PART# AH095

APPROVED BY: ______________
JEFF CROTEAU

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: 11010210
Document # : 40522095-002

Customer
AIR HYGIENE INTERNATIONAL

MIKE SCOTT
5634 S 122ND E AVE
TULSA OK 74146
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL191 **Certification Date:** 15Feb2011 **Exp. Date:** 16Aug2011
Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	4.89	PPM	+/- 1%	Direct NIST and VSL
CARBON MONOXIDE	4.92	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	4.93	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2629	15Aug2013	KAL003004	19.83 PPM	NITRIC OXIDE
NTRM 2635	05May2016	KAL003163	25.21 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
ECO PHYSICS/CLD 84M/84M0369	07Feb2011	CHEMI
SIEMENS I/ULTRAMAT 6E/N1-VN-0545	25Jan2011	NDIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

NITRIC OXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 08Feb2011 Response Unit: MV	Date: 15Feb2011 Response Unit: MV	Concentration=A+8x+Cx2+Dx3+Ex4
Z1=0.00000 R1=19.83000 T1=4.85900	Z1=0.00000 R1=19.72000 T1=4.83700	r=0.9999
R2=19.84000 Z2=0.00000 T2=4.86000	R2=19.73000 Z2=0.00000 T2=4.83400	Constants: A=0.036017895
Z3=0.00000 T3=4.85700 R3=19.84000	Z3=0.00000 T3=4.83100 R3=19.73000	B=0.999152579 C=0
Avg. Concentration: 4.889 PPM	Avg. Concentration: 4.891 PPM	D=0 E=0

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 08Feb2011 Response Unit: MV	Date: 15Feb2011 Response Unit: MV	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00000 R1=25.40000 T1=4.60000	Z1=0.00000 R1=25.21000 T1=4.61000	r=0.9999
R2=25.40000 Z2=0.00000 T2=4.60000	R2=25.21000 Z2=0.00000 T2=4.61000	Constants: A=0.02020944
Z3=0.00000 T3=4.60000 R3=25.40000	Z3=0.00000 T3=4.61000 R3=25.21000	B=1.096985091 C=-0.0077427
Avg. Concentration: 4.898 PPM	Avg. Concentration: 4.944 PPM	D=0.000148781 E=0

Special Notes: AH070

APPROVED BY: HILARY THATCHER

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory
P.O. No.: ALASG-55510
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
Project No.: 05-86916-005
1290 COMBERMERE STREET
TROY, MI 48083

Customer
AIR LIQUIDE AMERICA L.P.

AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106
P

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL13310 **Certification Date:** 22Apr2010 **Exp. Date:** 21Apr2012
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	12.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
	02Oct2010	KAL003166	25.21 PPM	CARBON MONOXIDE
NTRM 2629	01Jun2010	KAL004325	20.36 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	02Apr2010	FTIR
ECO PHYSICS/CLD 84M/84M0359	19Apr2010	CHEMI

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 14Apr2010 Response Unit:PPM	Date: 21Apr2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.05307 R1=25.30663 T1=12.10338	Z1=-0.06291 R1=25.26965 T1=12.17129	r=9.99986E-1
R2=25.31267 Z2=-0.05306 T2=12.12388	R2=25.30621 Z2=-0.02751 T2=12.19590	Constants: A=0.00000E+0
Z3=-0.03830 T3=12.14423 R3=25.34334	Z3=0.02191 T3=12.19939 R3=25.34779	B=8.81389E-1 C=5.84000E-4
Avg. Concentration: 12.09 PPM	Avg. Concentration: 12.15 PPM	D=1.00000E-6 E=0.00000E+0

NITRIC OXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 14Apr2010 Response Unit:MV	Date: 21Apr2010 Response Unit: MV	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00000 R1=20.33000 T1=12.05000	Z1=0.00000 R1=20.29000 T1=11.96000	r=0.999989
R2=20.35000 Z2=0.00000 T2=12.05000	R2=20.28000 Z2=0.00000 T2=11.96000	Constants: A=0.052499
Z3=0.00000 T3=12.05000 R3=20.34000	Z3=0.00000 T3=11.96000 R3=20.29000	B=0.998591 C=0.000000
Avg. Concentration: 12.11 PPM	Avg. Concentration: 12.04 PPM	D=0.000000 E=0.000000

Special Notes: AH072 Lot Number: 0586916005

APPROVED BY: Rob. McCrandall

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-59094
Project No.: 05-91737-001

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM041691 **Certification Date:** 28Sep2010 **Exp. Date:** 29Mar2011
Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
NITROGEN DIOXIDE	48.2 PPM	+/- 2%	NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2654	02Oct2012	AAL069467	487.0 PPM	NITROGEN DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
AMETEK 921/921 CE NO2/AW-921-S281	17Sep2010	UV

Special Notes: PART# AH032 RANGE: 45-50 PPM
LOT # 0591737001

APPROVED BY: ______________________
HILARY THATCHER

APPENDIX D

QUALITY ASSURANCE AND QUALITY CONTROL DATA

QA/QC PROGRAM

Air Hygiene ensures the quality and validity of its emission measurement and reporting procedures through a rigorous quality assurance (QA) program. The program is developed and administered by an internal QA team and encompasses five major areas:

1. QA reviews of reports, laboratory work, and field testing
2. Equipment calibration and maintenance
3. Chain-of-custody
4. Training
5. Knowledge of current test methods

Each of these areas is discussed individually below.

QA Reviews

Air Hygiene's review procedure includes review of each source test report, along with laboratory and fieldwork, by the QA Team. The most important review is the one that takes place before a test program begins. The QA Team works closely with technical division personnel to prepare and review test protocols. Test protocol review includes selection of appropriate test procedures, evaluation of interferences or other restrictions that might preclude use of standard test procedures, and evaluation and/or development of alternate procedures.

Equipment Calibration and Maintenance

The equipment used to conduct the emission measurements is maintained according to the manufacturer's instructions to ensure proper operation. In addition to the maintenance program, calibrations are carried out on each measurement device according to the schedule outlined by the Environmental Protection Agency. Quality control checks are also conducted in the field for each test program.

Chain-of-Custody

Air Hygiene maintains full chain-of-custody documentation on all samples and data sheets. In addition to normal documentation of changes between field sample custodians, laboratory personnel, and field test personnel, Air Hygiene documents every individual who handles any test component in the field (e.g., probe wash, impinger loading and recovery, filter loading and recovery, etc.). Samples are stored in a locked area to which only Air Hygiene personnel have access. Field data sheets are secured at Air Hygiene's offices upon return from the field.

Training

Personnel's training is essential to ensure quality testing. Air Hygiene has formal and informal training programs, which include:

1. Attendance at EPA-sponsored training courses
2. Enrollment in EPA correspondence courses
3 A requirement for all technicians to read and understand Air Hygiene's QA manual
4. In-house training and QA meetings on a regular basis
5. Maintenance of training records

Knowledge of Current Test Methods

With the constant updating of standard test methods and the wide variety of emerging test procedures, it is essential that any qualified source tester keep abreast of new developments. Air Hygiene subscribes to services, which provide updates on EPA reference methods, rules, and regulations. Additionally, source test personnel regularly attend and present papers at testing and emission-related seminars and conferences. Air Hygiene personnel maintain membership in the Air and Waste Management Association and the American Industrial Hygiene Association.

COMBUSTION TESTING QUALITY ASSURANCE ACTIVITIES

A number of quality assurance activities were undertaken before, during, and after this testing project. This section of the report combined with the documentation in Appendix C describes each of those activities.

Each instrument's response was checked and adjusted in the field prior to the collection of data via multi-point calibration. The instrument's linearity was checked by adjusting its zero and span responses to zero nitrogen and an upscale calibration gas in the range of the expected concentrations. The instrument response was then challenged with other calibration gases of known concentration and accepted as being linear if the response of the other calibration gases agreed within plus or minus two percent of the range of predicted values. NO_2 to NO conversion was checked via direct connect with an EPA Protocol certified concentration of NO_2 in a balance of nitrogen. Conversion was verified to be between 90 and 110 percent.

After each test run, the analyzers were checked for zero and span drift. This allowed each test run to be bracketed by calibrations and documents the precision of the data just collected. The criterion for acceptable data is that the instrument drift is no more than three percent of the full-scale response. The quality assurance worksheets in the following pages summarize all multipoint calibration checks and zero to span checks performed during the tests. These worksheets (as prepared from the data records of Appendix A) show that no drifts in excess of three percent occurred in the zero to span checks following each test run.

The sampling systems were leak checked by demonstrating that a vacuum greater than 10 in Hg could be held for at least one minute with a decline of less than one inch of Hg. A leak test was conducted after the sample system was set up and before the system was dismantled. This test was conducted to ensure that ambient air had not diluted the sample. Any leakage detected prior to the tests would be repaired and another leak check conducted before testing commenced. No leaks were found during the pre or post-test leak checks.

The absence of leaks in the sampling system was also verified by a sampling system bias check. The sampling system's integrity was tested by comparing the responses of the analyzers to the calibration gases introduced via two paths. The first path was directly into the analyzer and the second path via the sample system at the sample probe. Any difference in the instrument responses by these two methods was attributed to sampling system bias or leakage. The criterion for acceptance is agreement within five percent of the span of the analyzer.

The control gases used to calibrate the instruments were analyzed and certified by the compressed gas vendors to plus or minus one percent accuracy for all gases. EPA Protocol No. 1 was used, where applicable to assign the concentration values traceable to the National Institute of Standards and Technology (NIST), Standard Reference Materials (SRM's). The gas calibration sheets as prepared by the vendor are contained in Appendix C.

Air Hygiene collected and reported the enclosed test data in accordance with the procedures and quality assurance activities described in this test report. Air Hygiene makes no warranty as to the suitability of the test methods. Air Hygiene also assumes no liability relating to the interpretation and use of the test data.

INSTRUMENTAL ANALYSIS
QUALITY ASSURANCE DATA

Date: March 19, 2011
Company: Florida Power and Light
Location: Loxahatchee, Florida
Techs: JRF

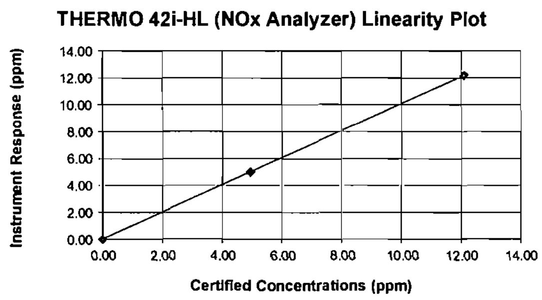
Sample System Leak Check

Date	Sample System	Leak Rate (l/min)
March 19, 2011	1	0

Calibration Date: March 19, 2011
Client: Florida Power and Light

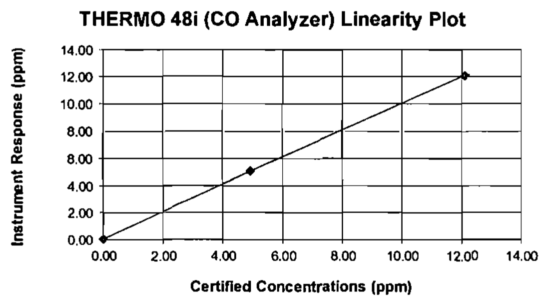
NOx Span (ppm) = 12.10

THERMO 42i-HL (NOx Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.03	0.25	0.03	YES (%)
4.93	5.00	0.58	0.07	YES (%)
12.10	12.22	0.99	0.12	YES (%)
Linearity = 0.993				



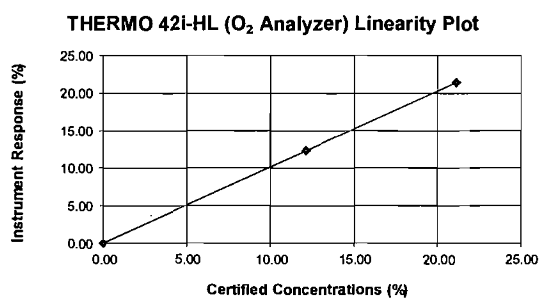
CO Span (ppm) = 12.10

THERMO 48i (CO Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.08	0.66	0.08	YES (%)
4.92	5.10	1.49	0.18	YES (%)
12.10	12.11	0.08	0.01	YES (%)
Linearity = 1.007				



O_2 Span (%) = 21.10

THERMO 42i-HL (O_2 Analyzer)				
Certified Concentration (%)	Instrument Response (%)	Calibration Error (%)	Absolute Conc. (%)	Pass or Fail (±2%, ≤0.5%)
0.00	0.03	0.14	0.03	YES (%)
12.10	12.34	1.14	0.24	YES (%)
21.10	21.46	1.71	0.36	YES (%)
Linearity = 0.985				



NOx Converter Efficiency

Date: March 19, 2011

Analyzer: INST-N2-0001

RM 7E, (12-17-09), Sections 7.1.4; 8.2.4.1; 12.7; and 13.5 Introduce NO_2 to the analyzer and record the NOx concentration displayed. ... Calculate the converter efficiency using Equation 7E-7. The specification for converter efficiency must be met. ... Air Hygiene also references ALT-0013 for specific NO_2 concentration (40-60 ppm) and EPA Traceability Protocol requirements (±2%).

Audit Gas:	NO_2 Concentration (C_v), ppmvd	**48.20**
Converter Efficiency Calculations:		
	Analyzer Reading, NO Channel, ppmvd	**1.95**
	Analyzer Reading, NOx Channel, ppmvd	**47.95**
	Analyzer Reading, NO_2 Channel ($C_{Dir(NO2)}$), ppmvd	**46.00**
	Converter Efficiency, %	**95.44**

RM 7E, (08-15-06), 13.5 NO2 to NO Conversion Efficiency Test (as applicable). The NO2 to NO conversion efficiency, calculated according to Equation 7E-7 or Equation 7E-9, must be greater than or equal to 90 percent.

$$Eff_{NO2} = \left(\frac{C_{Dir}}{C_V}\right) \times 100 \qquad \text{Eq. 7E-7} = \frac{46.00 \text{ ppmvd}}{48.20 \text{ ppmvd}} \times 100 = 95.44\%$$

Date/Time mm/dd/yy hh:mm:ss	Elapsed Time Seconds	NOx ppmvd	NO ppmvd
03/19/11 07:19:40	1350	12.73	4.42
03/19/11 07:20:10	1380	39.46	2.55
03/19/11 07:20:40	1410	46.43	2.20
03/19/11 07:21:10	1440	47.34	2.09
03/19/11 07:21:40	1470	47.72	2.00
03/19/11 07:22:10	***1500***	***47.95***	***1.95***
03/19/11 07:22:40	1530	45.46	1.79
03/19/11 07:23:10	1560	15.84	0.54

DRIFT AND BIAS CHECK			
Strat Test Pre and Post QA/QC Check	**O2**	**CO**	**NOx**
Initial Zero	0.01	0.02	0.09
Final Zero	0.04	-0.03	0.07
Avg. Zero	0.03	-0.01	0.08
Initial UpScale	12.15	5.06	4.93
Final UpScale	12.20	5.07	4.93
Avg. UpScale	12.18	5.07	4.93
Sys Resp (Zero)	0.03	0.08	0.03
Sys Resp (Upscale)	12.34	5.10	5.00
Upscale Cal Gas	12.10	4.92	4.93
Initial Zero Bias	-0.09%	-0.50%	0.50%
Final Zero Bias	0.05%	-0.91%	0.33%
Zero Drift	0.14%	0.41%	0.17%
Initial Upscale Bias	-0.90%	-0.33%	-0.58%
Final Upscale Bias	-0.66%	-0.25%	-0.58%
Upscale Drift	0.24%	0.08%	0.00%
Alternative Specification Abs Diff **Initial Zero**	0.02	0.06	0.06
Alternative Specification Abs Diff **Final Zero**	0.01	0.11	0.04
Alternative Specification Abs Diff **Initial Upscale**	0.19	0.04	0.07
Alternative Specification Abs Diff **Final Upscale**	0.14	0.03	0.07
Calibration Span	21.10	12.10	12.10
3% of Range (drift)	0.63	0.36	0.36
5% of Range (bias)	1.06	0.61	0.61

Respone Time (min)	0.7	1.3	1.3
Sys. Response (min)		1.3	

Date/Time mm/dd/yy hh:mm:ss	z	O2 %	s	z	CO ppm	s	z	NOx ppm	s	**INJECTIONS**
03/19/11 07:57:10		13.07			0.54			2.50		x
03/19/11 07:57:20		13.06			0.52			2.51		
03/19/11 07:57:30		8.50			0.47			2.51		
03/19/11 07:57:40		11.09			0.37			2.52		
03/19/11 07:57:50		**12.10**	x		0.28			2.14		
03/19/11 07:58:00		**12.13**		x	**0.15**			1.15		
03/19/11 07:58:10		**12.12**			**-0.08**			0.46		
03/19/11 07:58:20		**12.15**			**-0.05**		x	**0.24**		
03/19/11 07:58:30		**12.14**			**-0.02**			**0.09**		
03/19/11 07:58:40		**12.14**			**-0.06**			**0.08**		
03/19/11 07:58:50		**12.14**			**0.03**			**0.08**		
03/19/11 07:59:00		**12.15**			**-0.04**			**0.07**		
03/19/11 07:59:10		**12.14**			**-0.01**			**0.06**		x
03/19/11 07:59:20		**12.15**			**-0.13**			**0.06**		
03/19/11 07:59:30		**12.14**			**-0.04**			**0.06**		
03/19/11 07:59:40		5.09			**0.10**			**0.06**		
03/19/11 07:59:50	x	**0.20**			0.82			0.38		
03/19/11 08:00:00		**0.07**			2.43			1.13		
03/19/11 08:00:10		**0.03**			3.76			2.14		
03/19/11 08:00:20		**0.03**			4.51			3.70		
03/19/11 08:00:30		**0.02**			**4.82**	x		**4.72**	x	
03/19/11 08:00:40		**0.01**			**4.97**			**4.80**		
03/19/11 08:00:50		**0.00**			**4.98**			**4.85**		
03/19/11 08:01:00		**0.01**			**5.08**			**4.86**		
03/19/11 08:01:10		**-0.01**			**5.17**			**4.87**		
03/19/11 08:01:20		**-0.02**			**4.97**			**4.88**		
03/19/11 08:01:30		**-0.02**			**4.97**			**4.89**		

DRIFT AND BIAS CHECK			
Base Load, Run - 1	**O_2**	**NOx**	**CO**
Raw Average	13.17	2.45	0.59
Corrected Average	13.09	2.41	0.58
Initial Zero	0.01	0.09	0.02
Final Zero	0.04	0.07	-0.03
Avg. Zero	0.03	0.08	-0.01
Initial UpScale	12.15	4.93	5.06
Final UpScale	12.20	4.93	5.07
Avg. UpScale	12.18	4.93	5.07
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.09%	0.50%	-0.50%
Final Zero Bias	0.05%	0.33%	-0.91%
Zero Drift	0.14%	0.17%	0.41%
Initial Upscale Bias	-0.90%	-0.58%	-0.33%
Final Upscale Bias	-0.66%	-0.58%	-0.25%
Upscale Drift	0.24%	0.00%	0.08%
Alternative Specification Abs Diff **Initial Zero**	0.02	0.06	0.06
Final Zero	0.01	0.04	0.11
Initial Upscale	0.19	0.07	0.04
Final Upscale	0.14	0.07	0.03
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 2	**O_2**	**NOx**	**CO**
Raw Average	13.25	2.26	0.53
Corrected Average	13.09	2.23	0.59
Initial Zero	0.04	0.07	-0.03
Final Zero	0.13	0.07	-0.15
Avg. Zero	0.09	0.07	-0.09
Initial UpScale	12.20	4.93	5.07
Final UpScale	12.30	4.90	5.08
Avg. UpScale	12.25	4.92	5.08
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.05%	0.33%	-0.91%
Final Zero Bias	0.47%	0.33%	-1.90%
Zero Drift	0.43%	0.00%	0.99%
Initial Upscale Bias	-0.66%	-0.58%	-0.25%
Final Upscale Bias	-0.19%	-0.83%	-0.17%
Upscale Drift	0.47%	0.25%	0.08%
Alternative Specification Abs Diff **Initial Zero**	0.01	0.04	0.11
Final Zero	0.10	0.04	0.23
Initial Upscale	0.14	0.07	0.03
Final Upscale	0.04	0.10	0.02
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 3	O_2	NOx	CO
Raw Average	13.38	2.30	0.51
Corrected Average	13.14	2.29	0.63
Initial Zero	0.13	0.07	-0.15
Final Zero	0.25	0.06	-0.16
Avg. Zero	0.19	0.07	-0.16
Initial UpScale	12.30	4.90	5.08
Final UpScale	12.37	4.85	4.96
Avg. UpScale	12.34	4.88	5.02
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.47%	0.33%	-1.90%
Final Zero Bias	1.04%	0.25%	-1.98%
Zero Drift	0.57%	0.08%	0.08%
Initial Upscale Bias	-0.19%	-0.83%	-0.17%
Final Upscale Bias	0.14%	-1.24%	-1.16%
Upscale Drift	0.33%	0.41%	0.99%
Alternative Specification Abs Diff: Initial Zero	0.10	0.04	0.23
Final Zero	0.22	0.03	0.24
Initial Upscale	0.04	0.10	0.02
Final Upscale	0.03	0.15	0.14
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 4	O_2	NOx	CO
Raw Average	13.40	1.98	0.47
Corrected Average	13.12	1.98	0.59
Initial Zero	0.25	0.06	-0.16
Final Zero	0.28	0.06	-0.13
Avg. Zero	0.27	0.06	-0.15
Initial UpScale	12.37	4.85	4.96
Final UpScale	12.39	4.82	4.97
Avg. UpScale	12.38	4.84	4.97
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.04%	0.25%	-1.98%
Final Zero Bias	1.18%	0.25%	-1.74%
Zero Drift	0.14%	0.00%	0.25%
Initial Upscale Bias	0.14%	-1.24%	-1.16%
Final Upscale Bias	0.24%	-1.49%	-1.07%
Upscale Drift	0.09%	0.25%	0.08%
Alternative Specification Abs Diff: Initial Zero	0.22	0.03	0.24
Final Zero	0.25	0.03	0.21
Initial Upscale	0.03	0.15	0.14
Final Upscale	0.05	0.18	0.13
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 5	O_2	NOx	CO
Raw Average	13.37	1.97	0.43
Corrected Average	13.09	1.98	0.58
Initial Zero	0.28	0.06	-0.13
Final Zero	0.28	0.06	-0.20
Avg. Zero	0.28	0.06	-0.17
Initial UpScale	12.39	4.82	4.97
Final UpScale	12.37	4.81	4.94
Avg. UpScale	12.38	4.82	4.96
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.18%	0.25%	-1.74%
Final Zero Bias	1.18%	0.25%	-2.31%
Zero Drift	0.00%	0.00%	0.58%
Initial Upscale Bias	0.24%	-1.49%	-1.07%
Final Upscale Bias	0.14%	-1.57%	-1.32%
Upscale Drift	0.09%	0.08%	0.25%
Alternative Specification Abs Diff — Initial Zero	0.25	0.03	0.21
Final Zero	0.25	0.03	0.28
Initial Upscale	0.05	0.18	0.13
Final Upscale	0.03	0.19	0.16
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 6	O_2	NOx	CO
Raw Average	13.35	1.88	0.42
Corrected Average	13.09	1.89	0.60
Initial Zero	0.28	0.06	-0.20
Final Zero	0.25	0.06	-0.20
Avg. Zero	0.27	0.06	-0.20
Initial UpScale	12.37	4.81	4.94
Final UpScale	12.36	4.82	4.93
Avg. UpScale	12.37	4.82	4.94
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.18%	0.25%	-2.31%
Final Zero Bias	1.04%	0.25%	-2.31%
Zero Drift	0.14%	0.00%	0.00%
Initial Upscale Bias	0.14%	-1.57%	-1.32%
Final Upscale Bias	0.09%	-1.49%	-1.40%
Upscale Drift	0.05%	0.08%	0.08%
Alternative Specification Abs Diff — Initial Zero	0.25	0.03	0.28
Final Zero	0.22	0.03	0.28
Initial Upscale	0.03	0.19	0.16
Final Upscale	0.02	0.18	0.17
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 7	O_2	NOx	CO
Raw Average	13.33	2.01	0.45
Corrected Average	13.08	2.02	0.59
Initial Zero	0.25	0.06	-0.20
Final Zero	0.26	0.06	-0.14
Avg. Zero	0.26	0.06	-0.17
Initial UpScale	12.36	4.82	4.93
Final UpScale	12.34	4.82	5.00
Avg. UpScale	12.35	4.82	4.97
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.04%	0.25%	-2.31%
Final Zero Bias	1.09%	0.25%	-1.82%
Zero Drift	0.05%	0.00%	0.50%
Initial Upscale Bias	0.09%	-1.49%	-1.40%
Final Upscale Bias	0.00%	-1.49%	-0.83%
Upscale Drift	0.09%	0.00%	0.58%
Alternative Specification Abs Diff: Initial Zero	0.22	0.03	0.28
Final Zero	0.23	0.03	0.22
Initial Upscale	0.02	0.18	0.17
Final Upscale	0.00	0.18	0.10
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 8	O_2	NOx	CO
Raw Average	13.34	2.04	0.49
Corrected Average	13.10	2.05	0.58
Initial Zero	0.26	0.06	-0.14
Final Zero	0.25	0.06	-0.08
Avg. Zero	0.26	0.06	-0.11
Initial UpScale	12.34	4.82	5.00
Final UpScale	12.35	4.81	4.93
Avg. UpScale	12.35	4.82	4.97
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.09%	0.25%	-1.82%
Final Zero Bias	1.04%	0.25%	-1.32%
Zero Drift	0.05%	0.00%	0.50%
Initial Upscale Bias	0.00%	-1.49%	-0.83%
Final Upscale Bias	0.05%	-1.57%	-1.40%
Upscale Drift	0.05%	0.08%	0.58%
Alternative Specification Abs Diff: Initial Zero	0.23	0.03	0.22
Final Zero	0.22	0.03	0.16
Initial Upscale	0.00	0.18	0.10
Final Upscale	0.01	0.19	0.17
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 9	O_2	NOx	CO
Raw Average	13.32	1.96	0.48
Corrected Average	13.08	1.97	0.58
Initial Zero	0.25	0.06	-0.08
Final Zero	0.22	0.06	-0.15
Avg. Zero	0.24	0.06	-0.12
Initial UpScale	12.35	4.81	4.93
Final UpScale	12.32	4.82	5.03
Avg. UpScale	12.34	4.82	4.98
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	1.04%	0.25%	-1.32%
Final Zero Bias	0.90%	0.25%	-1.90%
Zero Drift	0.14%	0.00%	0.58%
Initial Upscale Bias	0.05%	-1.57%	-1.40%
Final Upscale Bias	-0.09%	-1.49%	-0.58%
Upscale Drift	0.14%	0.08%	0.83%
Alternative Specification Abs Diff: Initial Zero	0.22	0.03	0.16
Final Zero	0.19	0.03	0.23
Initial Upscale	0.01	0.19	0.17
Final Upscale	0.02	0.18	0.07
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base Load, Run - 10	O_2	NOx	CO
Raw Average	13.30	2.04	0.50
Corrected Average	13.09	2.05	0.61
Initial Zero	0.22	0.06	-0.15
Final Zero	0.21	0.07	-0.12
Avg. Zero	0.22	0.07	-0.14
Initial UpScale	12.32	4.82	5.03
Final UpScale	12.31	4.83	5.04
Avg. UpScale	12.32	4.83	5.04
Sys Resp (Zero)	0.03	0.03	0.08
Sys Resp (Upscale)	12.34	5.00	5.10
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.90%	0.25%	-1.90%
Final Zero Bias	0.85%	0.33%	-1.65%
Zero Drift	0.05%	0.08%	0.25%
Initial Upscale Bias	-0.09%	-1.49%	-0.58%
Final Upscale Bias	-0.14%	-1.40%	-0.50%
Upscale Drift	0.05%	0.08%	0.08%
Alternative Specification Abs Diff: Initial Zero	0.19	0.03	0.23
Final Zero	0.18	0.04	0.20
Initial Upscale	0.02	0.18	0.07
Final Upscale	0.03	0.17	0.06
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

APPENDIX E

STRATIFICATION TEST DATA

Source Information	
Company	Florida Power and Light
Plant Name	West County Energy Center
Equipment	Mitsubishi 501G
Location	Loxahatchee, Florida

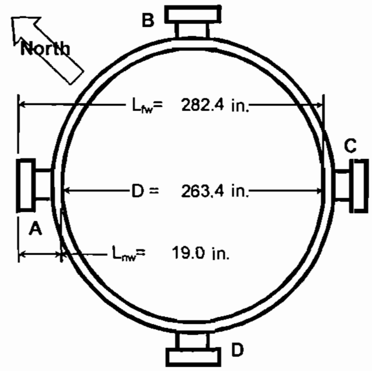
Test Information	
Date	03/19/11
Project #	bv-10-westcounty.fl-comp#2
Unit Number	3B
Load	Base Load
Number of Ports Available	4
Number of Ports Used	4

Stack and Test Type		
○ Isokinetic Traverse (Wet Chemistry Testing)		**Circular Stack**
○ Velocity Traverse (Flow and Flow RATA Test)		
○ Stratification Traverse (Compliance Test)	☐ RM 20	
◉ **Stratification Traverse (RATA)**	☐ Part 60 ☑ Part 75	

METHOD 1 - STRATIFICATION TEST FOR A CIRCULAR SOURCE

Company	Florida Power and Light	**Date**	03/19/11
Plant Name	West County Energy Center	**Project #**	bv-10-westcounty.fl-comp#2
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

Circular Stack or Duct Diameter			
Distance to Far Wall of Stack	(L_{fw})	282.38	in.
Distance to Near Wall of Stack	(L_{nw})	19.00	in.
Diameter of Stack	(D)	263.38	in.
Area of Stack	(A_s)	378.35	ft^2

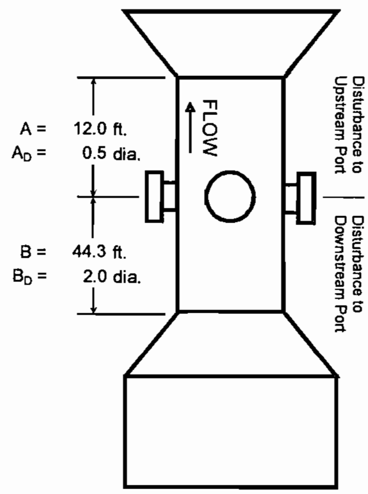


Distance from Disturbances to Port			
Distance Upstream	(A)	144.00	in.
Diameters Upstream	(A_D)	0.55	diameters
Distance Downstream	(B)	531.75	in.
Diameters Downstream	(B_D)	2.02	diameters

Number of Traverse Points Required					
Diameters to Flow Disturbance		Minimum Number of[1] Traverse Points		Minimum Number of Traverse Points Comp Stratification	
Down (B_D) Stream	Up (A_D) Stream	Particulate Points	Velocity Points	Criteria	Points
2.00-4.99	0.50-1.24	24	16	RM 7E 8.1.2	12 RM1 pts
5.00-5.99	1.25-1.49	20	16	Alt 7E 8.1.2	3 points
6.00-6.99	1.50-1.74	16	12		
7.00-7.99	1.75-1.99	12	12		
>= 8.00	>=2.00	8 or 12[2]	8 or 12[2]	**Minimum Number of Traverse Points RATA Stratification**	
Upstream Spec		24	16		
Downstream Spec		24	16		
Traverse Pts Required		24	16	**Criteria**	**Points**
				● Part75/60	12 RM1 pts
				75 abrv (a)	3 points
				75 abrv (b)	6 points
					12 points

[1] Check Minimum Number of Points for the Upstream and Downstream conditions, then use the largest.

[2] 8 for Circular Stacks 12 to 24 inches
12 for Circular Stacks over 24 inches



Number of Traverse Points Used				
4	Ports by	3	Pts / port	Stratification Traverse
12	Pts Used	12	Required	(RATA)

Traverse Point Locations			
Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	4.4%	11 5/8	30 5/8
2	14.6%	38 4/8	57 4/8
3	29.6%	78	97
4			
5			
6			
7			
8			
9			
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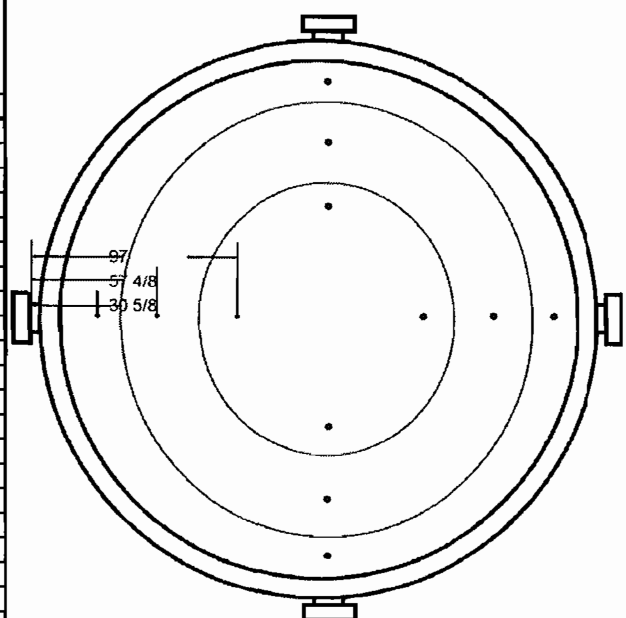


STRATIFICATION TRAVERSE (RATA) RESULTS

Company	Florida Power and Light	Date	03/19/11
Plant Name	West County Energy Center	Project #	bv-10-westcounty.fl-comp#2
Equipment	Mitsubishi 501G	# of Ports Available	4
Location	Loxahatchee, Florida	# of Ports Used	4

Stack Dimensions			
Diameter or Length of Stack	(D)	263.38	in.
Width of Stack	(W)		in.
Area of Stack	(A_s)	378.35	ft^2

Traverse Data			
4	Ports by	3	Pts / port
12	Pts Used	12	Required
Run Start	8:47:10	Run End	9:26:40

Traverse Point	Time Per Point	Point Start Time	Point Stop Time (Reading)	O2	Percent Difference	CO	Percent Difference	NOx	Percent Difference
	min.	hh:mm:ss	hh:mm:ss	%	%	ppm	%	ppm	%
D-3	3.00	8:47:10	8:50:10	13.09	**0.30%**	0.55	7.84%	2.69	9.91%
D-2	3.00	8:50:10	8:53:10	13.10	0.23%	0.51	0.00%	2.58	5.41%
D-1	3.00	8:53:10	8:56:10	13.10	0.23%	0.55	7.84%	2.53	3.37%
C-3	4.50	8:56:10	9:00:40	13.09	**0.30%**	0.50	1.96%	2.88	17.67%
C-2	3.00	9:00:40	9:03:40	13.12	0.08%	0.45	11.76%	2.46	0.51%
C-1	3.00	9:03:40	9:06:40	13.12	0.08%	0.51	0.00%	2.18	10.93%
B-3	4.00	9:06:40	9:10:40	13.15	0.15%	0.45	11.76%	2.94	**20.12%**
B-2	3.00	9:10:40	9:13:40	13.16	0.23%	0.50	1.96%	2.19	10.52%
B-1	3.00	9:13:40	9:16:40	13.16	0.23%	0.52	1.96%	2.13	12.97%
A-3	4.00	9:16:40	9:20:40	13.15	0.15%	0.55	7.84%	2.32	5.21%
A-2	3.00	9:20:40	9:23:40	13.17	0.30%	0.61	**19.61%**	2.22	9.30%
A-1	3.00	9:23:40	9:26:40	13.15	0.15%	0.42	17.65%	2.25	8.07%
Average				13.13		0.51		2.45	

RATA SAMPLE POINTS FOR CIRCULAR STACK

Company	Florida Power and Light	**Date**	03/19/11
Plant Name	West County Energy Center	**Project #**	bv-10-westcounty.fl-comp#2
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

Stack Dimensions				**Traverse Data**			
Diameter or Length of Stack	(D)	263.38	in.	4	**Ports by**	3	**Pts / port**
Width of Stack	(W)		in.	12	**Pts Used**	12	**Required**
Area of Stack	(A_s)	378.35	ft^2	**Run Start**	8:47:10	**Run End**	9:26:40

40 CFR 75 Criteria

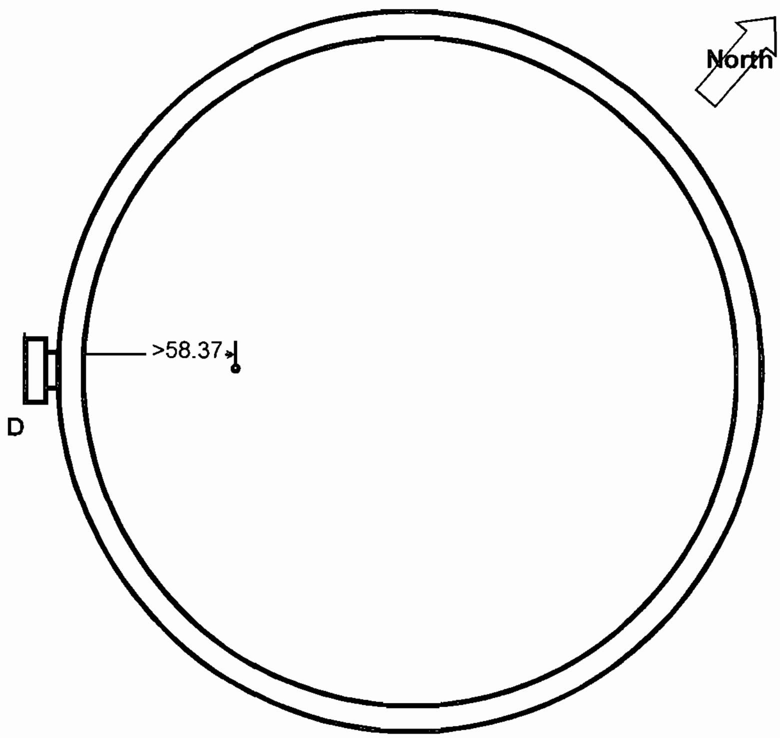
Stratification Results	
Maximum Percent Difference	20.12 % for NOx
Maximum Pollutant Conc. Diff.	0.49 ppm for NOx
Maximum Diluent Conc. Diff.	0.04 % for O2
Stack Diameter	263.38 in.

Stratification Conclusions	
Maximum % Diff.	Percent Diff. >10% Failed Stratification Test
Maximum Conc. Diff.	Conc. Diff. ≤ 3ppm Passed 6.5.6.3(b) Criteria
Stack Diameter	D > 93.6 in.

Passed Strat. Test Under 6.5.6.3(b) Criteria

Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	>14.95%	>39.37	>58.37
2			
3			

Test Type
- ☐ Moisture, for MW
- ☐ Moisture, for wet-to-dry
- ☑ Gas
- ☐ Use 6.5.6.3(a) points?
- ☐ 6.5.6(b)(2) alt. points could apply



cis-10-westcounty.fl-rata#1-U3B-strat

APPENDIX 2

40CFR75 QA CERT TEST DETAIL REPORT

ECMPS Client Tool
Version 1.0 2011 Q1

QA/Cert Test Detail Report
March 28, 2011 07:04 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL): 56407
State: FL
County: Palm Beach

Unit/Stack/Pipe ID: WCCT3B

7-Day Calibration

Component ID: B02
Test Number: 7DAY-Q12011-B02-3
Span Scale Level: High
Component Type: O2
Reason for Test: INITIAL
Span Value: 25.000
Test Completion: 02/22/2011 15:48
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
02/16/2011 08	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 08	HIGH	20.900	83.6	20.970	0.10		0.10	
02/17/2011 14	ZERO	0.000	0	0.000	0.00		0.00	
02/17/2011 14	HIGH	20.900	83.6	20.840	0.10		0.10	
02/18/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/18/2011 15	HIGH	20.900	83.6	20.840	0.10		0.10	
02/19/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/19/2011 15	HIGH	20.900	83.6	20.780	0.10		0.10	
02/20/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/20/2011 15	HIGH	20.900	83.6	20.810	0.10		0.10	
02/21/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/21/2011 15	HIGH	20.900	83.6	20.750	0.10		0.20	
02/22/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/22/2011 15	HIGH	20.900	83.6	20.750	0.10		0.20	

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Unit/Stack/Pipe ID: WCCT3B

7-Day Calibration

Component ID: B01 **Component Type:** NOX **Test Completion:** 02/22/2011 15:45
Test Number: 7DAY-Q12011-B01-1 **Reason for Test:** INITIAL **Reported Test Results:** PASSED
Span Scale Level: High **Span Value:** 200.000 **EPA Calculated Result:** PASSED

Evaluation Status: No Errors **Submission Status:** Not submitted
Submission Date/Time:

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
02/16/2011 08	ZERO	0.000	0	-0.100	0.10		0.10	
02/16/2011 08	HIGH	176.200	88.1	176.800	0.30		0.30	
02/17/2011 14	ZERO	0.000	0	0.000	0.00		0.00	
02/17/2011 14	HIGH	176.200	88.1	176.100	0.00		0.10	
02/18/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/18/2011 15	HIGH	176.200	88.1	175.800	0.20		0.20	
02/19/2011 15	ZERO	0.000	0	-0.100	0.10		0.10	
02/19/2011 15	HIGH	176.200	88.1	176.600	0.20		0.20	
02/20/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/20/2011 15	HIGH	176.200	88.1	176.300	0.10		0.10	
02/21/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/21/2011 15	HIGH	176.200	88.1	175.400	0.40		0.40	
02/22/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/22/2011 15	HIGH	176.200	88.1	175.600	0.30		0.30	

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3B

7-Day Calibration

Component ID: B01
Test Number: 7DAY-Q12011-B01-2
Span Scale Level: Low
Component Type: NOX
Reason for Test: INITIAL
Span Value: 10.000
Test Completion: 02/22/2011 15:43
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time: .

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
02/16/2011 08	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 08	HIGH	8.700	87	8.700	0.00		0.00	
02/17/2011 14	ZERO	0.000	0	0.100	1.00		1.00	
02/17/2011 14	HIGH	8.700	87	8.700	0.00		0.00	
02/18/2011 15	ZERO	0.000	0	0.100	1.00		1.00	
02/18/2011 15	HIGH	8.700	87	8.700	0.00		0.00	
02/19/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/19/2011 15	HIGH	8.700	87	8.600	1.00		1.00	
02/20/2011 15	ZERO	0.000	0	0.100	1.00		1.00	
02/20/2011 15	HIGH	8.700	87	8.700	0.00		0.00	
02/21/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/21/2011 15	HIGH	8.700	87	8.600	1.00		1.00	
02/22/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/22/2011 15	HIGH	8.700	87	8.700	0.00		0.00	

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**
Facility ID (ORISPL): **56407**

Unit/Stack/Pipe ID: **WCCT3B**
Cycle Time Test

Component ID:	B02	**Component Type:**	O2	**Test Completion:**	03/18/2011 14:22
Test Number:	CYCL-Q12011-B02-22	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	4	**Calculated Total Cycle Time:**	4		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	14:01	14:04	ZERO	0.000	13.190	0.040	3	3
2011/03/18	14:20	14:22	HIGH	20.900	13.080	20.890	2	2

Additional Information:
No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Unit/Stack/Pipe ID: **WCCT3B**
Cycle Time Test

Component ID:	B01	**Component Type:**	NOX	**Test Completion:**	03/18/2011 14:18
Test Number:	CYCL-Q12011-B01-20	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	4	**Calculated Total Cycle Time:**	4		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	14:01	14:04	ZERO	0.000	1.300	0.000	3	3
2011/03/18	14:14	14:18	HIGH	176.200	1.300	173.600	4	4

Additional Information:
No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: **WCCT3B**

Cycle Time Test

Component ID: B01
Component Type: NOX
Test Completion: 03/18/2011 14:10
Test Number: CYCL-Q12011-B01-21
Reason for Test: INITIAL
Reported Test Results: PASSED
Span Scale Level: Low
Span Value: 10.000
EPA Calculated Result: PASSED
Total Cycle Time: 4
Calculated Total Cycle Time: 4

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/18	14:01	14:04	ZERO	0.000	1.300	0.000	3	3
2011/03/18	14:08	14:10	HIGH	8.677	1.300	8.600	2	2

Additional Information:

No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Unit/Stack/Pipe ID: **WCCT3B**

Fuel Flowmeter Accuracy Test

Component ID: B04 **Component Type:** GFFM
Test Number: FFAC-Q22010-B04-82

Test Completion: 05/12/2010 00:00
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.2	0.2	0.2	12/01/2010 00

Additional Information:

No comment.

Unit/Stack/Pipe ID: **WCCT3B**

Fuel Flowmeter Accuracy Test

Component ID: B06 **Component Type:** OFFM
Test Number: FFAC-Q32009-B06-95

Test Completion: 09/15/2009 12:54
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.0	0.0	0.0	12/01/2010 00

Additional Information:

No comment.

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3B

Linearity Check

Component ID:	B02	**Component Type:**	O2	**Test Completion:**	03/18/2011 23:48
Test Number:	LINE-Q12011-B02-11	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	20.900	20.900	13.800	13.800	6.240	6.240
Mass CEM Value	20.900	20.900	13.783	13.783	6.277	6.277
Alt. Perf. Indicator						
Results	0.0	0.0	0.1	0.1	0.6	0.6

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/18/2011 23:23	MID	13.780	13.800	55.2%
03/18/2011 23:07	MID	13.790	13.800	55.2%
03/18/2011 23:44	MID	13.780	13.800	55.2%
03/18/2011 23:10	HIGH	20.900	20.900	83.6%
03/18/2011 23:48	HIGH	20.900	20.900	83.6%
03/18/2011 23:27	HIGH	20.900	20.900	83.6%
03/18/2011 23:41	LOW	6.310	6.240	25.0%
03/18/2011 23:19	LOW	6.250	6.240	25.0%
03/18/2011 23:03	LOW	6.270	6.240	25.0%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Unit/Stack/Pipe ID: WCCT3B

Linearity Check

Component ID:	B01	**Component Type:**	NOX	**Test Completion:**	03/18/2011 17:05
Test Number:	LINE-Q12011-B01-10	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	176.200	176.200	110.700	110.700	51.100	51.100
Mass CEM Value	174.000	174.000	107.367	107.367	48.633	48.633
Alt. Perf. Indicator						
Results	1.2	1.2	3.0	3.0	4.8	4.8

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/18/2011 16:43	MID	107.300	110.700	55.4%
03/18/2011 17:01	MID	107.300	110.700	55.4%
03/18/2011 16:24	MID	107.500	110.700	55.4%
03/18/2011 16:27	HIGH	174.000	176.200	88.1%
03/18/2011 17:05	HIGH	174.000	176.200	88.1%
03/18/2011 16:46	HIGH	174.000	176.200	88.1%
03/18/2011 16:39	LOW	48.600	51.100	25.6%
03/18/2011 16:20	LOW	48.700	51.100	25.6%
03/18/2011 16:57	LOW	48.600	51.100	25.6%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: **West County Energy Center**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Facility ID (ORISPL): **56407**

Unit/Stack/Pipe ID: **WCCT3B**

Relative Accuracy Test

System ID:	B01	**System Parameter:**	NOX	**Test Completion:**	03/19/2011 16:41
Test Number:	RATA-Q12011-B01-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
# of Op. Levels:	1	**Grace Period Test?**		**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Reported BAF:**	1.000
Submission Status:	Not submitted			**EPA Calculated BAF:**	1.000
Submission Date:				**RATA Frequency:**	4QTRS

Operating Level: High

Reference Method Used: 7E,3A: NOX RM 7E and CO2/O2 RM 3A

Summary Statistics:

	Reported	Recalculated		Reported	Recalculated
Mean of Monitoring System	0.006	0.006	**Relative Accuracy**	6.65	6.65
Mean of Reference Method Values	0.006	0.006	**Bias Adjustment Factor**	1.000	1.000
Mean of Difference	0.000	0.000	**APS Indicator**		
Standard Deviation of Difference	0.001	0.001	**T-Value**	2.306	2.306
Confidence Coefficient	0.000	0.000	**Gross Unit Load or Velocity**	278	278

Run Data:

Run	Start Date	End Date	Run Status	Monitoring System Value	Reference Method Value	Gross Load or Velocity
1	03/19/2011 09:32	03/19/2011 10:31	NOTUSED	0.006	0.007	302
2	03/19/2011 10:45	03/19/2011 11:44	RUNUSED	0.006	0.006	287
3	03/19/2011 12:05	03/19/2011 13:04	RUNUSED	0.005	0.006	280
4	03/19/2011 13:17	03/19/2011 13:37	RUNUSED	0.006	0.006	277
5	03/19/2011 13:50	03/19/2011 14:10	RUNUSED	0.006	0.006	278
6	03/19/2011 14:21	03/19/2011 14:41	RUNUSED	0.005	0.005	277
7	03/19/2011 14:51	03/19/2011 15:11	RUNUSED	0.006	0.006	277
8	03/19/2011 15:21	03/19/2011 15:41	RUNUSED	0.006	0.006	276
9	03/19/2011 15:51	03/19/2011 16:11	RUNUSED	0.006	0.005	276
10	03/19/2011 16:21	03/19/2011 16:41	RUNUSED	0.006	0.006	276

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:04 PM

Additional Information:

No comment.

*Performance Spec: RA <= 10% or Mean Difference <= +/- 2.0fps:
Reduced Frequency Spec: RA <= 7.5% or Mean Difference +/- 1.5 fps (Appendix A &3.3.4)

Unit/Stack/Pipe ID: **WCCT3B**

Transmitter Transducer Test

Component ID: B05
Component Type: GFFM
Test Number: FFAT-Q12010-B05-92
Reason for Test: QA
Test Completion: 03/03/2010 00:00
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors
Submission Status: Not submitted
Submission Date/Time:

High Level Accuracy	High Level Accuracy Specification	Mid Level Accuracy	Mid Level Accuracy Specification	Low Level Accuracy	Low Level Accuracy Specification
0.5	AGA3	0.5	AGA3	0.5	AGA3

Additional Information:

No comment.

Unit/Stack/Pipe ID: **WCCT3B**

Primary Element Inspection

System ID:
System Type:
Test Completion: 02/18/2011 00:00
Component ID: B05
Component Type: GFFM
Reported Test Results: PASSED
Test Number: PEI-110218-B05-2
Reason for Test: INITIAL
Grace Period Test?

Evaluation Status: No Errors
Submission Status: Not submitted
Test Description:

Additional Information:

No comment.

APPENDIX 3

CEMS CALIBRATION DRIFT REPORTS

Daily Stack Calibration Report
Generated: 2/22/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/22/2011
Period End: 2/22/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
·3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		0	Error %	Units	%	
02/22/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1060.100	12.100	1.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.700	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/22/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	175.600	-0.600	-0.3	20.0	10.0	PASS	0	-0.3	10.000	5.0	PASS
02/22/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/22/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/22/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/22/2011	15:35	3B_O2	O2	SPAN	20.900	20.750	-0.150	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/22/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/22/2011
Period End: 2/22/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.5	0.0%	12.1	1.0%
3B_COLOW	CO	0.1	1.0%	0.2	2.0%
3B_NOXHIGH	NOx	0.0	0.0%	0.6	0.3%
3B_NOXLOW	NOx	0.0	0.0%	0.0	0.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.500	- N/A -	12.100	- N/A -
3B_COLOW	CO	0.100	- N/A -	0.200	- N/A -
3B_NOXHIGH	NOx	0.000	0.0%	0.600	0.3%
3B_NOXLOW	NOx	0.000	0.0%	0.000	0.0%
3B_O2	O2	0.000	- N/A -	0.150	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3B_NOXHIGH	NOx	0.0	200.0 ppm	3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm	3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %	3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm	3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm	3B_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
02/21/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1059.300	11.300	0.9	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.000	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/21/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	175.400	-0.800	-0.4	20.0	10.0	PASS	0	-0.4	10.000	5.0	PASS
02/21/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/21/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.600	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/21/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/21/2011	15:35	3B_O2	O2	SPAN	20.900	20.750	-0.150	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.5	0.0%	11.3	0.9%
3B_COLOW	CO	0.0	0.0%	0.1	1.0%
3B_NOXHIGH	NOx	0.0	0.0%	0.8	0.4%
3B_NOXLOW	NOx	0.0	0.0%	0.1	1.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.500	- N/A -	11.300	- N/A -
3B_COLOW	CO	0.000	- N/A -	0.100	- N/A -
3B_NOXHIGH	NOx	0.000	0.0%	0.800	0.4%
3B_NOXLOW	NOx	0.000	0.0%	0.100	1.0%
3B_O2	O2	0.000	- N/A -	0.150	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/20/2011
Period End: 2/20/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3B_NOXHIGH	NOx	0.0	200.0 ppm	3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm	3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %	3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm	3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm	3B_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		0	Error %	Units	%	
02/20/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/20/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1063.200	15.200	1.3	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/20/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.200	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/20/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.700	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/20/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/20/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	176.300	0.100	0.1	20.0	10.0	PASS	0	0.1	10.000	5.0	PASS
02/20/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.100	0.100	1.0	1.0	10.0	PASS	0	1.0	5.000	5.0	PASS
02/20/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/20/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/20/2011	15:35	3B_O2	O2	SPAN	20.900	20.810	-0.090	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/20/2011
Period End: 2/20/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.6	0.1%	15.2	1.3%
3B_COLOW	CO	0.2	2.0%	0.2	2.0%
3B_NOXHIGH	NOx	0.0	0.0%	0.1	0.1%
3B_NOXLOW	NOx	0.1	1.0%	0.0	0.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.600	- N/A -	15.200	- N/A -
3B_COLOW	CO	0.200	- N/A -	0.200	- N/A -
3B_NOXHIGH	NOx	0.000	0.0%	0.100	0.1%
3B_NOXLOW	NOx	0.100	1.0%	0.000	0.0%
3B_O2	O2	0.000	- N/A -	0.090	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/19/2011
Period End: 2/19/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3B_NOXHIGH	NOx	0.0	200.0 ppm	3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm	3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %	3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm	3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm	3B_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		0	Error %	Units	%	
02/19/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1057.800	9.800	0.8	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.000	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/19/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	176.600	0.400	0.2	20.0	10.0	PASS	0	0.2	10.000	5.0	PASS
02/19/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/19/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.600	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/19/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/19/2011	15:35	3B_O2	O2	SPAN	20.900	20.780	-0.120	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/19/2011
Period End: 2/19/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.5	0.0%	9.8	0.8%
3B_COLOW	CO	0.0	0.0%	0.1	1.0%
3B_NOXHIGH	NOx	0.1	0.1%	0.4	0.2%
3B_NOXLOW	NOx	0.0	0.0%	0.1	1.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.500	- N/A -	9.800	- N/A -
3B_COLOW	CO	0.000	- N/A -	0.100	- N/A -
3B_NOXHIGH	NOx	0.100	0.1%	0.400	0.2%
3B_NOXLOW	NOx	0.000	0.0%	0.100	1.0%
3B_O2	O2	0.000	- N/A -	0.120	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/18/2011
Period End: 2/18/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3B_NOXHIGH	NOx	0.0	200.0 ppm	3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm	3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %	3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm	3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm	3B_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/18/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1053.500	5.500	0.5	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/18/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	175.800	-0.400	-0.2	20.0	10.0	PASS	0	-0.2	10.000	5.0	PASS
02/18/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.100	0.100	1.0	1.0	10.0	PASS	0	1.0	5.000	5.0	PASS
02/18/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/18/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/18/2011	15:35	3B_O2	O2	SPAN	20.900	20.840	-0.060	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/18/2011
Period End: 2/18/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.5	0.0%	5.5	0.5%
3B_COLOW	CO	0.1	1.0%	0.1	1.0%
3B_NOXHIGH	NOx	0.0	0.0%	0.4	0.2%
3B_NOXLOW	NOx	0.1	1.0%	0.0	0.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3B_COHIGH	CO	0.500	- N/A -	5.500	- N/A -
3B_COLOW	CO	0.100	- N/A -	0.100	- N/A -
3B_NOXHIGH	NOx	0.000	0.0%	0.400	0.2%
3B_NOXLOW	NOx	0.100	1.0%	0.000	0.0%
3B_O2	O2	0.000	- N/A -	0.060	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/17/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/17/2011
Period End: 2/17/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/17/2011	15:35	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	15:35	3B_COHIGH	CO	SPAN	1048.000	1059.600	11.600	1.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	14:39	3B_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	14:39	3B_COHIGH	CO	SPAN	1048.000	1054.200	6.200	0.5	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	15:35	3B_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	15:35	3B_COLOW	CO	SPAN	8.500	8.600	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	14:39	3B_COLOW	CO	ZERO	0.000	0.200	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	14:39	3B_COLOW	CO	SPAN	8.500	8.700	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/17/2011	15:35	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/17/2011	15:35	3B_NOXHIGH	NOx	SPAN	176.200	175.800	-0.400	-0.2	20.0	10.0	PASS	0	-0.2	10.000	5.0	PASS
02/17/2011	14:39	3B_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/17/2011	14:39	3B_NOXHIGH	NOx	SPAN	176.200	176.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/17/2011	15:35	3B_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/17/2011	15:35	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/17/2011	14:39	3B_NOXLOW	NOx	ZERO	0.000	0.100	0.100	1.0	1.0	10.0	PASS	0	1.0	5.000	5.0	PASS
02/17/2011	14:39	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/17/2011	15:35	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/17/2011	15:35	3B_O2	O2	SPAN	20.900	20.840	-0.060	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/17/2011	14:39	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/17/2011	14:39	3B_O2	O2	SPAN	20.900	20.840	-0.060	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/17/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/17/2011
Period End: 2/17/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.6	0.1%	8.9	0.8%
3B_COLOW	CO	0.2	1.5%	0.2	1.5%
3B_NOXHIGH	NOx	0.0	0.0%	0.2	0.2%
3B_NOXLOW	NOx	0.1	0.5%	0.0	0.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.550	- N/A -	8.900	- N/A -
3B_COLOW	CO	0.150	- N/A -	0.150	- N/A -
3B_NOXHIGH	NOx	0.000	0.0%	0.250	0.2%
3B_NOXLOW	NOx	0.050	0.5%	0.000	0.0%
3B_O2	O2	0.000	- N/A -	0.060	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3B_NOXHIGH	NOx	0.0	200.0 ppm
3B_NOXLOW	NOx	0.0	10.0 ppm
3B_O2	O2	0.00	25.00 %
3B_COLOW	CO	0.0	10.0 ppm
3B_COHIGH	CO	0.0	1200.0 ppm

					Target	Actual	Diff		Part60 Allowable					Part75 Allowable		
Date	Time	Channel		Type	Units	Units	Units	Error %	Units	%		WD	Error %	Units	%	
02/16/2011	08:41	3B_COHIGH	CO	ZERO	0.000	0.500	0.500	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	08:41	3B_COHIGH	CO	SPAN	1048.000	1055.500	7.500	0.6	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	08:41	3B_COLOW	CO	ZERO	0.000	0.000	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	08:41	3B_COLOW	CO	SPAN	8.500	8.500	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	08:41	3B_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/16/2011	08:41	3B_NOXHIGH	NOx	SPAN	176.200	176.800	0.600	0.3	20.0	10.0	PASS	0	0.3	10.000	5.0	PASS
02/16/2011	08:41	3B_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	08:41	3B_NOXLOW	NOx	SPAN	8.700	8.700	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	08:41	3B_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/16/2011	08:41	3B_O2	O2	SPAN	20.900	20.970	0.070	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.5	0.0%	7.5	0.6%
3B_COLOW	CO	0.0	0.0%	0.0	0.0%
3B_NOXHIGH	NOx	0.1	0.1%	0.6	0.3%
3B_NOXLOW	NOx	0.0	0.0%	0.0	0.0%
3B_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3B_COHIGH	CO	0.500	- N/A -	7.500	- N/A -
3B_COLOW	CO	0.000	- N/A -	0.000	- N/A -
3B_NOXHIGH	NOx	0.100	0.1%	0.600	0.3%
3B_NOXLOW	NOx	0.000	0.0%	0.000	0.0%
3B_O2	O2	0.000	- N/A -	0.070	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3B_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3B_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3B_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

APPENDIX 4

LINEARITY AND CGA SUMMARY TABLES

CGA Calibration Report
Generated: 3/19/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/18/2011
Period End: 3/19/2011
Included Calibrations: **CGA (40CFR60)**

Range of Analyzers:					Span of Analyzers:				
3B_NOXHIGH	NOx	0.0	200.0	ppm	3B_NOXHIGH	NOx	0.0	200.0	ppm
3B_O2	O2	0.00	25.00	%	3B_O2	O2	0.00	25.00	%
3B_COLOW	CO	0.0	10.0	ppm	3B_COLOW	CO	0.0	10.0	ppm
3B_COHIGH	CO	0.0	1200.0	ppm	3B_COHIGH	CO	0.0	1200.0	ppm

Date	Time	From 3 Pt.	Channel		Type	Target Units	Actual Units	Diff Units	Error %	CGA Allowable (40CFR60) Units	%		Bottle ID	Expire Date
03/18/2011	16:55	*	3B_COHIGH	CO	LOW	301.0	261.7	-39.3	-13.1	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:55	*	3B_COHIGH	CO	MID	662.0	603.3	-58.7	-8.9	99.3	15.0	PASS	ALM063790	1/12/2012
03/18/2011	16:36	*	3B_COHIGH	CO	LOW	301.0	260.8	-40.2	-13.4	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:36	*	3B_COHIGH	CO	MID	662.0	604.2	-57.8	-8.7	99.3	15.0	PASS	ALM063790	1/12/2012
03/18/2011	16:17	*	3B_COHIGH	CO	LOW	301.0	262.0	-39.0	-13.0	45.2	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:17	*	3B_COHIGH	CO	MID	662.0	601.7	-60.3	-9.1	99.3	15.0	PASS	ALM063790	1/12/2012
03/19/2011	01:03	*	3B_COLOW	CO	LOW	2.5	2.4	-0.1	-4.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/19/2011	01:03	*	3B_COLOW	CO	MID	5.6	5.5	-0.1	-1.8	0.8	15.0	PASS	ALM059441	8/22/2011
03/19/2011	00:46	*	3B_COLOW	CO	LOW	2.5	2.4	-0.1	-4.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/19/2011	00:46	*	3B_COLOW	CO	MID	5.6	5.5	-0.1	-1.8	0.8	15.0	PASS	ALM059441	8/22/2011
03/19/2011	00:29	*	3B_COLOW	CO	LOW	2.5	2.4	-0.1	-4.0	0.4	15.0	PASS	ALM016434	8/22/2011
03/19/2011	00:29	*	3B_COLOW	CO	MID	5.6	5.4	-0.2	-3.6	0.8	15.0	PASS	ALM059441	8/22/2011
03/18/2011	16:55	*	3B_NOXHIGH	NOx	LOW	51.1	48.6	-2.5	-4.9	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:55	*	3B_NOXHIGH	NOx	MID	110.7	107.3	-3.4	-3.1	16.6	15.0	PASS	ALM063790	1/12/2012
03/18/2011	16:36	*	3B_NOXHIGH	NOx	LOW	51.1	48.6	-2.5	-4.9	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:36	*	3B_NOXHIGH	NOx	MID	110.7	107.3	-3.4	-3.1	16.6	15.0	PASS	ALM063790	1/12/2012
03/18/2011	16:17	*	3B_NOXHIGH	NOx	LOW	51.1	48.7	-2.4	-4.7	7.7	15.0	PASS	ALM025866	10/28/2012
03/18/2011	16:17	*	3B_NOXHIGH	NOx	MID	110.7	107.5	-3.2	-2.9	16.6	15.0	PASS	ALM063790	1/12/2012

CGA Calibration Report
Generated: 3/19/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/18/2011
Period End: 3/19/2011
Included Calibrations: **CGA (40CFR60)**

Date	Time	From 3 Pt.	Channel		Type	Target Units	Actual Units	Diff Units	Error %	CGA Allowable (40CFR60) Units	%		Bottle ID	Expire Date
03/18/2011	23:38	*	3B_O2	O2	LOW	6.2	6.3	0.1	1.1	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	23:38	*	3B_O2	O2	MID	13.8	13.8	0.0	-0.1	2.1	15.0	PASS	ALM032282	2/17/2014
03/18/2011	23:17	*	3B_O2	O2	LOW	6.2	6.3	0.0	0.2	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	23:17	*	3B_O2	O2	MID	13.8	13.8	0.0	-0.1	2.1	15.0	PASS	ALM032282	2/17/2014
03/18/2011	23:00	*	3B_O2	O2	LOW	6.2	6.3	0.0	0.5	0.9	15.0	PASS	ALM033049	2/17/2014
03/18/2011	23:00	*	3B_O2	O2	MID	13.8	13.8	0.0	-0.1	2.1	15.0	PASS	ALM032282	2/17/2014

FAIL = Difference Error > Regulations Allow
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
@ Bottle is within 7 days of expiration
\# Bottle has Expired - Must be Replaced

Absolute Average DIFF and Absolute(Target - Average Reading)/Target) * 100

Channel		----LOW---- Diff Units	Target %	----MID---- Diff Units	Target %
3B_COHIGH	CO	45.1	15.0%	71.9	10.9%
3B_COLOW	CO	0.2	8.0%	1.0	18.3%
3B_NOXHIGH	NOx	2.5	4.8%	3.4	3.1%
3B_O2	O2	0.0	0.6%	0.0	0.1%

Performance Specification

Channel		PASS	FAIL
3B_COHIGH	CO	<=15.0%	>15.0%
3B_COLOW	CO	<=15.0%	>15.0%
3B_NOXHIGH	NOx	<=15.0%	>15.0%
3B_O2	O2	<=15.0%	>15.0%

Perf: [Part60 CGA CO] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA CO] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA CO] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA CO] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA NOx] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target
AltPerf: [Part60 CGA NOx] Low = 5 ppm, Mid = 5 ppm, High = 5 ppm
Perf: [Part60 CGA O2] Low = 15.0 %Target, Mid = 15.0 %Target, High = 15.0 %Target

APPENDIX 5

CYCLE TIME SUPPORTING DOCUMENTATION

Font11

Babcock & Wilcox Power Generation Group NetDAHS©
Average Values Report
Version 59.0
Generated: 3/18/2011 17:50

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3b

Period Start: 3/18/2011 14:00
Period End: 3/18/2011 14:27
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3B_NOX ppm	3B_O2 %	3B_MW_TOT MW
3/18/2011 14:00	1.4	13.18	290.7
3/18/2011 14:01	1.3	13.19	291.5
3/18/2011 14:02	1.6	13.12	292.2
3/18/2011 14:03	0.8	4.77	291.9
3/18/2011 14:04	0.0	0.04	290.6
3/18/2011 14:05	0.0	0.03	289.1
3/18/2011 14:06	0.4	6.76	287.9
3/18/2011 14:07	1.3	13.18	289.0
3/18/2011 14:08	1.3	13.25	289.7
3/18/2011 14:09	4.2	4.90	290.1
3/18/2011 14:10	8.6	0.04	290.7
3/18/2011 14:11	8.6	0.03	291.0
3/18/2011 14:12	8.6	0.03	291.1
3/18/2011 14:13	1.5	13.01	289.1
3/18/2011 14:14	1.3	13.12	290.1
3/18/2011 14:15	4.3	7.01	290.7
3/18/2011 14:16	10.2	0.06	290.6
3/18/2011 14:17	10.2	0.03	292.0
3/18/2011 14:18	173.6	0.03	292.2
3/18/2011 14:19	4.0	13.06	290.4
3/18/2011 14:20	1.8	13.08	289.0
3/18/2011 14:21	3.3	15.45	289.2
3/18/2011 14:22	0.1	20.89	289.3
3/18/2011 14:23	0.0	20.93	288.1
3/18/2011 14:24	0.3	17.72	288.6
3/18/2011 14:25	1.7	13.12	289.4
3/18/2011 14:26	1.9	13.13	288.3
3/18/2011 14:27	1.7	13.12	289.6
Final Average*	9.1	9.15	290.1
Maximum*	4.0	17.72	292.2
Minimum*	0.3	6.76	287.9

NOx H - 176.2 ppm
NOx L - 8.677 ppm
O_2 - 20.9%

*Does not include Invalid Averaging Periods ("N/A")

CUSTOM INSTRUMENTATION
SERVICES CORPORATION

40 CFR 60 CO Response Time Test

SITE NAME West County

DATE 3-18-11

UNIT NUMBER 3B

Performed by Justin Hewett

Reference Gas Cylinder:	Label Concentration	Serial Number	Expiration Date
Nitrogen:		CC51192	
CO / Low	8.542	CC343655	10-21-12

Nominal Stack Concentrations prior to test:

Oxygen: 13.2 CO: 0.483

Record the following for reference to recorded DAHS data:

Gas Injection	Time	Analyzer Response	Response Time Seconds
Start of Test (Audit On)	13:32:00	0.483	
ON: Zero Gas	13:35:00	0.190	78
OFF: Zero Gas		0.045	
ON: CO/L	13:38:00	8.22	67
OFF: CO/L		8.59	
ON: Zero Gas	13:41:00	0.276	80
OFF: Zero Gas		0.037	
ON: CO/L	13:44:00	8.23	77
OFF: CO/L		8.56	
ON: Zero Gas	13:47:00	0.175	82
OFF: Zero Gas		-0.002	
ON: CO/L	13:50:00	8.47	83
OFF: CO/L		8.58	
ON: Zero Gas	13:53:00	0.169	77
OFF: Zero Gas	13:56:00	0.021	
End of Test (Audit Off)	13:59:00	0.478	

APPENDIX 6

EPA PROTOCOL GAS CERTIFICATES

Airgas

CERTIFICATE OF ANALYSIS

NITROGEN - CEM-CAL ZERO

Airgas Specialty Gases
630 United Drive
Durham, NC 27713
Phone (919) 544-3773
Fax (919) 544-3774
www.airgas.com

Part Number:	NI CZ15A	Reference Number:	122-124238078-1
Cylinder Analyzed:	CC51192	Cylinder Volume:	142 Cubic Feet
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2000 PSIG
Analysis Date:	Oct 12, 2010	Valve Outlet:	580
Lot #:	122-124238078-1		

Expiration Date: Oct 12, 2015

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
NitrogenCEM	99.9995%	99.9995%
CARBON DIOXIDE	<1 PPM	<1.00 PPM
Moisture	<1 PPM	0.26 PPM
NOx	<0.1 PPM	<0.10 PPM
SO2	<0.1 PPM	<0.10 PPM
THC	<0.1 PPM	<0.10 PPM
CARBON MONOXIDE	<0.5 PPM	<0.50 PPM
Oxygen	<0.5 PPM	0.23 PPM

Notes:

Meets Federal Register specifications Title 40 C.F.R. 72.2

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

#5000

Airgas

Airgas Specialty Gases
630 United Drive
Durham NC, 27713
(919) 544-3773
http://www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E15A1668	Reference Number:	122-124238078-3
Cylinder Number:	CC343655	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 21, 2010	Valve Outlet:	660

Expiration Date: Oct 21, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig,i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NOx	8.500 PPM	8.677 PPM	G1	+/- 1% NIST Traceable
NITRIC OXIDE	8.500 PPM	8.677 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	8.500 PPM	8.542 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	080609	CC255244	10.04PPM CARBON MONOXIDE/NITROGEN	Jun 15, 2012
NTRM	100603	CC280952	20.34PPM NITRIC OXIDE/NITROGEN	Feb 01, 2013
NTRM	100603	CC280952 NOX	20.34PPM NOx/NITROGEN	Feb 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Horiba APMA-360 CO (0-50ppm)	Infrared	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

Airgas

Airgas Specialty Gases
630 United Drive
Durham, NC 27713
Phone (919) 544-3773
Fax (919) 544-3774
www.airgas.com

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E15A0011	Reference Number:	122-124238078-2
Cylinder Number:	CC166907	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 19, 2010	Valve Outlet:	660

Expiration Date: Oct 19, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITRIC OXIDE	175.0 PPM	176.2 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	1035 PPM	1048 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			
Total oxides of nitrogen		176.8 PPM		For Reference Only

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	090603	CC288058	250.6PPM NITRIC OXIDE/NITROGEN	Feb 01, 2011
NTRM	020502	SG9142254BAL	1488PPM CARBON MONOXIDE/NITROGEN	May 15, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 #1 CO	FTIR	Oct 04, 2010
Nicolet 6700 #1 NO	FTIR	Oct 04, 2010

Triad Data Available Upon Request

Notes:

Approved for Release

#5000

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

COMPLIANCE CLASS
Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-001

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Amended Procedure G-2, August 25, 1999.

Cylinder Number: ALM016434 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	2.53	PPM	+/- 2%	NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

Special Notes: CO RANGE 2-3 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40633107-002

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM059441 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	5.57	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE
Date: 14Feb2011 Response Unit:VOLTS
Z1=-0.03320 R1=4.84370 T1=2.69370
R2=4.85010 Z2=-0.05020 T2=2.68980
Z3=-0.03980 T3=2.69150 R3=4.84280
Avg. Concentration: 5.580 PPM

Second Triad Analysis

Date: 21Feb2011 Response Unit: VOLTS
Z1=0.02640 R1=4.86920 T1=2.72860
R2=4.87880 Z2=0.03380 T2=2.73790
Z3=0.03600 T3=2.73970 R3=4.88910
Avg. Concentration: 5.560 PPM

Calibration Curve

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999990739
Constants: A=0.0190246
B=2.077972083 C=-0.0120773
D= E=

Special Notes: CO RANGE 5-6 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

RATA CLASS

Dual-Analyzed Calibration Standard

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: CEM-6035
Project No.: 01-35874-002

Customer
FLORIDA P&L-MARTIN PLT-PO#-CEM ONLY

21900 SW WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM025866 Certification Date: 29Oct2010 Exp. Date: 28Oct2012
Cylinder Pressure***: 1962 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	301	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	51.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	51.4	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003888	240.8 PPM	CARBON MONOXIDE
ITRM 1683	01Nov2013	KAL003284	46.90 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	11Oct2010	FTIR
FTIR//000928781	29Oct2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
CARBON MONOXIDE		
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.01673 R1=239.9048 T1=299.7323	Z1=-0.03420 R1=240.0633 T1=299.7638	r=9.99988E-1
R2=239.9334 Z2=0.14016 T2=299.9462	R2=240.1269 Z2=0.03466 T2=299.9593	Constants: A=0.00000E+0
Z3=0.17124 T3=300.3045 R3=239.9374	Z3=0.08633 T3=300.2578 R3=240.1329	B=8.96123E-1 C=3.52000E-4
Avg. Concentration: 301.1 PPM	Avg. Concentration: 300.9 PPM	D=0.00000E+0 E=0.00000E+0
NITRIC OXIDE		
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.12887 R1=46.84412 T1=51.06194	Z1=0.07736 R1=46.70219 T1=50.89229	r=9.99999E-1
R2=46.89432 Z2=-0.07937 T2=51.14584	R2=46.79544 Z2=0.12585 T2=50.91652	Constants: A=0.00000E+0
Z3=0.01313 T3=51.15833 R3=46.98010	Z3=0.14749 T3=51.04982 R3=46.83210	B=9.82452E-1 C=1.98000E-4
Avg. Concentration: 51.11 PPM	Avg. Concentration: 51.10 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: Michael A. Kuhns
Michael A. Kuhns

PMR NOX/CO High/mid

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

P.O. No.: 4500250736

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 01-19426-012
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

Customer
FLORIDA POWER & LIGHT

MARTIN PLANT
21900 S.W. WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM063790 Certification Date: 12Jan2010 Exp. Date: 12Jan2012
Cylinder Pressure***: 2002 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	662	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	110.7	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	111.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1681	02Oct2010	KAL003160	970.1 PPM	CARBON MONOXIDE
ITRM 1684	15Oct2012	KAL004453	95.84 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	31Dec2009	FTIR
FTIR//000928781	04Jan2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
CARBON MONOXIDE		
Date: 05Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00836 R1=967.7358 T1=659.8589	Z1=-0.06379 R1=967.9088 T1=660.3933	r=9.99999E-1
R2=967.9701 Z2=0.17759 T2=660.2537	R2=968.2288 Z2=0.29739 T2=660.7589	Constants: A=0.00000E+0
Z3=0.50273 T3=660.5182 R3=968.5788	Z3=0.40472 T3=660.9639 R3=968.3168	B=2.58580E-1 C=1.15000E-4
Avg. Concentration: 661.5 PPM	Avg. Concentration: 662.0 PPM	D=0.00000E+0 E=0.00000E+0
NITRIC OXIDE		
Date: 05Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.29121 R1=95.73315 T1=110.4266	Z1=-0.07261 R1=96.06142 T1=111.0910	r=9.99998E-1
R2=95.81615 Z2=-0.13602 T2=110.6344	R2=96.06672 Z2=-0.05270 T2=111.1651	Constants: A=0.00000E+0
Z3=-0.12519 T3=110.9319 R3=95.98806	Z3=-0.01136 T3=111.2319 R3=96.15300	B=9.94707E-1 C=5.00000E-5
Avg. Concentration: 110.6 PPM	Avg. Concentration: 110.9 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: Michael A Kuhns
Michael A. Kuhns

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-003

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM033049 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	6.24 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2658	01Feb2016	K001907	10.03 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:MV
Z1=-0.00190 R1=4.91170 T1=3.05330
R2=4.91300 Z2=0.00000 T2=3.05350
Z3=-0.00140 T3=3.05260 R3=4.91510
Avg. Concentration: 6.240 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999996776
Constants: A=0.015250224
B=2.040162442 C=
D= E=

Special Notes: O2 RANGE 5-7.5%

APPROVED BY: ______________
JOHN OSHEA

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-004

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM032282 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	13.8 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT-61/V1-0407-	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:VOLTS
Z1=-0.00160 R1=4.58880 T1=2.72560
R2=4.58540 Z2=-0.00110 T2=2.72480
Z3=-0.00210 T3=2.72550 R3=4.58360
Avg. Concentration: 13.80 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053895951 C=
D= E=

APPROVED BY: David Ashnoff
DAVID ASHNOFF

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-005

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM008490 **Certification Date:** 15Feb2011 **Exp. Date:** 14Feb2014
Cylinder Pressure*:** 2000 PSIG **Batch No:** PLUO026512

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	22.6 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 15Feb2011 Response Unit:VOLTS
Z1=-0.00240 R1=4.58780 T1=4.46640
R2=4.58950 Z2=-0.00150 T2=4.46570
Z3=-0.00120 T3=4.46700 R3=4.58940
Avg. Concentration: 22.60 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053896951 C=
D= E=

Special Notes: CO < 0.5 PPM NO < 0.1 PPM

APPROVED BY: David Ashnoff
DAVID ASHNOFF

APPENDIX 7

DAHS VERIFICATION DOCUMENTATION

B&W PGG, KVB-Enertec, INC.
Formula Verification Report
UNIT 3B
Plant Name: WEST COUNTY ENERGY CENTER
ORISPL #: 056407
Date: March 19, 2011

FORMULAS THAT PASSED VERIFICATION:

DateTime	Param	Code	ID	Conc	DilConc	Fc/F	Rate	HI	GCV	Optime	Computed	Reported
03/19/11 07:00	CO2	G-4	B01			1040		2501.3			148.6	148.6
01/28/11 10:00	NOX	F-5	B02	23.9	18	8710					0.179	0.179
03/18/11 17:00	NOXM	F-24A	B03				0.005	2501.3			12.5	12.5
03/19/11 17:00	HI	D-6	B04				24308		102900		2501.3	2501.3
03/07/11 09:00	HI	D-8	B05				126880		19500		2474.2	2474.2
01/19/11 22:00	HI	D-15	B06					2537.6		1	5911	5911
03/19/11 17:00	SO2	D-5	B07				0.0006	2501.3			1.5008	1.50078
03/07/11 09:00	SO2	D-2	B08	1			126880				29.568	29.568
03/06/11 16:00	CO2	G-4	B10			1420		0.6			0	0
01/19/11 22:00	CO2	G-4A	B11			1040/1420				1	406.4	406.4

Certified for all Utilities reporting under 40 CFR Part 75 with B&W PGG KVB/Enertec Products NetDAHS 8.0.150 SP4 release installed

UTILITY NAME: ANY
PLANT NAME: Any
ORISPL: Any
DAHS SOFTWARE: B&W Power Generation Group - KVB/Enertec Products NetDAHS
DATE PERFORMED: 03/02/2011

I certify that the automated Data Acquisition and Handling system (DAHS) component of each CEM System identified in the attached results was tested and that proper computation of the missing data substitution procedures was verified. The results of the verification test for the missing data routine are included.

John F. Downs

March 3, 2011

Signature   Date

John F. Downs

Printed Name

Test Number 1

Availability >= 95% and MDP <=24 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 2

Availability = 95% and MDP <=24 hours. Boundary test.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 3

Availability >= 95% and MDP > 24 hours. HB/HA value is greater than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 4

Availability >= 95% and MDP > 24 hours and HB/HA value is less than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 5

Availability >= 90% and < 95% and MDP <= 8 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 6

Availability >= 90% and < 95% and MDP > 8 hours and HB/HA value is > 95th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 7

Availability >= 90% and < 95% and MDP > 8 hours and 95th percentile > HB/HA value.

SO2 - Passed
NOX - Passed

FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 8

Availability < 90% and MDP > 0 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 9

Maximum potential Initial missing data period. Load Range or next higher Load Range not available.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 10

Initial missing data period. 720 LookBack Period.

SO2 - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 11

< 2160 QA hours available. Initial missing data period. Next higher Load Range available.

NOX - Passed
FLOW - Passed

Test Number 12

< 2160 QA hours available. Initial missing data period. Load Range available.

NOX - Passed
FLOW - Passed

Test Number 13

NOx, Flow availability > 80% and < 90% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
MOISTURE - Passed

Test Number 14

NOx, Flow availability < 80% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Summary

Number Of Tests Passed: 73
Number Of Tests Failed: 0

Start: 3/2/2011 2:31:56 PM
End: 3/2/2011 2:35:00 PM

APPENDIX 8

40 CFR 75 MONITORING PLAN

ECMPS Client Tool
Version 1.0 2011 Q1

Monitoring Plan Printout Report
March 28, 2011 07:10 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL):	56407
Monitoring Plan Location IDs:	WCCT3B
State:	FL
County:	Palm Beach
Latitude:	26.6986
Longitude:	-80.3747

Reporting Frequency

Monitoring Plan Location IDs	Reporting Frequency	Begin Quarter	End Quarter
WCCT3B	Q - Quarterly	2010 QTR 4	

Monitoring Location Attributes

Unit/Stack/Pipe Identifier	Duct Indicator	Ground Elevation	Stack Height	Cross Area Exit	Cross Area Flow	Material Code	Shape Code	Begin Date	End Date
WCCT3B		25	150	359		OTHER	ROUND	12/01/2010	

Unit Operation Information

Unit Identifier	Commence Commercial Operation Date	Commence Operation Date	Boiler/Turbine Type			Max Heat Input		
			Code	Begin Date	End Date	Value (mmBtu)	Begin Date	End Date
WCCT3B	12/03/2010	12/01/2010	CC	12/01/2010		2761.0	12/01/2010	

Unit Type Codes: CC - Combined cycle

Unit Program Information

Unit Identifier	Program Code	Unit Class	Unit Monitor Certification Begin Date	Unit Monitor Certification Deadline
WCCT3B	ARP	P2	12/03/2010	
	CAIRNOX	A	12/03/2010	
	CAIROS	A	12/03/2010	
	CAIRSO2	A	12/03/2010	

Unit Fuel

Unit Identifier	Fuel Type	Fuel Indicator	Demonstration Method for GCV	Demonstration Method for Daily Sulfur	Ozone Season Indicator	Begin Date	End Date
WCCT3B	DSL	S				12/01/2010	
	PNG	P				12/01/2010	

Fuel Type Codes: PNG - Pipeline Natural Gas

DSL - Diesel Oil

Fuel Indicator Codes: S - Secondary

P - Primary

Unit Controls

Unit Identifier	Parameter	Control Equipment	Original Ind	Seasonal Ind	Installation Date	Optimization Date	Retirement Date
WCCT3B	NOX	DLNB	Y				
	NOX	H2O	Y				
	NOX	O	Y				
	NOX	SCR	Y				

Control Equipment Descriptions: SCR - Selective Catalytic Reduction

O - Other

H2O - Water Injection

DLNB - Dry Low NOx Burners

Facility Name: West County Energy Center
Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Monitoring Method

Unit/Stack/Pipe Identifier	Parameter	Methodology	Substitute Data Approach	Bypass Approach Code	Begin Date/Hour	End Date/Hour
WCCT3B	CO2	AD	SPTS		12/01/2010 00	
	HI	AD	SPTS		12/01/2010 00	
	NOX	NOXR			12/01/2010 00	
	NOXR	CEM	SPTS		12/01/2010 00	
	OP	EXP			12/01/2010 00	
	SO2	AD	SPTS		12/01/2010 00	

Parameter Codes:
SO2 - SO2 Hourly Mass Rate (lb/hr)
OP - Opacity
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
CO2 - CO2 Hourly Mass Rate (ton/hr)

Methodology Codes:
NOXR - NOx Mass Calculated from NOx Emission Rate
EXP - Exempt
CEM - Continuous Emission Monitor
AD - Appendix D

Substitute Data Codes:
SPTS - Standard Part 75 for Missing Data

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Monitoring System / Analytical Components

Unit/Stack /Pipe Identifier	System					Component								
	ID	Type	Des	Begin Date/Hour	End Date/Hour	ID	Type	SAM	BAS	Manufacturer	Model or Version	Serial Number	Begin Date/Hour	End Date/Hour
WCCT3B	B01	NOX	P	12/01/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3B	12/01/2010 00	
						B01	NOX	EXT	D	TECO	42I-LS	0934838563	12/01/2010 00	
						B02	O2	EXT	D	SERVOMEX	1440D	01440D1V 02/4248	12/01/2010 00	
						B03	PRB	EXT		CISCO	EP750	10008100-8	12/01/2010 00	
	B02	GAS	P	12/01/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3B	12/01/2010 00	
						B04	GFFM	TUR		THERMO	6500	6000297822-102	12/01/2010 00	
						B05	GFFM	ORF		ROSEMONT	305AC9	1000510	12/01/2010 00	
	B03	OILM	P	12/01/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3B	12/01/2010 00	
						B06	OFFM	COR		MICRO MOTION	CMF300M	14147591	12/01/2010 00	

System Types Descriptions:
NOX - NOx Emission Rate
GAS - Gas Fuel Flow
OILM - Mass of Oil Fuel Flow

System Designations Descriptions:
P - Primary

Sample Acquisition Method (SAM):
TUR - Turbine
ORF - Orifice
EXT - Dry Extractive
COR - Coriolis

Component Types Descriptions:
DAHS - Data Acquisition and Handling System
NOX - NOx Concentration
O2 - O2 Concentration
PRB - Probe
GFFM - Gas Fuel Flowmeter
OFFM - Oil Fuel Flowmeter

Monitoring System Fuel Flow

Unit/Stack/Pipe Identifier	System ID	Fuel Code	Max Fuel Flow Rate	Units of Measure	Source Code	Begin Date/Hour	End Date/Hour
WCCT3B	B02	PNG	30667.0	HSCF	URV	12/01/2010 00	
	B03	DSL	126880.0	LBHR	UMX	12/01/2010 00	

System Fuel Codes Descriptions: PNG - Pipeline Natural Gas
DSL - Diesel Oil

Units of Measure Descriptions: LBHR - Pounds / Hour
HSCF - Hundred Standard Cubic Feet / Hour

Source Codes Descriptions: URV - Upper Range Value
UMX - Unit Maximum Rate

Analyzer Range Data

Unit/Stack/Pipe Identifier	Component Type	Component ID	Range Code	Dual Range Indicator	Begin Date/Hour	End Date/Hour
WCCT3B	NOX	B01	Auto Ranging	Y	12/01/2010 00	
	O2	B02	High Range		12/01/2010 00	

Component Types Descriptions: NOX - NOx Concentration
O2 - O2 Concentration

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Emissions Formulas

Unit/Stack/Pipe Identifier	Parameter	Formula ID	Formula Code	Formula	Begin Date/Hour	End Date/Hour
WCCT3B	CO2	B01	G-4	CO2-gas = (1040 * F#(B04) * (1 / 385) * 44.0) / 2000	12/01/2010 00	
	NOXR	B02	F-5	E = 1.194 * 10 ** - 7 * S#(B01-B01) * F#(B12) * (20.9/(20.9- S#(B02-B01)))	12/01/2010 00	
	NOX	B03	F-24A	NOX_mass = F#(B02)*F#(B06)	12/01/2010 00	
	HI	B04	D-6	HI_gas = (S#(B05-B02) * GCV_gas) / 10 ** 6	12/01/2010 00	
	HI	B05	D-8	HI_oil = S#(B06-B03) * GCV_oil / 10 ** 6	12/01/2010 00	
	HI	B06	D-15A	HI_hr = (F#(B04) * T_gas + F#(B05) * T_oil)/ T_unit	12/01/2010 00	
	SO2	B07	D-5	SO2_glb/hr = 0.0006*F#(B04)	12/01/2010 00	
	SO2	B08	D-2	SO2_rate-oil = 2.0 * S#(B06-B03) * %S_oil / 100.0	12/01/2010 00	
	SO2	B09	D-12	SO2_TOTAL= ((F#(B08) * T_OIL) + (F#(B07) * T_GAS))	12/01/2010 00	
	CO2	B10	G-4	W_CO2 = 1420 * F#(B05) * 1 / 385 * 44.0 / 2000	12/01/2010 00	
	CO2	B11	G-4A	CO2_unit =((F#(B01) * T_gas) + (F#(B10) * T_oil)) / T_unit	12/01/2010 00	
	FD	B12	F-8	F_c = X_oil * 1420 + X_gas * 1040	12/01/2010 00	
	FGAS	B13	N-GAS	GAS_TOTAL = S#(B04-B02) + S#(B05-B02)	12/01/2010 00	

Parameter Codes Descriptions:

CO2 - CO2 Hourly Mass Rate (ton/hr)
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
SO2 - SO2 Hourly Mass Rate (lb/hr)
FD - F-Factor Dry-basis
FGAS - Gas Hourly Flow Rate (hscf)

Formula Codes Descriptions:

N-GAS - FGAS (net gas flow rate)
G-4A - CO2 (from CO2 rate for multiple fuels)
G-4 - CO2 (from HI, Fc)
F-8 - FD/FC/FW (from multiple fuels)
F-5 - NOXR/SO2R (from NOX or SO2 dry, O2 dry, Fd)
F-24A - NOX (from NOX rate, HI)
D-8 - HI (from oil flow rate, GCV)
D-6 - HI (from gas flow rate, GCV)
D-5 - SO2 (from gas SO2 emission rate, HI)
D-2 - SO2 (from OILM, oil sulfur content)
D-15A - HI (from HI rate for multiple fuels)
D-12 - SO2 (from SO2 rate for multiple fuels)

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:10 PM

Span Values

Unit/Stack /Pipe Identifier	Comp Type	Scale	Method	MPC/ MPF	MEC	Span Value	Full-Scale Range	Units of Measure	Scale Transition Point	Def. High Range Value	Flow Full Range (SCFH)	Flow Span Value (SCFH)	Begin Date/Hour	End Date/Hour
WCCT3B	NOX	H	TB	200.0	10.0	200.000	200.000	PPM	9.0				12/01/2010 00	
	NOX	L	F		10.0	10.000	10.000	PPM	9.0				12/01/2010 00	
	O2	H				25.000	25.000	PCT					12/01/2010 00	

Component Types Descriptions: NOX - NOx Concentration
O2 - O2 Concentration

Span Method Codes Descriptions: TB - Table Defaults from Part 75
F - Formula

Units of Measure Descriptions: PPM - Parts per Million
PCT - Percentage

Unit/Stack/Pipe Load or Operating Level Information

Unit/Stack/Pipe Identifier	Maximum Hourly Load	Units of Measure	Upper Bound of Range of Operation	Lower Bound of Range of Operation	Designated Normal Op. Level	Second Most Frequently Used Op. Level	Second Normal Indicator	Load Analysis Date	Begin Date/Hour	End Date/Hour
WCCT3B	417	MW	417	55	High	Mid	Yes	12/01/2010	12/01/2010 00	

Units of Measure Descriptions: MW - Megawatt

Monitoring Defaults

Unit/Stack/Pipe Identifier	Parameter	Value	Units of Measure	Purpose Code	Fuel Type	Operating Condition	Source of Value	Begin Date/Hour	End Date/Hour
WCCT3B	NORX	2.2880	LBMMBTU	MD	NFS	A	TEST	12/01/2010 00	
	O2X	19.0000	PCT	DC	NFS	A	DEF	12/01/2010 00	

Parameter Codes Descriptions: O2X - Maximum O2 Concentration (pct)
NORX - Maximum NOx Emission Rate (lb/mmBtu)

Units of Measure Descriptions: PCT - Percentage
LBMMBTU - Pounds / mmBtu

Purpose Codes Descriptions: MD - Missing Data (or Unmonitored Bypass Stack or Emergency Fuel) Default
DC - Diluent Cap

Fuel Type Codes Descriptions: NFS - Non-Fuel Specific

Operating Conditions Descriptions: A - Any Hour

Source Codes Descriptions: TEST - Unit or Stack Testing
DEF - Default Value from Part 75

APPENDIX 9

GAS AND OIL FUEL METER CERTIFICATION DOCUMENTATION

FLOW ELEMENT INSPECTION / CLOSURE REPORT

WEST COUNTY POWER PARTNERS, LLC.
WEST COUNTY ENERGY CENTER - UNIT 3

FLORIDA POWER & LIGHT

Startup Package 3FGA-02

Project Number 161354

Date 2/18/11

Tag Number 3FGA- FE-1001 SN 100510 Checked By Bruce Jordan

Service Description H-A DUCT BNR FG INL FLOW ELEMENT/CALIBRATED SECTION

P&ID 3FGA-M2381 Purchase Spec. 64.0602 Installation Spec. 70.0000

AREA BLDG STRUC COL RD ROW R304 ELEV

	Accept	Reject (*see footnote*)
All shipping, storage materials, removed from FLOW ELEMENT. (ie; braces, packing material, plugs, caps, dessicant, etc.)	BJ	
All Mechanical internals installed per installation instructions, and fastened correctly. (If Applicable)	BJ	
All internal surfaces coated as per specifications. (If Applicable)	N/A	
All FLOW ELEMENT penetrations clear and free of obstructions.	BJ	
FLOW ELEMENT is free of any debris or foreign mater. (ie; welding rods, trash, loose nuts, bolts, washers, dirt, rags, ect.)	BJ	
FLOW ELEMENT gasket seating surfaces are clean and free of visible defects.	BJ	

Remarks

***NOTE**: If any item is rejected, it must be corrected and reinspected prior to closing the vessel.*

Certificate of Calibration

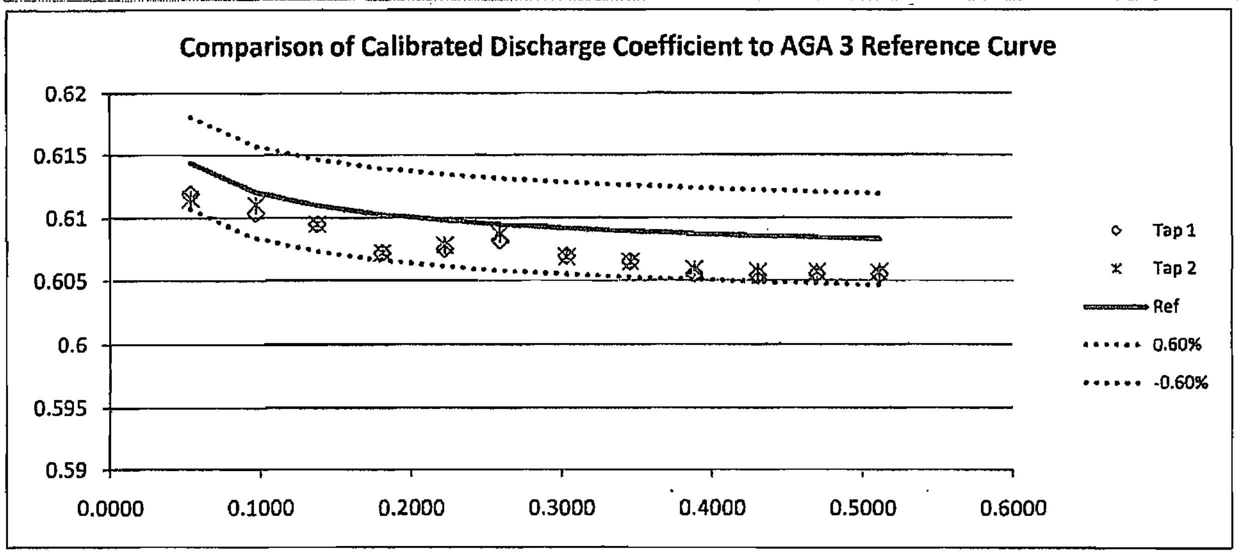
PO Number	FPLWC 64.0602
Tag Number	3FGA-FE-1001

The flow meters for the above referenced purchase order were calibrated at a reputable flow calibration laboratory using the standard procedures of the lab. These procedures have been evaluated by the quality assurance department of Triad Measurement & Equipment, Inc. (Triad). The calibration data has been reviewed by Triad and has been presented in tabular and graphical format for review.

To intitate the test, the flow meters were installed in the laboratory flow line. Careful attention was given to align the flow element with the test line piping, and to assure no gaskets between flanged sections protruded into the flow. Vents were provided at critical locations of the test line to purge the system of air. The test technician verified proper installation of the flow element in the test line prior to introducing water into the system to equalize test line piping and primary element temperature to water temperature. Prior to the test run, the control valve was set to produce the desired flow, while the flow was directed to waste. Sufficient time was allowed to stabilze both the flow and the instrument readings, after which the weigh tank discharge valve was closed and the weigh tank scale indicator and the electric timer were both zeroed. To begin the test run, flow was diverted into the weigh tank, which automatically started the timer. At the start of water collection a computer based data acquisition system was activated to read the meter output, such that the meter output was averaged while the weigh tank was filling. At the end of the run, flow was diverted away from the weigh tank and the timer and data acquisition system were stopped to terminate the test run. The weight of water in the tank, elapsed time, water temperature, and average meter output were recorded on a data sheet. The data were entered into the computer to determine the flow and the results were plotted so that each test run was evaluated before the next run began. The control valve was then adjusted to the next flow and the procedure repeated.

The laboratory has reported that the flow measure uncertainty is within .3% of the true value for each test run. Calibrations of the test instrumentation (tempurature, time, weight and length measurements) are traceable to the National Institute of Standards and Technology (formerly the National Bureau of Standards). Triad certifies that the data included in this report is accurate and has been obtained from original laboratory documents. Based on the periodic review of lab procedures and review of the applicable lab data, the calibration for the meters listsed in the attachements has been accepted.

Michael Bibb - President



Tap 1	
Avg Coef	0.6075
Regression Calc Slope	-0.0132
Regression Calc Intercepl	0.6112
Design Rn	861,800

Tap 2	
Avg Coef	0.6077
Regression Calc Slope	-0.0127
Regression Calc Intercepl	0.6113
Design Rn	861,800

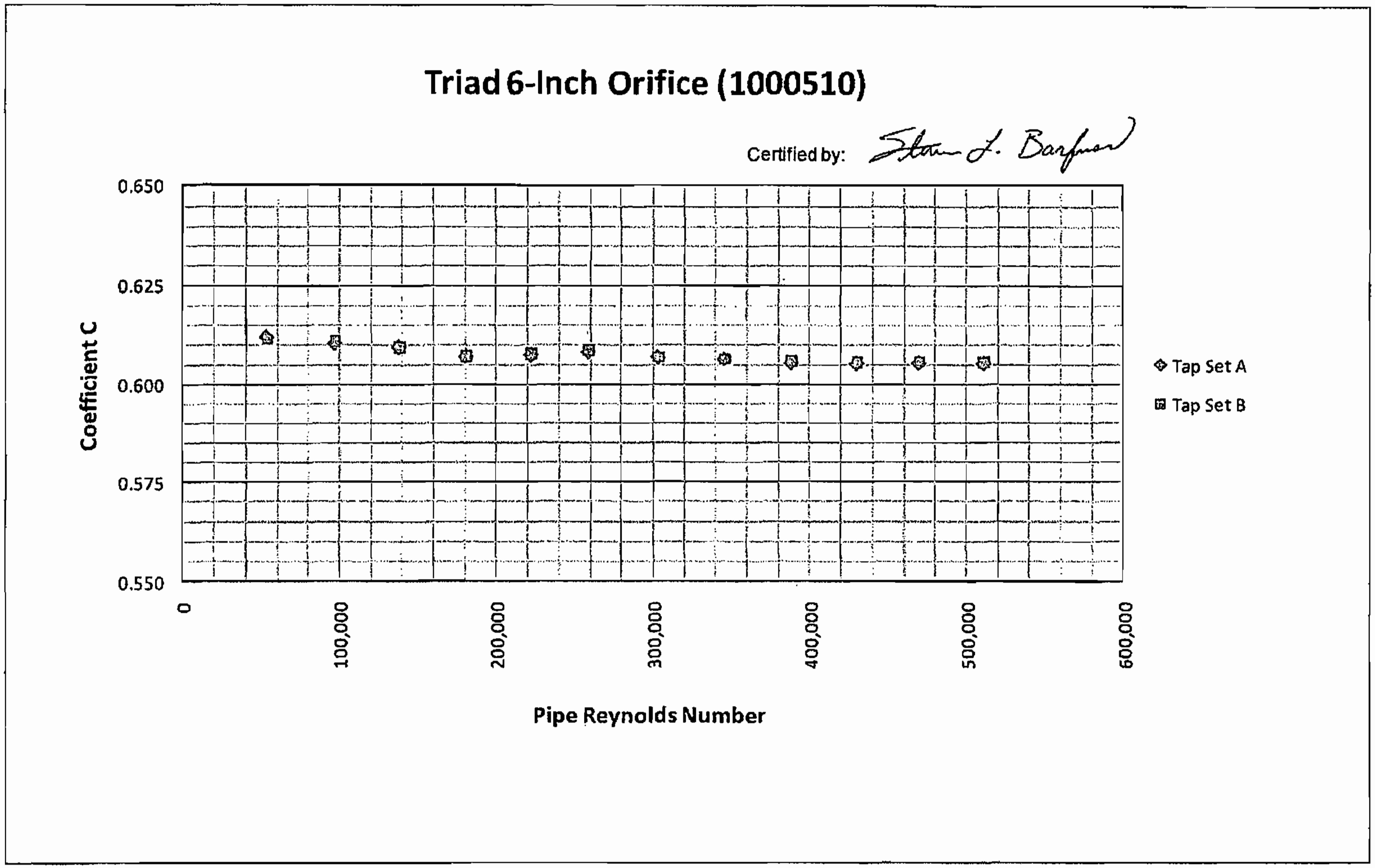


Figure 1. Discharge coefficient versus pipe Reynolds Number for 6-inch meter SN# 1000510

Table 1. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5850
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.065
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000510	Pipe Diameter (in.) =	6.065
Meter / Tag Number:	3FGA-FE-1001 / 3FGA-FE-1001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.5
	Tap Set A	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.58E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	150.5	10.48	53,620	0.6119	0.73%	0.27%
2	272.5	34.56	97,113	0.6104	0.48%	0.27%
3	387.1	69.94	137,926	0.6095	0.32%	0.30%
4	507.9	121.31	180,977	0.6072	-0.05%	0.27%
5	623.8	182.81	222,289	0.6075	0.00%	0.26%
6	726.9	247.69	259,041	0.6082	0.12%	0.25%
7	851.4	341.25	303,389	0.6069	-0.10%	0.27%
8	970.2	443.75	345,734	0.6065	-0.17%	0.26%
9	1090.0	561.88	388,422	0.6055	-0.32%	0.26%
10	1207.6	690.00	430,337	0.6054	-0.35%	0.26%
11	1318.7	822.50	469,910	0.6055	-0.33%	0.25%
12	1434.8	973.75	511,282	0.6055	-0.34%	0.25%

Average coefficient for all data : 0.6075

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

Table 2. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5850
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.0650
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000510	Pipe Diameter (in.) =	6.0650
Meter / Tag Number:	3FGA-FE-1001 / 3FGA-FE-1001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.5
	Tap Set B	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.58E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	150.5	10.50	53,620	0.6115	0.63%	0.27%
2	272.5	34.50	97,113	0.6110	0.54%	0.27%
3	387.1	69.94	137,926	0.6095	0.30%	0.30%
4	507.9	121.31	180,977	0.6072	-0.08%	0.27%
5	623.8	182.63	222,289	0.6078	0.03%	0.26%
6	726.9	247.31	259,041	0.6087	0.17%	0.25%
7	851.4	341.25	303,389	0.6069	-0.13%	0.27%
8	970.2	443.75	345,734	0.6065	-0.19%	0.26%
9	1090.0	561.25	388,422	0.6059	-0.29%	0.26%
10	1207.6	689.38	430,337	0.6057	-0.33%	0.26%
11	1318.7	821.88	469,910	0.6057	-0.32%	0.25%
12	1434.8	973.13	511,282	0.6057	-0.33%	0.25%

Average coefficient for all data : 0.6077

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

TRIAD MEASUREMENT & EQUIPMENT, INC.
PO BOX 6237 KINGWOOD, TX 77325
PH 281-359-2300 FAX 281-359-2757

FE-Sizer for Windows 95/98/Me/NT/2000/XP/2003 Server - Version 3.0, Release 3.43.1.

Licensed to: Triad Measurement & Equipment Inc.

Service Data

Tag:	3FGA-FE-1001	Client:	WCPP LLC
Serv:	HRSG A DUCT BNR FUEL GAS INLET	Project:	West County Energy Ctr. Unit 3
Line No.:		J.O./P.O. No.:	161354.64.0602

Calculation Method & Base Conditions

Sizing Parameter:	FLOWMETER FLOW	C-Std:	API 2530/AGA 3 (1992)
Atm Press, Patm:	14.696 psia	Tap Loc:	UPSTREAM

Meter/Pipe Data

Meter Type:	ORIFICE PLATE	Meter Matl:	316/316L SS
Meter Style:	CONCENTRIC	Tap Style:	FLANGE TAPS
Nom Pipe Size:	6.00 in	Pipe Matl:	CARBON STEEL
Pipe I.D., D(ref):	6.065 in	Pipe Sched:	STD

Sizing Data

Orifice Bore, d (60.0 deg F):	3.5480 in
Maximum Differential, dPm (ref dP - H2O @ 60.0 deg F):	250.000 in WC
Normal Differential, dPm (ref dP - H2O @ 60.0 deg F):	150.000 in WC

Fluid Data

Fluid:	FUEL GAS
State-Units-Equation-Condition:	VAPOR-MASS-PVT-FLOWING
Specific Gravity, Gg:	0.6000
Compressibility (Flowing), Zf1:	1.0000
Pressure (Flowing), Pf1:	44.7000 psia
Temperature (Flowing), Tf1:	95.0 deg F
Viscosity, U:	0.01500 cPoise
Specific Heat Ratio (Cp/Cv), k:	1.4000

Calculated Results

Sizing Factor, Sm:	0.212049
Pipe Reynolds Number @ Maximum Flow, RD:	1110809
Pipe Reynolds Number @ Normal Flow, RD:	860429
Discharge Coefficient, C:	0.605705
Expansion Factor, Y1:	0.961015
Bore Expansion Factor, Fad:	1.000259
Pipe Expansion Factor, FaD:	1.000166
Permanent dP Loss:	64.54 %
Throat Velocity @ Max Flow:	496.13 ft/s
Beta, B (68.0 deg F):	0.58500
Maximum Flow, Wm:	16002.7 lb/h
Normal Flow, Wn:	12395.7 lb/h
Orifice Uncertainty, Uo:	0.50 %
Calc Memo: 14200-01-01 ASME Calibrated	

Sales Order Number: 14200
By: Taher Fodeibou

Sht: ___ of ___ Chk: _____
Rev: 0 Date: 13 Oct 2010

TRIAD
CERTIFIED AS BUILT

Micro Motion, Inc. Mass Flowmeter Calibration Certificate **14147591**

System Under Test

Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
CMF300H999NAFUEZZX	14147591	SSCB/CSSC	81249040	1	1	3B32MBN11CF121
2700R11BCUEZZZ	3131979	SSCB/CSSC	81249040	1	1	3B32MBN11CF121

Core Processor S/N 16123652

Setup

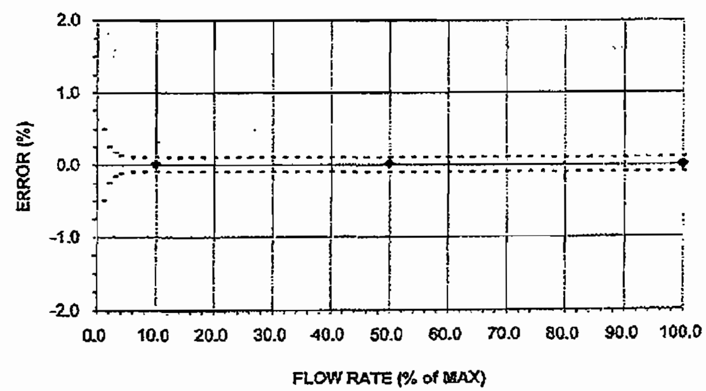
Calibration : 1.25128841
Calibration Time : 15-Sep-09
Test Stand : TSM2-A/AUTO @ SSCB
Uncertainty : ±0.03 %
Fluid : WATER
100%Rate : 2268.00 kg/min
Pickoff : MMI
100% P/T: 278.27 kPa /22.1 ℃

Results

Status : PASSED
D1 : 0
D2 : 1
K1 : 10571.22
K2 : 12376.43
DT : 2.79
DensCal : 10571123762.79
FD : 230.93
DTG : -
DFQ1 : -
DFQ2 : -
FCF : 735.88
FT : 2.79
FlowCal : 735.882.79
FFQ : -
FTG : -

Technician	Witness
P. MEDINA	H. KOMATSU H. Komatsu

Detail



Flow (%)	Nominal Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	2268.00	1704.742	1704.814	-0.004	0.100
10.0	226.80	170.4856	170.4789	0.004	0.100
50.0	1134.00	853.8642	853.7238	0.016	0.100
100.0	2268.00	1705.196	1705.057	0.008	0.100

MHI POWER SYSTEMS HQ TAKASAGO
☐ Witnessed
☑ Reviewed
By:
On: 27.09.'09

Traceable to International Standards. Details at www.micromotion.com.

Micro Motion, Inc. Transmitter Configuration Report **3131979**

Process Role	Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
Sensor	CMF300H999NAFUEZZX	14147591	JPN/CSSC	81249040	1	1	3B32MBN11CF121
Transmitter	2700R11BCUEZZZ	3131979	JPN/CSSC	81249040	1	1	3B32MBN11CF121

Core Processor S/N 16123652

Flow Variable Setup

Direction :	FORWARD ONLY	
Damping :	0.8	SEC
Mass Flow Unit :	lb/h	
Volume Flow Unit :	ft3/h	
Mass Flow Cutoff :	600.01	lb/h
Volume Flow Cutoff :	9.61	ft3/h

Density Variable Setup

Damping :	1.6	SEC
Unit :	lb/ft3	
Low Limit :	0	g/cm3
High Limit :	5	g/cm3

Temperature Variable Setup

Unit :	DEGF	
Damping :	4.8	SEC

Channel A Output Setup: (Milliamp Output 1)

LRV :	0	lb/h
URV :	150000	lb/h
Cutoff :	600.01	lb/h
Damping :	0	SEC
Variable :	Mass Flow	

Channel B Output Setup: (Milliamp Output 2)

LRV :	30	lb/ft3
URV :	60	lb/ft3
Cutoff :	-	lb/ft3
Damping :	0	SEC
Variable :	Density	

Channel C Output Setup: (Frequency Output)

Hz :	1	Hz
Flow Rate :	72000	lb/h
Unit Per Pulse :	20	lb/Pulse
Variable :	Mass Flow	

Bracket Tightened : Good

General Transmitter Setup

Fault Setting(Milliamp) :	DOWN SCALE (2mA)
Fault Setting(Freq) :	DOWN SCALE (0Hz)
Control Setting :	-
Processing Time :	20Hz
Channel A Setting:	INTERNAL
Channel B Setting:	INTERNAL
Channel C Setting:	EXTERNAL

Sensor Setup

D1 :	0
D2 :	1
K1 :	10571.22
K2 :	12376.43
DT :	2.79
FD :	230.93
FlowCal :	735.882.79

Special Units 1 Setup

Special Flow Unit :	-
Special Total Unit :	-
Base Total Unit :	-
Base Time Unit :	-
Conversion :	-

Special Units 2 Setup

Special Flow Unit :	-
Special Total Unit :	-
Base Total Unit :	-
Base Time Unit :	-
Conversion :	-

Off-Line Configuration Password (code) : 1234

Witness
H. KOMATSU H. Komatsu

EMERSON PROCESS MANAGEMENT

MHI
POWER SYSTEMS HQ
TAKASAGO
☐ Witnessed
☑ Reviewed
By: [signature]
On: 27.09.'09

2009/10/6 14:33 [CSSC]

CUSTOM INSTRUMENTATION
SERVICES CORPORATION

CISCO

CERTIFICATION REPORT
UNIT 3C
CONTINUOUS EMISSION MONITORING SYSTEM

WEST COUNTY ENERGY CENTER
LOXAHATCHEE, FLORIDA

PREPARED FOR: FLORIDA POWER AND LIGHT COMPANY

PREPARED BY: CUSTOM INSTRUMENTATION SERVICES CORPORATION

REV. 0
DATE: April 26, 2011

COPY NO ____

7841 SOUTH WHEELING COURT • ENGLEWOOD, COLORADO 80112
TEL: (303) 790-1000 FAX: (303) 790-7292

TABLE OF CONTENTS

1. INTRODUCTION

The West County Energy Center is a nominal 3,750 megawatt (MW) power plant located in Loxahatchee, Florida. Three nominal 1,250 MW gas-fired combined cycle units use ultralow sulfur (ULS) fuel oil as backup fuel. Each combined cycle unit consists of three nominal 250 MW Model 501G gas turbines with three supplementary-fired heat recovery steam generators (HRSG) and a common 500 MW steam-electric generator. Exhaust gases from each turbine are discharged into the atmosphere through stacks approximately 150 feet above grade. A dedicated CEMS monitors emissions from each unit.

Custom Instrumentation Services Corporation of Centennial, Colorado built the Continuous Emission Monitoring Systems (CEMS). This report provides information on the certification of the CEMS measuring emissions from Unit 3C. Data from the CEMS is recorded and stored on a Data Acquisition System.

The CEMS on the combustion turbines have been designed to meet the monitoring and reporting requirements of Florida Department of Environmental Protection (FDEP) and USEPA as required by 40 CFR 60 and 40 CFR 75. This report presents the results of testing on the NO_x, CO and O_2 analyzers on Unit 3C. The testing was performed to meet the requirements of 40 CFR 60, Appendix B, Performance Specification 4/4a for CO and 40 CFR 75, Appendix A for NO_x and O_2.

Field certification testing on the CEMS occurred in February and March 2011. The tests conducted on the CEMS included Relative Accuracy, Bias Check, Calibration Error, Linearity, Cylinder Gas Audit and Cycle Time. The results of all tests are summarized in Table 1. A printout of the certification results generated by the EPA Emission Collection and Monitoring Plan System (ECMPS) is included in Appendix 2.

Air Hygiene conducted Relative Accuracy Testing for NO_x, CO and O_2. Ten runs were completed Unit 3C. The results of the RA tests are in the Air Hygiene test report. As shown, the Relative Accuracy calculations on the analyzers were within the EPA and FDEP requirements for all parameters. A detailed description of the RA testing is provided in Section 2.1 and in the Air Hygiene test report in Appendix 1.

A bias check evaluation was made on the NO_x lb/mmBtu relative accuracy results as required in 40 CFR 75. Unit 3C did exhibit bias and a bias adjustment factor is required. The bias test results are discussed in Section 2.2. Supporting data is provided in the relative accuracy tables in the Air Hygiene test report.

The calibration error and calibration drift tests occurred over seven consecutive operating days. The results of the analyzer drift tests are summarized in Table 1. As shown, the analyzers operated well within the applicable EPA requirements. An explanation of the drift test is provided in Section 2.3 and supporting documentation is provided in Appendix 3.

Linearity tests on the high range of the NO_x analyzer and on the O_2 analyzer are a requirement of 40 CFR 75. Cycle Time tests on the NO_x analyzer and the O_2 analyzer are

also a requirement of 40 CFR 75. The tests took place on March 14, 2011. Cylinder Gas Audits and a cycle time test on the CO analyzer also took place on March 14, 2011. The results of the tests are summarized in Table 1. As shown, the analyzers operated well within EPA requirements for all parameters. An explanation of the linearity and CGA tests is provided in Section 2.4. Summary tables and audit reports for the linearity and CGA tests are provided in Appendix 4. An explanation of the cycle time test is provided in Section 2.5. Supporting documents for the cycle time tests are provided in Appendix 5.

A formula verification was performed on the Data Acquisition and Handling System. The DAHS passed all the tests required by EPA. The DAHS test is described in Section 3 and supporting documents are provided in Appendix 7.

A complete 40 CFR 75 Monitoring Plan is included in Appendix 8 and the gas fuel meter certification documentation is provided in Appendix 9.

In summary, the CEMS on Unit 3C at West County Energy Center provides reliable data and operates within the requirements of the EPA as outlined in 40 CFR 60, Appendix B, Performance Specifications 2, 3, 4/4a and 40 CFR 75, Appendix A and meet the requirements of the FDEP for CEMS.

Table 1 WEST COUNTY ENERGY CENTER UNIT 3C

SUMMARY OF CEMS CERTIFICATION RESULTS

	RESULTS	STANDARD	PASS / FAIL
	RELATIVE ACCURACY		
NO_x lb/mmBtu	0.001 lb/mmBtu	0.015 lb/mmBtu MD*	PASS
CO ppm @15% O_2	2 ppm	5 ppm MD	PASS
CO lb/hr	2 ppm	5 ppm MD	PASS
	40 CFR 75 BIAS TEST		
Adjustment Factor	1.104	NA	BAF Required
	7-DAY CALIBRATION ERROR NO_x High		
NO_x High (Zero)	0.1% of span	2.5% of span	PASS
NO_x High (Span)	2.0% of span	2.5% of span	PASS
	7-DAY CALIBRATION ERROR O_2		
O_2 % (Zero)	0.0 % O_2	0.5% O_2	PASS
O_2 % (Span)	0.1 % O_2	0.5% O_2	PASS
	7-DAY CALIBRATION DRIFT CO Low		
CO Low (Zero)	4.0% of span	5.0% of span	PASS
CO Low (Span)	5.0% of span	5.0% of span	PASS
	7-DAY CALIBRATION DRIFT CO High		
CO High (Zero)	0.1% of span	5.0% of span	PASS
CO High (Span)	4.9% of span	5.0% of span	PASS
	LINEARITY		
NO_x High Range	3.0%	5% LE	PASS
O_2 %	1.1%	5% LE	PASS
	CYLINDER GAS AUDIT		
CO Low Range	6.7%	15% CGA Error	PASS
CO High Range	4.5%	15% CGA Error	PASS
	CYCLE TIME		
NO_x lb/mmBtu	3 Minutes	15 Minutes	PASS
CO Low Range	76 Seconds	90 Seconds	PASS
ANALYZER SERIAL NUMBERS			
NO_x		0934939234	
CO		CM09400114	
O_2		01440DIVO2/4249	

WHERE: RA = RELATIVE ACCURACY
* = RATA RESULTS REQUIRED FOR ANNUAL RATA FREQUENCY FOR 40 CFR 75
MD = MEAN DIFFERENCE BETWEEN RM AND CEMS PLUS THE 2.5 % CONFIDENCE COEFFICIENT
DRIFT AND LINEARITY RESULTS ARE THE HIGHEST ENCOUNTERED DURING ALL TESTS

2. CEMS CERTIFICATION

Field tests and DAHS tests were performed for CEMS certification in accordance with the criteria in 40 CFR 60, Appendix B, 40 CFR 75, Appendix A, and 40 CFR 75.20. The results for all tests were determined from the data collected by the DAHS. The computer printouts for each field test are included in the Appendices.

2.1 RELATIVE ACCURACY

The relative accuracy test audit (RATA) was performed on March 12 and 13, 2011. Each test run was a minimum of 21 minutes in duration and consisted of sampling for NO_x, CO and O_2. The times during which the tests were performed are shown in the Air Hygiene test report in Appendix 1.

The reference methods used by Air Hygiene are outlined below:

CONSTITUENT	METHOD
O_2	EPA METHOD 3A
CO	EPA METHOD 10
NO_x	EPA METHOD 7E

As shown in the Relative Accuracy (RA) tables in the Air Hygiene test report, relative accuracy is reported as an error and is the sum of the absolute mean value of the differences between the reference method tests and the instrument readings, plus the 95 percent confidence interval of the differences, expressed as a percentage of the mean reference method value. As an alternative, 40 CFR 75 allows low NO_x emitters (less than 0.20 lb/mmBtu) to express relative accuracy as the difference between the average reference method value and the average CEMS value.

CO results are acceptable if the RA does not exceed 10%, if the average difference between the CEMS and reference method values plus the 2.5 percent confidence coefficient does not exceed 5.0 ppm, or if the alternative relative accuracy (ARA) does not exceed 5%.

The analyzer response was determined from the average of readings taken every minute for the duration of the time the relative accuracy tests were performed. The raw value reports from the CEMS are included in the Air Hygiene test report.

The NO_x lb/mmBtu measurement passed the relative accuracy requirements as stated in 40 CFR 75, Appendix A and the NO_x system (NO_x and O_2 analyzer) qualifies for annual RATA frequency under 40 CFR 75. The NO_x system had a relative accuracy result less than 7.5%. The CO analyzers passed the relative accuracy requirements as stated in 40 CFR 60, Appendix B, PS 4/4a.

2.2 BIAS CHECK

The relative accuracy result for NO_x lb/mmBtu on Unit 3C was checked for low bias by determining if the mean difference between the test team's values and the CEMS values is greater than the absolute value of the confidence coefficient. The CEMS on Unit 3C did exhibit bias and a bias adjustment factor is required.

2.3 CALIBRATION ERROR/CALIBRATION DRIFT

The 7-day calibration error test on both ranges of the CO analyzer and the high ranges of the NO_x and O_2 analyzers occurred on seven consecutive days when the unit was operating at normal load. No adjustments were made to any of the analyzers during the seven day period. The calibration gases used for the calibration error test were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

The NO_x, CO and O_2 data from calibrations occurring over seven days are provided in Appendix 3. As shown, the calibration error for all analyzers was well within EPA requirements.

2.4 LINEARITY/CGA

The NO_x high range and O_2 linearity tests and the CO Cylinder Gas Audits (CGA) were performed on March 14, 2011. To perform the linearity test, the analyzers were challenged three times with each of three levels of calibration gas (low, mid and high). To perform the CGA, both ranges of the CO analyzer were challenged three times with two levels of calibration gas (low and mid).

The mean difference between the analyzer response and the calibration gas value, as a percentage of the calibration gas value, must be within 5% for linearity tests and within 15% for CGA. Results are also acceptable if the difference between the mean response and the calibration gas is within 5 ppm for NO_x and CO or 0.5% O_2. The linearity results for Unit 3C were within the requirements of 40 CFR 75, Appendix A and the CGA results met requirements of 40 CFR 60, Appendix F.

Summaries of the linearity and CGA test results are provided in tables in Appendix 4. The calibration gases used for the tests were US EPA Protocol 1, following the requirements of 40 CFR 75. The certificates of analysis for the cylinders are included in Appendix 6.

2.5 CYCLE TIME/RESPONSE TIME

The cycle time tests were performed on March 14, 2011. To perform the test, both ranges of the NO_x analyzer and the O_2 analyzer were challenged with a zero gas and high level (80 to 100% of span) calibration gas. Both the upscale and down scale response times were determined. As stated in 40 CFR 75, Appendix A, the response time to reach 95% of

the gas value must be less than 15 minutes. For the NO_x system (NO_x and O_2 analyzer), the longer of the two analyzers response times is the cycle time for the system.

The response time test on the low range of the CO analyzer was performed on March 14, 2011. As stated in 40 CFR 60, Appendix B, PS 4a, the three averaged upscale and downscale response times must be less than or equal to 90 seconds. The system response times met this requirement for Unit 3C. Reports that show the analyzers response are provided in Appendix 5.

3. DAHS VERIFICATION

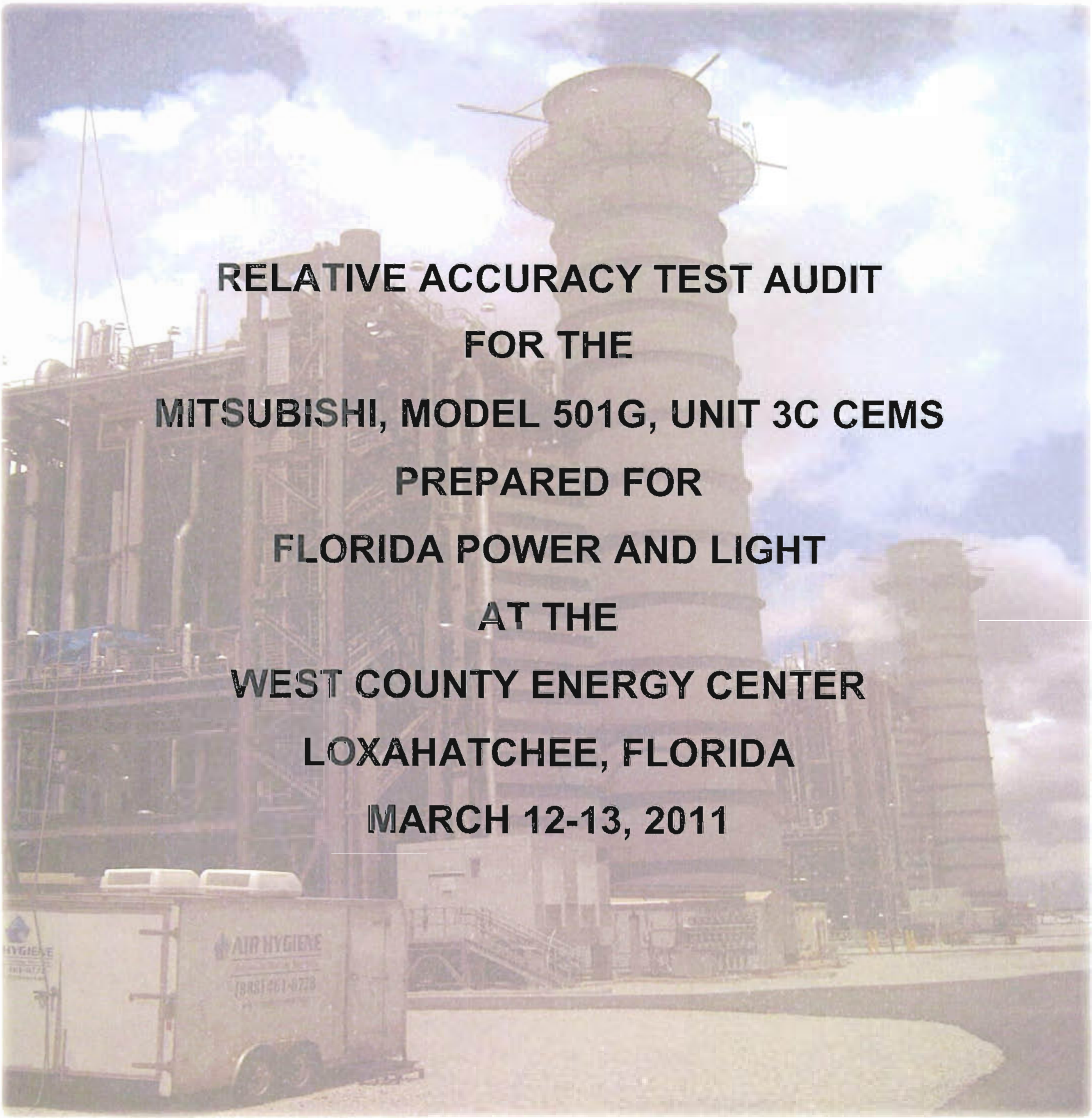
Each of the missing data routines and calculations performed by the DAHS was verified. All variables included in the calculations (bias adjustment factor, fuel inputs) were included. The formula verification and associated printouts are included in Appendix 7.

4. DISCUSSION OF RESULTS

The CEMS and DAHS on Unit 3C at West County Energy Center successfully met all the requirements of the EPA as outlined in 40 CFR 60 and 40 CFR 75. The certification data has been entered in the format specified by EPA for 40 CFR 75 and a printout of the results generated by ECMPS is included in Appendix 2.

APPENDIX 1

AIR HYGIENE RATA TEST REPORT



RELATIVE ACCURACY TEST AUDIT

FOR THE

MITSUBISHI, MODEL 501G, UNIT 3C CEMS

PREPARED FOR

FLORIDA POWER AND LIGHT

AT THE

WEST COUNTY ENERGY CENTER

LOXAHATCHEE, FLORIDA

MARCH 12-13, 2011

Corporate Headquarters
5634 S. 122nd E. Ave. Suite F
Tulsa, OK 74146

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Miami, FL 33101
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LOXAHATCHEE, FLORIDA
MARCH 12-13, 2011

Prepared and Reviewed by:

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APPENDICES

Relative Accuracy Test Audit
Mitsubishi, Model 501G, Unit 3C CEMS
Florida Power and Light
West County Energy Center
Loxahatchee, Florida
March 12-13, 2011

1.0 INTRODUCTION

Air Hygiene International, Inc. (Air Hygiene) has completed the Relative Accuracy Test Audit (RATA) for nitrogen oxides (NOx), carbon monoxide (CO), and oxygen (O_2) from the exhaust of the Mitsubishi, Model 501G, Unit 3C for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. This report details the background, results, process description, and the sampling/analysis methodology of the stack sampling survey conducted on March 12-13, 2011.

1.1 TEST PURPOSE AND OBJECTIVES

The purpose of the test was to perform the initial certification RATA on the CEMS that serves the Mitsubishi, Model 501G, Unit 3C for Florida Power and Light at the West County Energy Center near Loxahatchee, Florida. Reference method (RM) testing followed the Code of Federal Regulations (CFR), Title 40 (40 CFR), Part 60 (40 CFR 60), Appendix A, Methods 1, 3a, 7e, 10, and 19. RM values are compared with the on-site CEMS to document performance as required in the 40 CFR 60, Appendix B, Performance Specifications (PS) and 40 CFR 75 Appendix A and B. All relative accuracies were established on-site and were governed by the following sets of rules:

In accordance with 40 CFR 75, Appendix A, Section 3.3.2(a) and (b), the NOx RATA results are acceptable if the RA does not exceed 10.0 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.02 lb/MMBtu. Passing this set of criteria requires the CEMS to be retested after no more than two operating quarters. Alternatively, in accordance with 40 CFR 75, Appendix B, Section 2.3.1.2(a) and (f), and Appendix B, Figure 2, the NOx RATA results are acceptable if the RA does not exceed 7.5 percent or if during the RATA the average NOx emission rate is less than or equal to 0.2 lb/MMBtu and the average difference between the CEMS and RM values does not exceed 0.015 lb/MMBtu. Passing this set of criteria allows the CEMS to be retested after four operating quarters or at least within eight calendar quarters.

In accordance with 40 CFR 60, Appendix B, PS 4 and 4A, Sections 13.2 of each, the CO RA test results are acceptable if the RA does not exceed 10.0 percent, if the average difference between the CEMS and RM values plus the 2.5 percent confidence coefficient (2.5%CC) does not exceed 5.0 parts per million (ppm), or if the alternative relative accuracy (ARA) does not exceed 5.0 percent. Part 60 further requires that the unit be operating at greater than 50 percent of normal load.

1.2 SUMMARY OF TEST PROGRAM

The following list details pertinent information related to this specific project:

1.2.1 Participating Organizations
- Florida Department of Environmental Protection (FDEP)
- Florida Power and Light
- Black and Veatch
- Custom Instrumentation Services Corporation (CiSCO)
- Air Hygiene

1.2.2 Industry
- Electric Utility / Electric Services

1.2.3 Air Permit and Federal Requirements
- Permit Number: PSD-FL396
- Emission Unit ID: 015
- 40 CFR 60, Appendix B, Performance Specifications (PS)
- 40 CFR 75, Appendix A
- 40 CFR 75, Appendix B

1.2.4 Plant Location
- West County Energy Center near Loxahatchee, Florida

1.2.5 Equipment Tested
- Mitsubishi, Model 501G, Unit 3C
- NOx Analyzer (THERMO, 42i-LS, Serial #0934939234)
- CO Analyzer (THERMO, 48i, Serial #CM09400114)
- O_2 Analyzer (Servomex, 1440D, Serial#01440DIV02/4249)

1.2.6 Emission Points
- Exhaust from the Mitsubishi, Model 501G, Unit 3C
- For all gases, one sample point in the exhaust duct from the Mitsubishi, Model 501G, Unit 3C, determined after conducting a stratification test (refer to Appendix E)

1.2.7 Pollutants Measured
- NOx
- CO
- O_2

1.2.8 Dates of Emission Test
- March 12-13, 2011

1.3 KEY PERSONNEL

Florida Power and Light:	John Mirino	786-242-3895
Black and Veatch:	Bill Stevenson	913-458-8549
CiSCO:	Justin Hewett	936-537-4848
Air Hygiene:	Jake Fahlenkamp	918-307-8865

2.0 SUMMARY OF TEST RESULTS

Results from the sampling conducted on Florida Power and Light's Mitsubishi, Model 501G, Unit 3C located at the West County Energy Center on March 12-13, 2011 are summarized in the following table.

TABLE 2.1
SUMMARY OF MITSUBISHI, 501G, UNIT 3C RATA RESULTS

Pollutant	Units	Criteria			Results	Passed / Test Frequency
		CFR	Specification / Section	Standard		
NOx	lb/MMBtu	Part 75	Appendix A, Section 3.3.2(a),(b) Appendix B, Section 2.3.1.2(a),(f), Figure 2	RA ≤ 10%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.02 lb/MMBtu Annual Incentive RA ≤ 7.5%, or if lb/MMBtu ≤ 0.2, d ≤ ±0.015 lb/MMBtu	RA = 16.3% RM = 0.01 lb/MMBtu d = 0.001 lb/MMBtu BAF=1.104	YES / ANNUAL
CO	ppm@ 15%O_2	Part 60	Appendix B, Performance Specification 4, 4A, from all Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	ARA = 34.4% RA = 208.3% |d|+2.5%CC = 2 ppm	YES / ANNUAL
CO	lb/hr	Part 60	Appendix B, Performance Specification 4, 4A Section 13.2	RA ≤ 10%, or d + 2.5% CC ≤ ±5 ppmv, or ARA ≤ 5%	ARA = 37.4% RA = 201.8% |d|+2.5%CC = 2 ppm	YES / ANNUAL
Load	MW	Part 60	Appendix B, Performance Specifications	> 50% max load	336.2	WITHIN TOLERANCE
Load	MW	Part 75	Appendix A and B	normal load range	336.2	WITHIN TOLERANCE

Notes: RA = relative accuracy, ARA = alternative relative accuracy, RM = reference method value, d = difference between RM and CEMS value, CC = confidence coefficient, v = velocity, BAF = bias adjustment factor

The RATA passed for all pollutants (NOx and CO) in all units (ppm@15%O_2, lb/hr, and lb/MMBtu) under all 40 CFR 60 and 40 CFR 75 criteria.

Specifically, NOx in units of lb/MMBtu passed the 40 CFR 75 alternative annual incentive criteria with an emissions rate of less than 0.2 lb/MMBtu and a difference between the RM and CEMS analyzers of less than 0.015 lb/MMBtu. Also there is a Bias Adjustment Factor of 1.104 required. CO in units of ppm@15%O_2 and lb/hr passed the 40 CFR 60 alternative criteria with a concentration difference between the RM and CEMS analyzers plus the confidence coefficient of less than 5 ppm.

Unit load was within the 40 CFR 60 required criteria of greater than 50 percent of the maximum load and also fell within the normal load criteria as defined by the plants Quality Control and Monitoring Plan which defined the upper and lower boundary on the unit and the normal and alternative normal load ranges.

3.0 SOURCE OPERATION

3.1 PROCESS DESCRIPTION

Florida Power and Light (FPL) owns and operates the West County Energy Center (West County) located at 20505 State Road 80 in Loxahatchee, Florida. West County is a nominal 2,500 megawatt (MW) greenfield power plant and consists of two combined cycle units (Unit 1 and 2). Each combined cycle unit consists of: three nominal 250 MW Mitsubishi Model 501G combustion turbine-electrical generator (CTGs) sets with evaporative inlet cooling systems; three supplementary-fired heat recovery steam generators (HRSGs) with selective catalytic reduction (SCR) reactors; one nominal 428 million British thermal units per hour (MMBtu/hour) based on low heat value (LHV) natural gas-fired duct burner (DB) located within each of the three HRSG's; and a common nominal 500 MW steam turbine-electrical generator (STG). The total nominal generating capacity of each of the "3 on 1" combined cycle unit is approximately 1,250 MW.

Each CTG has a nominal heat input rate of 2,333 MMBtu/hr when firing natural gas and 2,117 MMBtu/hr when firing distillate fuel oil (based on a compressor inlet air temperature of 59 degrees Fahrenheit (°F), the lower heating value (LHV) of each fuel, and 100 percent load), includes an automated gas turbine control system, and has dual-fuel capability of firing natural gas as the primary fuel or ultra low sulfur distillate (ULSD) fuel oil as a restricted alternate fuel. Each HRSG recovers exhaust, heat energy from each of the CTGs. Each Unit delivers steam to each STG. The efficient combustion of natural gas and restricted firing of ULSD fuel oil minimizes the emissions of carbon monoxide (CO), particulate matter (PM), sulfuric acid mist (H_2SO_4), sulfur dioxide (SO_2) and volatile organic compounds (VOCs). Dry Low-NOX (DLN) combustors for gas firing and water injection for oil firing reduce nitrogen oxides (NOx) emissions. A selective catalyst reduction (SCR) system further reduces NOx emissions.

3.2 SAMPLING LOCATION

The 501G stack is circular and measures 21.9 feet (ft) (263 inches) in diameter at the test ports which are approximately 138 ft above grade level with an exit elevation of approximately 150 ft above grade level. The test ports are located approximately 44.31 ft (531.75 inches) downstream and approximately 12 ft (144 inches) upstream from the nearest disturbances. All exhaust samples for gaseous emissions were continuously drawn from the exhaust system at the sample ports from a single point determined after conducting a stratification test (Appendix E). During the stratification test three points were traversed from each of the four ports. The probe was allowed to remain at a point for two times the system response time.

4.0 SAMPLING AND ANALYTICAL PROCEDURES

4.1 TEST METHODS

The emission test on the Mitsubishi, Model 501G, Unit 3C at the West County Energy Center was performed following United States Environmental Protection Agency (EPA) methods described by the Code of Federal Regulations (CFR). Table 4.1 outlines the specific methods performed on March 12-13, 2011.

TABLE 4.1
SUMMARY OF SAMPLING METHODS

Pollutant or Parameter	Sampling Method	Analysis Method
Sample Point Location	EPA Method 1	Equal Area Method
Oxygen	EPA Method 3a	Paramagnetic Cell
Nitrogen Oxides	EPA Method 7e	Chemiluminescent Analyzer
Carbon Monoxide	EPA Method 10	Nondispersive Infrared Analyzer
Stack Flow Rate	EPA Method 19	Dry Oxygen F Factor

4.2 INSTRUMENT CONFIGURATION AND OPERATIONS FOR GAS ANALYSIS

The sampling and analysis procedures used during these tests conform with the methods outlined in the Code of Federal Regulations (CFR), Title 40, Part 60, Appendix A, Methods 1, 3a, 7e, 10, and 19.

Figure 4.1 depicts the sample system used for the NOx, CO, and O_2 tests. A stainless steel probe was inserted into the sample port of the stack to extract gas measurements from the emission stream at a single point in the stack determined after passing an initial stratification test. The gas sample was continuously pulled through the probe and transported, via heat-traced Teflon® tubing, to a stainless steel minimum-contact condenser designed to dry the sample. Transportation of the sample, through Teflon® tubing, continued into the sample manifold within the mobile laboratory via a stainless steel/Teflon® diaphragm pump. From the manifold, the sample was partitioned to the NOx, CO, and O_2 analyzers through rotameters that controlled the flow rate of the sample.

Figure 4.1 shows that the sample system was also equipped with a separate path through which a calibration gas could be delivered to the probe and back through the entire sampling system. This allowed for convenient performance of system bias checks as required by the testing methods.

All instruments were housed in an air-conditioned, trailer-mounted mobile laboratory. Gaseous calibration standards were provided in aluminum cylinders with the concentrations certified by the vendor. EPA Protocol No. 1 was used to determine the cylinder concentrations where applicable (i.e. NOx calibration gases).

Table 4.2 provides a description of the analyzers used for the instrument portion of the tests. All data from the continuous monitoring instruments were recorded on a Logic Beach Portable Data Logging System Hyperlogger which retrieves calibrated electronic data from each instrument every one second and reports an average of the collected data every 30 seconds. Data records can be found in Appendix A and B of this report.

Three test runs of approximately 60 minutes and seven test runs of approximately 21 minutes each were conducted on the Mitsubishi, Model 501G, Unit 3C for NOx, CO, and O_2. The unit operation was greater than 50 percent of capacity as required by the 40 CFR 60, Performance Specifications. The unit operation was at the normal load as required by 40 CFR 75.

The stack gas analysis for O_2 concentrations was performed in accordance with procedures set forth in EPA Method 3a. The O_2 analyzer uses a paramagnetic cell.

EPA Method 7e was used to determine concentrations of NOx. A chemiluminescent analyzer was used to determine the nitrogen oxides concentration in the gas stream. A NO_2 in nitrogen certified gas cylinder was used to verify at least a 90 percent NO_2 conversion on the day of the test.

CO emission concentrations were quantified in accordance with procedures set forth in EPA Method 10. A continuous nondispersive infrared (NDIR) analyzer was used for this purpose.

TABLE 4.2
ANALYTICAL INSTRUMENTATION

Parameter	Model and Manufacturer	Range	Sensitivity	Detection Principle
NOx	THERMO 42i-HL	User may select up to 5,000 ppm	0.1 ppm	Thermal reduction of NO_2 to NO. Chemiluminescence of reaction of NO with O_3. Detection by PMT. Inherently linear for listed ranges.
CO	THERMO 48i	User may select up to 10,000 ppm	0.1 ppm	Infrared absorption, gas filter correlation detector, microprocessor based linearization.
O_2	THERMO 42i-HL	0-25%	0.1%	Paramagnetic cell, inherently linear.

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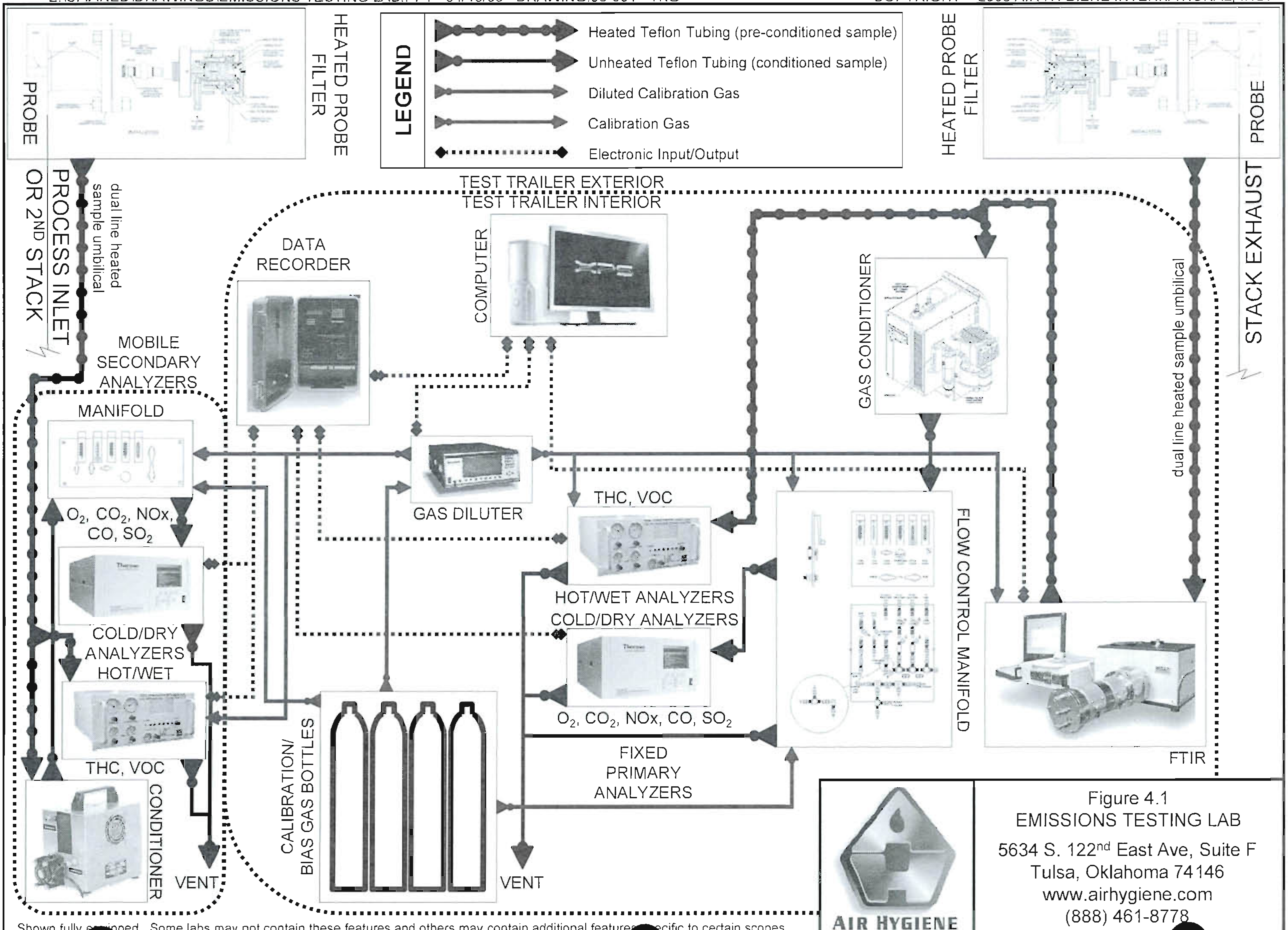

Figure 4.1
EMISSIONS TESTING LAB

5634 S. 122nd East Ave, Suite F
Tulsa, Oklahoma 74146
www.airhygiene.com
(888) 461-8778

APPENDIX A

TEST RESULTS AND CALCULATIONS

TABLE A.1:
EMISSIONS TESTING SCHEDULE

Unit	Load	Test Type	Run	Date	Start	Stop	Time Sync
3C	Base Load	Stratification Test	1	03/12/11	9:19:07	9:59:37	EST
3C	Base W/Db	Gas RATA	1	03/13/11	9:56:01	10:55:31	DAHS
3C	Base W/Db	Gas RATA	2	03/13/11	11:12:01	12:11:31	DAHS
3C	Base W/Db	Gas RATA	3	03/13/11	12:27:01	13:26:31	DAHS
3C	Base W/Db	Gas RATA	4	03/13/11	13:39:01	13:59:31	DAHS
3C	Base W/Db	Gas RATA	5	03/13/11	14:11:01	14:31:31	DAHS
3C	Base W/Db	Gas RATA	6	03/13/11	14:41:01	15:01:31	DAHS
3C	Base W/Db	Gas RATA	7	03/13/11	15:11:01	15:31:31	DAHS
3C	Base W/Db	Gas RATA	8	03/13/11	15:41:01	16:01:31	DAHS
3C	Base W/Db	Gas RATA	9	03/13/11	16:59:01	17:19:31	DAHS
3C	Base W/Db	Gas RATA	10	03/13/11	17:29:01	17:49:31	DAHS

Note: DAHS Time (EST minus 1hr)

TEST RESULTS

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(ppm@ 15%O_2)	(ppm@ 15%O_2)	(diff)	($diff^2$)
1	09:56 - 10:55	NO	343.4	0.80	2.10		
2	11:12 - 12:11	YES	345.2	0.70	2.00	-1.3000	1.69
3	12:27 - 13:26	YES	336.8	0.70	2.00	-1.3000	1.69
4	13:39 - 13:59	YES	330.3	0.70	1.90	-1.2000	1.44
5	14:11 - 14:31	YES	329.6	0.60	1.90	-1.3000	1.69
6	14:41 - 15:01	YES	329.0	0.70	1.90	-1.2000	1.44
7	15:11 - 15:31	YES	329.5	0.70	1.90	-1.2000	1.44
8	15:41 - 16:01	YES	329.3	0.60	1.90	-1.3000	1.69
9	16:59 - 17:19	YES	343.1	0.70	0.60	0.1000	0.01
10	17:29 - 17:49	YES	346.2	0.70	0.70	0.0000	0.00
11		NO					
12		NO					
		Total	**3019.0**	**6.10**	**14.80**	**-8.7000**	**11.0900**
		Average	**335.4**	**0.68**	**1.64**	**-0.9667**	
		Number of Runs		9			
		Standard Deviation		0.579			
		T-value		2.306			
		Confidence Coefficient		0.4449			

Relative Accuracy =	**208.3%**
Applicable Standard =	**4.10**
Alternative Relative Accuracy =	**34.4%**
|d (difference in ppm)| + CC =	**2.0**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
CO RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(lb/hr)	(lb/hr)	(diff)	($diff^2$)
1	09:56 - 10:55	NO	343.4	4.90	13.40		
2	11:12 - 12:11	YES	345.2	4.50	12.40	-7.9000	62.41
3	12:27 - 13:26	YES	336.8	4.30	12.30	-8.0000	64.00
4	13:39 - 13:59	YES	330.3	4.20	12.10	-7.9000	62.41
5	14:11 - 14:31	YES	329.6	4.10	12.00	-7.9000	62.41
6	14:41 - 15:01	YES	329.0	4.40	11.80	-7.4000	54.76
7	15:11 - 15:31	YES	329.5	4.20	11.70	-7.5000	56.25
8	15:41 - 16:01	YES	329.3	4.10	11.60	-7.5000	56.25
9	16:59 - 17:19	YES	343.1	4.40	4.00	0.4000	0.16
10	17:29 - 17:49	YES	346.2	4.50	4.20	0.3000	0.09
11		NO					
12		NO					
	Total		**3019.0**	**38.70**	**92.10**	**-53.4000**	**418.7400**
	Average		**335.4**	**4.30**	**10.23**	**-5.9333**	

Number of Runs	9
Standard Deviation	3.569
T-value	2.306
Confidence Coefficient	2.7433

Relative Accuracy =	**201.8%**
Applicable Standard =	**23.20**
Alternative Relative Accuracy =	**37.4%**
|d (difference in ppm)| + CC =	**2.0**

Part 60, Appendix B, Performance Specification 4,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS having span values of 1,000 ppmv CO.
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA or 5 percent when the applicable emission standard (permit limit) is used to calculate RA.

Part 60, Appendix B, Performance Specification 4A,
1.2.1 This specification is for evaluating the acceptability of carbon monoxide (CO) continuous emission monitoring systems (CEMS) at the time of installation or soon after and whenever specified in an applicable subpart of the regulations. This specification was developed primarily for CEMS that comply with low emission standards (less than 200 ppmv).
13.2 Relative Accuracy. The RA of the CEMS must be no greater than 10 percent when the average RM value is used to calculate RA, 5 percent when the applicable emission standard (permit limit) is used to calculate RA, or within 5 ppmv when the RA is calculated as the absolute average difference between the RM and CEMS plus the 2.5 percent confidence coefficient.

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
NOx RATA Data Sheet
West County Energy Center

RUN #	RUN TIME	USED	UNIT LOAD	RM	CEMS	RM-CEMS	
			(MW)	(lb/MMBtu)	(lb/MMBtu)	(diff)	($diff^2$)
1	09:56 - 10:55	YES	343.4	0.006	0.005	0.0010	0.0000
2	11:12 - 12:11	YES	345.2	0.006	0.005	0.0010	0.0000
3	12:27 - 13:26	NO	336.8	0.007	0.005		
4	13:39 - 13:59	YES	330.3	0.006	0.005	0.0010	0.0000
5	14:11 - 14:31	YES	329.6	0.005	0.005	0.0000	0.0000
6	14:41 - 15:01	YES	329.0	0.006	0.006	0.0000	0.0000
7	15:11 - 15:31	YES	329.5	0.006	0.006	0.0000	0.0000
8	15:41 - 16:01	YES	329.3	0.006	0.005	0.0010	0.0000
9	16:59 - 17:19	YES	343.1	0.006	0.005	0.0010	0.0000
10	17:29 - 17:49	YES	346.2	0.006	0.006	0.0000	0.0000
11		NO					
12		NO					
		Total	**3025.6**	**0.053**	**0.048**	**0.0050**	**0.0000**
		Average	**336.2**	**0.006**	**0.005**	**0.0006**	

Number of Runs	9
Standard Deviation	0.001
T-value	2.306
Confidence Coefficient	0.0004

Relative Accuracy = 16.31%

If the mean difference is less than or equal to the absolute value of the confidence coefficient, then the Bias Test passes and the bias adjustment factor is not applicable.

Mean Difference =	0.0006
Confidence Coefficient =	0.0004

BAF = 1 + (abs. value mean difference/avg. CEMS reading)

Average CEMS Reading =	0.005
BAF =	**1.104**

Part 75, Appendix A,
3.3.2 Relative Accuracy for NOX-Diluent Continuous Emission Monitoring Systems
(a) The relative accuracy for NOX-diluent continuous emission monitoring systems shall not exceed 10.0 percent.
(b) For affected units where the average of the reference method measurements of NOX emission rate (this means lb/MMBtu) during the relative accuracy test audit is less than or equal to 0.200 lb/mmBtu, the difference between the mean value of the continuous emission monitoring system measurements and the reference method mean value shall not exceed ±0.020 lb/mmBtu, wherever the relative accuracy specification of 10.0 percent is not achieved.

7.6.5 Bias Adjustment

(b) For single-load RATAs of SO2 pollutant concentration monitors, NOX concentration monitoring systems, and NOX-diluent monitoring systems and for the single-load flow RATAs required or allowed under section 6.5.2 of this appendix and sections 2.3.1.3(b) and 2.3.1.3(c) of Appendix B to this part, the appropriate BAF is determined directly from the RATA results at normal load, using Equation A-12. Notwithstanding, when a NOX concentration CEMS or an SO2 CEMS or a NOX-diluent CEMS installed on a low-emitting affected unit (i.e., average SO2 or NOX concentration during the RATA &IE; 250 ppm or average NOX emission rate &IE; 0.200 lb/mmBtu) meets the normal 10.0 percent relative accuracy specification (as calculated using Equation A-10) or the alternate relative accuracy specification in section 3.3 of this appendix for low-emitters, but fails the bias test, the BAF may either be determined using Equation A-12, or a default BAF of 1.111 may be used.

Part 75, Appendix B,

2.3.1.2 Reduced RATA Frequencies. Relative accuracy test audits of primary and redundant backup SO2 pollutant concentration monitors, CO2 pollutant concentration monitors (including O2 monitors used to determine CO2 emissions), CO2 or O2 diluent monitors used to determine heat input, moisture monitoring systems, NOX concentration monitoring systems, flow monitors, NOX-diluent monitoring systems or SO2-diluent monitoring systems may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters) if any of the following conditions are met for the specific monitoring system involved:

(a) The relative accuracy during the audit of an SO2 or CO2 pollutant concentration monitor (including an O2 pollutant monitor used to measure CO2 using the procedures in appendix F to this part), or of a CO2 or O2 diluent monitor used to determine heat input, or of a NOX concentration monitoring system, or of a NOX-diluent monitoring system, or of an SO2-diluent continuous emissions monitoring system is ≤ 7.5 percent;

(f) For units with low NOX emission rates (average NOX emission rate measured by the reference method during the RATA ≤ 0.200 lb/mmBtu), when a NOX-diluent continuous emission monitoring system fails to achieve a relative accuracy ≤ 7.5 percent, but the monitoring system mean value from the RATA, calculated using Equation A-7 in appendix A to this part, is within ± 0.015 lb/mmBtu of the reference method mean value;

Figure 2 to Appendix B of Part 75_Relative Accuracy Test Frequency Incentive System.

RATA	Semiannual(percent)(1)	Annual(1)
SO2 or NOX(3)	7.5% < RA ≤ 10.0% or ± 15.0 ppm(2)	RA ≤ 7.5% or ± 12.0 ppm(2)
SO2-diluent	7.5% < RA ≤ 10.0% or ± 0.030 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.025 lb/mmBtu(2)
NOX-diluent	7.5% < RA ≤ 10.0% or ± 0.020 lb/mmBtu(2)	RA ≤ 7.5% or ± 0.015 lb/mmBtu(2)
Flow	7.5% < RA ≤ 10.0% or ± 2.0 fps(2)	RA ≤ 7.5% or ± 1.5 fps
CO2 or O2	7.5% < RA ≤ 10.0% or ± 1.0% CO2/O2(2)	RA ≤ 7.5% or ± 0.7% CO2/O2(2)
Moisture	7.5% < RA ≤ 10.0% or ± 1.5% H2O(2)	RA ≤ 7.5% or ± 1.0% H2O(2)

(1) The deadline for the next RATA is the end of the second (if semiannual) or fourth (if annual) successive QA operating quarter following the quarter in which the CEMS was last tested. Exclude calendar quarters with fewer than 168 unit operating hours (or, for common stacks and bypass stacks, exclude quarters with fewer than 168 stack operating hours) in determining the RATA deadline. For SO2 monitors, QA operating quarters in which only very low sulfur fuel as defined in § 72.2, is combusted may also be excluded. However, the exclusion of calendar quarters is limited as follows: the deadline for the next RATA shall be no more than 8 calendar quarters after the quarter in which a RATA was last performed.

(2) The difference between monitor and reference method mean values applies to moisture monitors, CO2, and O2 monitors, low emitters, or low flow, only.

(3) A NOX concentration monitoring system used to determine NOX mass emissions under § 75.71.

Relative Accuracy Test Data
CEMS Results (NOx)
Mitsubishi, 501G, Unit 3C

Parameter:	Oxides of Nitrogen
Date of Test:	March 13, 2011
Reference Method:	EPA Method 7e
CEMS Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-LS
Serial #:	0934939234

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:56 - 10:55	343.4				0.005
2	11:12 - 12:11	345.2				0.005
3	12:27 - 13:26	336.8				0.005
4	13:39 - 13:59	330.3				0.005
5	14:11 - 14:31	329.6				0.005
6	14:41 - 15:01	329.0				0.006
7	15:11 - 15:31	329.5				0.006
8	15:41 - 16:01	329.3				0.005
9	16:59 - 17:19	343.1				0.005
10	17:29 - 17:49	346.2				0.006
11						
12						

Relative Accuracy Test Data
CEMS Results (CO)
Mitsubishi, 501G, Unit 3C

Parameter:	Carbon Monoxide
Date of Test:	March 13, 2011
Reference Method:	EPA Method 10
CEMS Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48i
Serial #:	CM09400114

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:56 - 10:55	343.4	3.10	2.10	13.40	
2	11:12 - 12:11	345.2	2.90	2.00	12.40	
3	12:27 - 13:26	336.8	2.80	2.00	12.30	
4	13:39 - 13:59	330.3	2.80	1.90	12.10	
5	14:11 - 14:31	329.6	2.80	1.90	12.00	
6	14:41 - 15:01	329.0	2.80	1.90	11.80	
7	15:11 - 15:31	329.5	2.70	1.90	11.70	
8	15:41 - 16:01	329.3	2.70	1.90	11.60	
9	16:59 - 17:19	343.1	0.90	0.60	4.00	
10	17:29 - 17:49	346.2	1.00	0.70	4.20	
11						
12						

Relative Accuracy Test Data
CEMS Results (O_2)
Mitsubishi, 501G, Unit 3C

Parameter:	Oxygen
Date of Test:	March 13, 2011
Reference Method:	EPA Method 3a
CEMS Analyzer Type:	Paramagnetic Cell
Manufacturer:	Servomex
Model #:	1440
Serial #:	01440DIV02/4249

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:56 - 10:55	343.4	12.41
2	11:12 - 12:11	345.2	12.43
3	12:27 - 13:26	336.8	12.41
4	13:39 - 13:59	330.3	12.41
5	14:11 - 14:31	329.6	12.41
6	14:41 - 15:01	329.0	12.41
7	15:11 - 15:31	329.5	12.41
8	15:41 - 16:01	329.3	12.41
9	16:59 - 17:19	343.1	12.43
10	17:29 - 17:49	346.2	12.43
11			
12			

Relative Accuracy Test Data
Reference Method Results (NOx)
Mitsubishi, 501G, Unit 3C

Parameter:	Oxides of Nitrogen
Date of Test:	March 13, 2011
Reference Method:	EPA Method 7e
RM Analyzer Type:	Chemiluminescence
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:56 - 10:55	343.4				0.006
2	11:12 - 12:11	345.2				0.006
3	12:27 - 13:26	336.8				0.007
4	13:39 - 13:59	330.3				0.006
5	14:11 - 14:31	329.6				0.005
6	14:41 - 15:01	329.0				0.006
7	15:11 - 15:31	329.5				0.006
8	15:41 - 16:01	329.3				0.006
9	16:59 - 17:19	343.1				0.006
10	17:29 - 17:49	346.2				0.006
11						
12						

Relative Accuracy Test Data
Reference Method Results (CO)
Mitsubishi, 501G, Unit 3C

Parameter:	Carbon Monoxide
Date of Test:	March 13, 2011
Reference Method:	EPA Method 10
RM Analyzer Type:	Infrared Absorption
Manufacturer:	Thermo
Model #:	48i
Serial #:	INST-CO-0015

RUN #	RUN TIME	UNIT LOAD	CONCENTRATIONS		RATES	
		(MW)	(ppmvd)	(ppm@ 15%O_2)	(lb/hr)	(lb/MMBtu)
1	09:56 - 10:55	343.4	1.09	0.76	4.86	
2	11:12 - 12:11	345.2	1.00	0.70	4.46	
3	12:27 - 13:26	336.8	0.96	0.67	4.26	
4	13:39 - 13:59	330.3	0.95	0.66	4.17	
5	14:11 - 14:31	329.6	0.93	0.64	4.06	
6	14:41 - 15:01	329.0	0.99	0.69	4.35	
7	15:11 - 15:31	329.5	0.95	0.66	4.17	
8	15:41 - 16:01	329.3	0.92	0.64	4.06	
9	16:59 - 17:19	343.1	1.02	0.70	4.44	
10	17:29 - 17:49	346.2	1.01	0.70	4.46	
11						
12						

Relative Accuracy Test Data
Reference Method Results (O_2)
Mitsubishi, 501G, Unit 3C

Parameter:	Oxygen
Date of Test:	March 13, 2011
Reference Method:	EPA Method 3a
RM Analyzer Type:	Paramagnetic Cell
Manufacturer:	Thermo
Model #:	42i-HL
Serial #:	INST-N2-0001

RUN #	RUN TIME	UNIT LOAD (MW)	CONC. (%)
1	09:56 - 10:55	343.4	12.41
2	11:12 - 12:11	345.2	12.42
3	12:27 - 13:26	336.8	12.45
4	13:39 - 13:59	330.3	12.38
5	14:11 - 14:31	329.6	12.37
6	14:41 - 15:01	329.0	12.38
7	15:11 - 15:31	329.5	12.40
8	15:41 - 16:01	329.3	12.40
9	16:59 - 17:19	343.1	12.33
10	17:29 - 17:49	346.2	12.37
11			
12			

CALCULATIONS

EXAMPLE CALCULATIONS (CALIBRATION)

Analyzer Calibration Error

RM 7E, (12-17-09), 12.2 Analyzer Calibration Error. For non-dilution systems, use Equation 7E-1 to calculate the analyzer calibration error for the low-, mid-, and high-level calibration gases. (calc for NOx analyzer mid gas, if applicable)

$$ACE = \left(\frac{C_{Dir} - C_V}{CS}\right) \times 100$$ Eq. 7E-1

$$ACE = \frac{4.99\ \text{ppm} - 4.93\ \text{ppm}}{12.10\ \text{ppm}} \times 100 = 0.50\ \%$$

EXAMPLE CALCULATIONS (BIAS, DRIFT, AND CORRECTED RAW AVERAGE)

System Bias

RM 7E, (12-17-09), 12.3 System Bias. For non-dilution systems, use Equation 7E-2 to calculate the system bias separately for the low-level and upscale calibration gases. (calc for NOx analyzer upscale gas, Run 1 initial bias, if applicable)

$$SB = \left(\frac{C_S - C_{Dir}}{CS}\right) \times 100$$ Eq. 7E-2

$$SB = \frac{4.99\ \text{ppm} - 4.99\ \text{ppm}}{12.10\ \text{ppm}} \times 100 = 0.00\ \%$$

Drift Assessment

RM 7E, (12-17-09), 12.5 Drift Assessment. Use Equation 7E-4 to separately calculate the low-level and upscale drift over each test run. (calc for NOx analyzer upscale drift, Run 1, if applicable)

$$D = |SB_{final} - SB_i|$$ Eq. 7E-4

$$D = |\ -0.99\ \% - 0.00\ \%\ | = 0.99\ \%$$

Alternative Drift and Bias

RM 7E, (12-17-09), 13.2 / 13.3 System Bias and Drift. Alternatively, the results are acceptable if |Cs – Cdir| is ≤ 0.5 ppmv or if |Cs – Cv| is ≤ 0.5 ppmv (as applicable). (calc for NOx analyzer initial upscale, Run 1, if applicable)

$$SB / D_{Alt} = |C_S - C_{Dir}|$$ Eq. Section 13.2 and 13.3

$$SB / D_{Alt} = |\ 4.99\ \text{ppm} - 4.99\ \text{ppm}\ | = 0.00\ \text{ppm}$$

Bias Adjusted Average

RM 7E, (12-17-09), 12.6 Effluent Gas Concentration. For each test run, calculate Cavg, the arithmetic average of all valid NOx concentration values (e.g., 1-minute averages). Then adjust the value of Cavg for bias, using Equation 7E-5b. (calc for NOx analyzer, Run 1, if applicable)

$$C_{Gas} = (C_{Avg} - C_O) \times \left(\frac{C_{MA}}{C_M - C_O}\right)$$ Eq. 7E-5b

$$C_{Gas} = \left(2.22\ \text{ppm} - -0.08\ \text{ppm}\right) \times \left(\frac{4.93\ \text{ppm}}{4.93\ \text{ppm} - -0.08\ \text{ppm}}\right) = 2.26\ \text{ppm}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RUNS)

Stack Exhaust Flow (Q_S) - RM19

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1{,}000{,}000}\right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}}\right)$$

$$Q_S = \frac{8{,}710.00\ \text{SCF}}{\text{MMBtu}} \times \frac{2{,}787{,}226.58\ \text{SCF}}{\text{hr}} \times \frac{1{,}029.00\ \text{Btu}}{\text{SCF}} \times \frac{\text{MMBtu}}{10^6\ \text{Btu}} \times \left[\frac{20.90\%}{20.9\% - 12.4\ \%}\right] = 61{,}486{,}651.57\ \text{SCFH}$$

Diluent-Corrected Pollutant Concentration, O_2 Based

RM 20, (11-26-02), 7.3.1 Correction of Pollutant Concentration Using O_2 Concentration. Calculate the O_2 corrected pollutant concentration, as follows: (calc for NOx gas, Run 1, if applicable)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}}\right) \quad \text{Eq. 20-4}$$

$$C_{adj} = 2.26\ \text{ppm} \times \left(\frac{20.9\% - 15.00\ \%}{20.9\% - 12.41\ \%}\right) = 1.57\ \text{ppm@15\%}O_2$$

EXAMPLE CALCULATIONS (RUNS)

Emissions Rate (lb/hr)

Calculation for pound per hour emission rate. Calculate, as follows: (calc for NOx gas Run 1, if applicable)

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

$$E_{lb/hr} = \frac{2.26\ \text{ppm}}{10^6\ \text{ppm/part}} \times \frac{61{,}486{,}652\ \text{SCFH} \times 46.01\ \text{lb/lb-mol}}{385.23\ \text{SCF/lb-mol}} = \frac{16.59\ \text{lb}}{\text{hr}}$$

Emissions Rate (lb/MMBtu)

RM 19, (12-17-09), 12.2 Emission Rates of PM, SO_2, and NOx. Select from the following sections the applicable procedure to compute the PM, SO_2, or NOx emission rate (E) in ng/J (lb/million Btu). (calc for NOx gas Run 1, if applicable)

Oxygen Based

12.2.1 Oxygen-Based F Factor, Dry Basis. When measurements are on a dry basis for both O_2 (%O_2d) and pollutant (Cd) concentrations, use the following equation:

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_C \times 20.9\%}{20.9\% - C_{Gas(O2)}} \quad \text{Eq. 19-1}$$

$$E_{lb/MMBtu} = \frac{2.26\ \text{ppm} \times 8{,}710.00\ \text{SCF/MMBtu} \times 0.0000001194\ \text{lb/ppm*ft}^3 \times 20.9\%}{20.9\% - 12.41\ \%} = \frac{0.006\ \text{lb}}{\text{MMBtu}}$$

Conversion Constant

Convc for NOx

$$Conv_c(lb/ppm \cdot ft^3) = \frac{\frac{MW}{G}}{10^6}$$

$$Conv_c = \frac{\frac{46.01\ \text{lb}}{\text{lb•mole}} \times \frac{\text{lb•mole}}{385.23\ \text{SCF}}}{10^6} = \frac{0.0000001194\ \text{lb}}{\text{ppm-ft}^3}$$

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

EXAMPLE CALCULATIONS (RATA RESULTS)

Difference (d)

40 CFR 75, App A, (12-17-09), 7.3.1 Arithmetic Mean. Calculate the arithmetic mean of the differences, d , of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$d = \sum_{i=1}^{n} d_i$$ Eq. A-7

d = 0.006 lb/MMBtu - 0.005 lb/MMBtu = 0.001 lb/MMBtu

Standard Deviation

40 CFR 75, App A, (12-17-09), 7.3.2 Standard Deviation. Calculate the standard deviation, Sd, of a data set as follows:
(calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i\right)^2}{n}\right]}{n-1}}$$ Eq. A-8

$$S_d = \sqrt{\frac{0.000 \text{ lb/MMBtu}^2 - \frac{\left[0.005 \text{ lb/MMBtu}\right]^2}{9}}{9 - 1}} = 0.001 \text{ lb/MMBtu}$$

Confidence Coefficient

40 CFR 75, App A, (12-17-09), 7.3.3 Confidence Coefficient. Calculate the confidence coefficient (one-tailed), cc, of a data set as follows. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$ Eq. A-9

$$CC = 2.306 \times \frac{0.001 \text{ lb/MMBtu}}{\sqrt{9}} = 0.000 \text{ lb/MMBtu}$$

T-Values	n	2	3	4	5	6	7	8	9
	$t_{0.025}$	12.706	4.303	3.182	2.776	2.571	2.447	2.365	2.306

2.5 percent confidence coefficients

Relative Accuracy

40 CFR 75, App A, (12-17-09), 7.3.4 Relative Accuracy. Calculate the relative accuracy of a data set using the following equation. (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$ Eq. A-10

$$RA = \frac{|0.001 \text{ lb/MMBtu}| + |0.000 \text{ lb/MMBtu}|}{0.006 \text{ lb/MMBtu}} \times 100 = 16.31 \ \%$$

Bias Adjustment Factor (BAF)

40 CFR 75, App A, (12-17-09), 7.6.5 Bias Adjustment. (a) If the monitor or monitoring system fails to meet the bias test requirement, adjust the value obtained from the monitor using the following equation: (calc for NOx lb/MMBtu data, if applicable. Note: This is an example calculation which may not have any bearing on the actual test requirements.)

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}}\right)$$ Eq. A-12

d_{AVG} = 0.001 > |CC| = 0.000 $\Rightarrow$ $BAF = 1 + \frac{|0.001 \text{ lb/MMBtu}|}{0.005 \text{ lb/MMBtu}} = 1.104$ lb/MMBtu

Note: BAF only applies if the mean difference (d) is greater than the absolute value of the confidence coefficient.

Note: Lack of significant figures may cause rounding errors between actual calculations and example calculations.

RM 7E, (08-15-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

ACE = Analyzer calibration error, percent of calibration span.
B_{WS} = Moisture content of sample gas as measured by Method 4 or other approved method, percent/100.
C_{Avg} = Average unadjusted gas concentration indicated by data recorder for the test run.
C_D = Pollutant concentration adjusted to dry conditions.
C_{Dir} = Measured concentration of a calibration gas (low, mid, or high) when introduced in direct calibration mode.
C_{Gas} = Average effluent gas concentration adjusted for bias.
C_M = Average of initial and final system calibration bias (or 2-point system calibration error) check responses for the upscale calibration gas.
C_{MA} = Actual concentration of the upscale calibration gas, ppmv.
C_O = Average of the initial and final system calibration bias (or 2-point system calibration error) check responses from the low-level (or zero) calibration gas.
C_S = Measured concentration of a calibration gas (low, mid, or high) when introduced in system calibration mode.
C_{SS} = Concentration of NOx measured in the spiked sample.
C_{Spike} = Concentration of NOx in the undiluted spike gas.
C_{Calc} = Calculated concentration of NOx in the spike gas diluted in the sample.
C_V = Manufacturer certified concentration of a calibration gas (low, mid, or high).
C_W = Pollutant concentration measured under moist sample conditions, wet basis.
CS = Calibration span.
D = Drift assessment, percent of calibration span.
E_p = The predicted response for the low-level and mid-level gases based on a linear response line between the zero and high-level response.
Eff_{NO2} = NO_2 to NO converter efficiency, percent.
H = High calibration gas, designator.
L = Low calibration gas, designator.
M = Mid calibration gas, designator.
NOFinal = The average NO concentration observed with the analyzer in the NO mode during the converter efficiency test in Section 16.2.2.
NOxCorr = The NOx concentration corrected for the converter efficiency.
NOxFinal = The final NOx concentration observed during the converter efficiency test in Section 16.2.2.
NOxPeak = The highest NOx concentration observed during the converter efficiency test in Section 16.2.2.
Q_{Spike} = Flow rate of spike gas introduced in system calibration mode, L/min.
Q_{Total} = Total sample flow rate during the spike test, L/min.
R = Spike recovery, percent.
SB = System bias, percent of calibration span.
SB_i = Pre-run system bias, percent of calibration span.
SB_f = Post-run system bias, percent of calibration span.
SB / D_{Alt} = Alternative absolute difference criteria to pass bias and/or drift checks.
SCE = System calibration error, percent of calibration span.
SCE_i = Pre-run system calibration error, percent of calibration span.
SCE_{final} = Post-run system calibration error, percent of calibration span.
Z = Zero calibration gas, designator.

40CFR60.355(b)(1), (09-20-06), Nomenclature. The terms used in the equations are defined as follows:

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg
P_o = observed combustor inlet absolute pressure at test, mm Hg
H_o = observed humidity of ambient air, g H_2O/g air
e = transcendental constant, 2.718
T_a = ambient temperature, K

RM 19, (07-29-06), 12.1 Nomenclature. The terms used in the equations are defined as follows:

AdjFactor = Percent oxygen or carbon dioxide adjustment applied to a target pollutant
B_{wa} = Moisture fraction of ambient air, percent.
Btu = British thermal unit
$\%_C$ = Concentration of carbon from an ultimate analysis of fuel, weight percent.
$\%_{CO2d}$, $\%_{CO2w}$ = Concentration of carbon dioxide on a dry and wet basis, respectively, percent.
CIP / CDP = Combustor inlet pressure / compressor discharge pressure (mm Hg); note, some manufactures reference as PCD.
E = Pollutant emission rate, ng/J (lb/million Btu).
E_a = Average pollutant rate for the specified performance test period, ng/J (lb/million Btu).
E_{ao}, E_{ai} = Average pollutant rate of the control device, outlet and inlet, respectively, for the performance test period, ng/J (lb/million Btu).
E_{bi} = Pollutant rate from the steam generating unit, ng/J (lb/million Btu).
E_{bo} = Pollutant emission rate from the steam generating unit, ng/J (lb/million Btu).
E_{ci} = Pollutant rate in combined effluent, ng/J (lb/million Btu).
E_{co} = Pollutant emission rate in combined effluent, ng/J (lb/million Btu).
E_d = Average pollutant rate for each sampling period (e.g.,24-hr Method 6B sample or 24-hr fuel sample) or for each fuel lot (e.g., amount of fuel bunkered), ng/J (lb/million Btu).
E_{di} = Average inlet SO_2 rate for each sampling period d, ng/J (lb/million Btu).
E_g = Pollutant rate from gas turbine, ng/J (lb/million Btu).
E_{ga} = Daily geometric average pollutant rate, ng/J (lbs/million Btu) or ppm corrected to 7 percent O_2.
E_{jo},E_{ji} = Matched pair hourly arithmetic average pollutant rate, outlet and inlet, respectively, ng/J (lb/million Btu) or ppm corrected to **7** percent O_2.
E_h = Hourly average pollutant, ng/J (lb/million Btu).
E_{hj} = Hourly arithmetic average pollutant rate for hour "j," ng/J (lb/million Btu) or ppm corrected to 7 percent O_2.
EXP = Natural logarithmic base (2.718) raised to the value enclosed by brackets.
Fc = Ratio of the volume of carbon dioxide produced to the gross calorific value of the fuel from Method 19
F_d, F_w, F_c = Volumes of combustion components per unit of heat content, scm/J (scf/million Btu).
ft^3 = cubic feet
G = ideal gas conversion factor
(385.23 SCF/lb-mol at 68 deg F & 14.696 psia)
GCM = gross Btu per SCF (constant, compound based)
GCV = Gross calorific value of the fuel consistent with the ultimate analysis, kJ/kg (Btu/lb).
GCV_p, GCV_r = Gross calorific value for the product and raw fuel lots, respectively, dry basis, kJ/kg (Btu/lb).
$\%_H$ = Concentration of hydrogen from an ultimate analysis of fuel, weight percent.
H_b = Heat input rate to the steam generating unit from fuels fired in the steam generating unit, J/hr (million Btu/hr).
H_g = Heat input rate to gas turbine from all fuels fired in the gas turbine, J/hr (million Btu/hr).
$\%_{H2O}$ = Concentration of water from an ultimate analysis of fuel, weight percent.
H_r = Total numbers of hours in the performance test period (e.g., 720 hours for 30-day performance test period).
K = volume of combustion component per pound of component (constant)
K = Conversion factor, 10^{-5} (kJ/J)/(%) [10^6 Btu/million Btu].
K_c = (9.57 scm/kg)/% [(1.53 scf/lb)/%].
K_{cc} = (2.0 scm/kg)/% [(0.321 scf/lb)/%].
K_{hd} = (22.7 scm/kg)/% [(3.64 scf/lb)/%].
K_{hw} = (34.74 scm/kg)/% [(5.57 scf/lb)/%].
K_n = (0.86 scm/kg)/% [(0.14 scf/lb)/%].
K_o = (2.85 scm/kg)/% [(0.46 scf/lb)/%].
K_s = (3.54 scm/kg)/% [(0.57 scf/lb)/%].
K_{sulfur} = $2x10^4$ Btu/wt%-MMBtu
K_w = (1.30 scm/kg)/% [(0.21 scf/lb)/%].
lb = pound
ln = Natural log of indicated value.
L_p,L_r = Weight of the product and raw fuel lots, respectively, metric ton (ton).
$\%_N$ = Concentration of nitrogen from an ultimate analysis of fuel, weight percent.
$M_{\%}$ = mole percent
mol = mole
MW = molecular weight (lb/lb-mol)
MW_{AIR} = molecular weight of air (28.9625 lb/lb-mole)[1]
NCM = net Btu per SCF (constant based on compound)
$\%_O$ = Concentration of oxygen from an ultimate analysis of fuel, weight percent.
$\%_{O2d}$, $\%_{O2w}$ = *Concentration of oxygen on a dry and wet basis, respectively, percent.*
P_B = barometirc pressure, in Hg
P_s = Potential SO2 emissions, percent.
$\%_S$ = Sulfur content of as-fired fuel lot, dry basis, weight percent.
S_e = Standard deviation of the hourly average pollutant rates for each performance test period, ng/J (lb/million Btu).
$\%_{Sf}$ = *Concentration of sulfur from an ultimate analysis of fuel, weight percent.*
S(wt%) = weight percent of sulfur, per lab analysis by appropriate ASTM standard
S_i = Standard deviation of the hourly average inlet pollutant rates for each performance test period, ng/J (lb/million Btu).
S_o = Standard deviation of the hourly average emission rates for each performance test period, ng/J (lb/million Btu).
$\%S_p$, $\%S_r$ = Sulfur content of the product and raw fuel lots respectively, dry basis, weight percent.
SCF = standard cubic feet
SH = specific humidity, pounds of water per pound of air
$t_{0.95}$ = Values shown in Table 19-3 for the indicated number of data points n.
T_{amb} = ambient temperature, °F
W/D Factor = 1.0236 = conv. at 14.696 psia and
68 deg F (ref. Civil Eng. Ref. Manual, 7th Ed.)
X_{CO2}=CO_2 Correction factor, percent.
X_k = Fraction of total heat input from each type of fuel k.

Calculations, Formulas, and Constants

The following information supports the spreadsheets for this testing project.

Given Data:

Ideal Gas Conversion Factor = 385.23 SCF/lb-mol at 68 deg F & 14.696 psia

Fuel Heating Value is based upon Air Hygiene's fuel gas calculation sheet. All calculations are based upon a correction to 68 deg F & 14.696 psia

High Heating Values (HHV) are used for the Fuel Heating Value, F-Factor, and Fuel Flow Data per EPA requirements.

ASTM D 3588

Molecular Weight of NOx (lb/lb-mole) = 46.01
Molecular Weight of CO (lb/lb-mole) = 28.00
Molecular Weight of SO_2 (lb/lb-mole) = 64.00
Molecular Weight of THC (propane) (lb/lb-mole) = 44.00
Molecular Weight of VOC (methane) (lb/lb-mole) = 16.00
Molecular Weight of NH_3 (lb/lb-mole) = 17.03
Molecular Weight of HCHO (lb/lb-mole) = 30.03

40CFR60, App. A., RM 19, Table 19-1

Conversion Constant for NOx = 0.0000001194351
Conversion Constant for CO = 0.0000000726839
Conversion Constant for SO_2 = 0.0000001661345
Conversion Constant for THC = 0.0000001142175
Conversion Constant for VOC (methane) = 0.0000000415336
Conversion Constant for NH_3 = 0.0000000442074
Conversion Constant for HCHO = 0.0000000779534
NOTE: units are lb/ppm*ft^3

Formulas:

1. Corrected Raw Average (C_{Gas}), 40CFR60, App. A, RM 7E, Eq. 7E-5 (08/15/06)

$$C_{Gas} = (C_{Avg} - C_O) \times \left(\frac{C_{MA}}{C_M - C_O} \right)$$

2. Correction to % O_2, 40CFR60, App. A, RM 20, Eq. 20-5 (11/26/02)

$$C_{adj} = C_{Gas(Target)} \times \left(\frac{20.9\% - AdjFactor}{20.9\% - C_{Gas(O2)}} \right)$$

3. Correction to % O_2 and ISO Conditions

$$C_{ISO} = C_{Adj} \times \sqrt{\frac{P_r}{P_o}} \times e^{(19 \times (H_o - 0.00633))} \times \left(\frac{288}{T_a} \right)^{1.53}$$

4. Method 19 stack exhaust flow (scfh)

$$Q_S = \left(\frac{FFactor \times Q_f \times HHV}{1{,}000{,}000} \right) \times \left(\frac{20.9\%}{20.9\% - C_{Gas(O2)}} \right)$$

5. Emission Rate in lb/hr

$$E_{lb/hr} = \frac{C_{Gas}}{10^6} \times \frac{Q_S \times MW}{G}$$

6. Emission Rate in tons per year

$$E_{ton/yr} = \frac{E_{lb/hr} \times hr_{year}}{2000}$$

7. Emission Concentration in lb/MMBtu (O_2 based)

$$E_{lb/MMBtu} = \frac{C_{Gas} \times F_d Factor \times Conv_C \times 20.9\%}{20.9\% - C_{Gas(O2)}}$$

8. Emission Concentration in g/hp*hr

$$E_{g/hp\text{-}hr} = \frac{E_{lb/hr} \times 453.6}{mw \times 1314.022} \; or \; \frac{E_{lb/hr} \times 453.6}{hp}$$

RATA SHEET CALCULATIONS

d = Reference Method Data - CEMS Data
S_d = Standard Deviation
CC = Confident Coefficient
n = number of runs
$t_{0.025}$ = 2.5 percent confidence coefficent T-values
RA = relative accuracy
ARA = alternative relative accuracy
BAF = Bias adjustment factor

n	t	n	t	n	t
2	12.706	7	2.447	12	2.201
3	4.303	8	2.365	13	2.179
4	3.182	9	2.306	14	2.160
5	2.776	10	2.262	15	2.145
6	2.571	11	2.228	16	2.131

1. Difference

$$d = \sum_{i=1}^{n} d_i$$

2. Standard Deviation

$$S_d = \sqrt{\frac{\sum_{i=1}^{n} d_i^2 - \left[\frac{\left(\sum_{i=1}^{n} d_i \right)^2}{n} \right]}{n-1}}$$

3. Confident Coefficient

$$CC = t_{0.025} \times \frac{S_d}{\sqrt{n}}$$

4. Relative Accuracy

$$RA = \frac{|d_{AVG}| + |CC|}{RM_{AVG}} \times 100$$

5. Alternative Relative Accuracy

$$ARA = \frac{|d_{AVG}| + |CC|}{AS} \times 100$$

5. Bias Adjustment Factor

$$BAF = 1 + \left(\frac{|d_{AVG}|}{CEM_{AVG}} \right)$$

APPENDIX B

CEMS AND REFERENCE METHOD DATA

Florida Power and Light	
Air Permit # :	PSD-FL-396
Plant Name or Location:	West County Energy Center
Date:	March 13, 2011
Project Number:	cis-10-westcounty.fl-rata#1
Manufacturer & Equipment:	Mitsubishi
Model:	501G
Unit Number:	3C
Test Load:	Base w/DB
Tester(s) / Test Unit(s):	JF/AS/RW/TG/127/206

		RUN									
	UNITS	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Start Time	hh:mm:ss	09:56:01	11:12:01	12:27:01	13:39:01	14:11:01	14:41:01	15:11:01	15:41:01	16:59:01	17:29:01
End Time	hh:mm:ss	10:55:31	12:11:31	13:26:31	13:59:31	14:31:31	15:01:31	15:31:31	16:01:31	17:19:31	17:49:31
Bar. Pressure	in. Hg	30.28	30.30	30.30	30.26	30.26	30.23	30.22	30.22	30.22	30.22
Amb. Temp.	°F	72	74	74	76	77	77	77	76	75	74
Rel. Humidity	%	42	36	36	42	42	43	43	44	44	43
Spec. Humidity	lb water / lb air	0.006905	0.006321	0.006321	0.007915	0.008186	0.008392	0.008394	0.008308	0.008032	0.007586
Turbine Fuel Flow	lb/min	1,872	1,860	1,848	1,842	1,842	1,842	1,842	1,842	1,848	1,854
Duct Burner Fuel Flow	lb/min	159	159	159	159	159	159	159	159	159	159
Total Fuel Flow	SCFH	2,787,227	2,770,510	2,753,885	2,745,378	2,745,424	2,745,493	2,745,836	2,745,950	2,753,748	2,762,072
Power Output	megawatts	343.4	345.2	336.8	330.3	329.6	329.0	329.5	329.3	343.1	346.2
O_2 CEMS Data	%	12.41	12.43	12.41	12.41	12.41	12.41	12.41	12.41	12.43	12.43
NOx CEMS Data	lb/MMBtu	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.005	0.005	0.006
CO CEMS Data	ppmvd	3.10	2.90	2.80	2.80	2.80	2.80	2.70	2.70	0.90	1.00
	ppm@15%O_2	2.10	2.00	2.00	1.90	1.90	1.90	1.90	1.90	0.60	0.70
	lb/hr	13.40	12.40	12.30	12.10	12.00	11.80	11.70	11.60	4.00	4.20

CEMS AND REFERENCE METHOD DATA

CEMS Data

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 9:56
Period End: 3/13/2011 10:55
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 9:56	31.2	9515	0.005	3.1	2.2	13.4	12.42	341
3/13/2011 9:57	31.3	9539	0.005	3.1	2.2	13.5	12.42	342.7
3/13/2011 9:58	31.3	9551	0.005	3.1	2.2	13.5	12.38	343.5
3/13/2011 9:59	31.1	9554	0.005	3.1	2.2	13.4	12.37	343.9
3/13/2011 10:00	31.4	9558	0.005	3.1	2.2	13.5	12.41	344.3
3/13/2011 10:01	31.2	9557	0.005	3.2	2.2	14.0	12.36	345.3
3/13/2011 10:02	30.9	9567	0.005	3.2	2.2	13.9	12.39	343.9
3/13/2011 10:03	31.4	9566	0.005	3.3	2.3	14.4	12.44	344.8
3/13/2011 10:04	31.3	9567	0.005	3.3	2.3	14.3	12.4	345
3/13/2011 10:05	31.3	9568	0.005	3.1	2.2	13.5	12.39	345.2
3/13/2011 10:06	31.4	9574	0.005	3.0	2.1	13.2	12.37	345
3/13/2011 10:07	31.1	9570	0.005	3.0	2.1	13.1	12.38	343.1
3/13/2011 10:08	31.3	9572	0.005	3.1	2.2	13.8	12.45	343.5
3/13/2011 10:09	31.3	9571	0.005	3.0	2.1	13.2	12.43	344.4
3/13/2011 10:10	31.3	9570	0.005	3.1	2.2	13.5	12.42	344.8
3/13/2011 10:11	31.5	9571	0.006	3.1	2.2	13.6	12.38	345.5
3/13/2011 10:12	31.2	9567	0.006	3.1	2.2	13.4	12.41	343.8
3/13/2011 10:13	31.3	9570	0.005	3.1	2.2	13.5	12.43	342.6
3/13/2011 10:14	31.3	9571	0.005	3.1	2.2	13.5	12.4	341.3
3/13/2011 10:15	31.2	9575	0.005	3.1	2.2	13.4	12.4	340.5
3/13/2011 10:16	31.3	9576	0.005	3.2	2.2	13.8	12.34	339.7
3/13/2011 10:17	30.8	9574	0.005	3.2	2.2	13.8	12.37	338.6
3/13/2011 10:18	31	9571	0.005	3.4	2.4	14.8	12.43	340.5
3/13/2011 10:19	31.2	9571	0.005	3.3	2.3	14.3	12.43	342.2
3/13/2011 10:20	31.3	9566	0.005	3.2	2.2	14.0	12.45	343.3
3/13/2011 10:21	31.4	9568	0.005	3.1	2.2	13.5	12.42	344.7
3/13/2011 10:22	31.4	9560	0.006	3.0	2.1	13.2	12.39	346.1
3/13/2011 10:23	31.3	9563	0.006	3.0	2.1	13.2	12.37	345.9
3/13/2011 10:24	31.3	9563	0.005	3.1	2.2	13.5	12.44	345.2
3/13/2011 10:25	31.3	9559	0.005	3.2	2.2	14.0	12.44	346.3
3/13/2011 10:26	31.3	9559	0.005	3.2	2.2	14.0	12.38	345.5
3/13/2011 10:27	31.2	9553	0.006	3.1	2.2	13.4	12.42	344.3
3/13/2011 10:28	31.3	9559	0.005	3.1	2.2	13.5	12.43	344.8
3/13/2011 10:29	31.3	9559	0.005	3.1	2.2	13.5	12.4	344.5
3/13/2011 10:30	31.1	9553	0.005	3.1	2.2	13.4	12.44	343.8
3/13/2011 10:31	31.2	9562	0.005	3.0	2.1	13.2	12.44	344.9
3/13/2011 10:32	31.5	9571	0.005	2.9	2.0	12.7	12.42	344.6
3/13/2011 10:33	31.2	9571	0.005	2.9	2.0	12.6	12.4	342
3/13/2011 10:34	31.3	9571	0.005	3.0	2.1	13.2	12.43	341.8
3/13/2011 10:35	31.2	9571	0.005	3.0	2.1	13.2	12.44	343.2
3/13/2011 10:36	31.3	9571	0.005	3.0	2.1	13.2	12.42	343.3
3/13/2011 10:37	31.1	9570	0.005	3.0	2.1	13.1	12.43	342.7
3/13/2011 10:38	31.1	9570	0.005	3.0	2.1	13.1	12.41	340.7
3/13/2011 10:39	31	9571	0.005	3.0	2.1	13.1	12.42	340.1
3/13/2011 10:40	31	9569	0.005	3.0	2.1	13.1	12.44	341.1
3/13/2011 10:41	31.2	9567	0.005	3.0	2.1	13.2	12.45	342.1
3/13/2011 10:42	31.1	9567	0.005	2.9	2.0	12.6	12.41	342.1
3/13/2011 10:43	31.1	9563	0.005	3.0	2.1	13.1	12.42	341.5
3/13/2011 10:44	31.2	9567	0.005	2.9	2.0	12.6	12.44	342.7
3/13/2011 10:45	31.1	9570	0.005	2.8	1.9	12.3	12.37	342.6
3/13/2011 10:46	31	9565	0.005	2.9	2.0	12.5	12.41	341.3
3/13/2011 10:47	31	9567	0.005	3.0	2.1	13.1	12.46	341.7
3/13/2011 10:48	31.1	9568	0.005	3.1	2.2	13.7	12.46	342.4
3/13/2011 10:49	31.4	9563	0.005	3.1	2.2	13.5	12.42	343.2
3/13/2011 10:50	31.1	9565	0.006	3.0	2.1	13.1	12.43	344.5
3/13/2011 10:51	31.2	9565	0.006	3.0	2.1	13.2	12.41	344.5
3/13/2011 10:52	31.2	9560	0.006	3.0	2.1	13.2	12.44	344.5
3/13/2011 10:53	31.3	9555	0.006	3.0	2.1	13.2	12.44	345
3/13/2011 10:54	31.3	9556	0.006	3.0	2.1	13.2	12.43	345.1
3/13/2011 10:55	31.2	9559	0.006	2.9	2.0	12.6	12.41	344.8
Final Average*	31.2	9564	0.005	3.1	2.1	13.4	12.41	343.4
Maximum*	31.5	9576	0.006	3.4	2.4	14.8	12.46	346.3
Minimum*	30.8	9515	0.005	2.8	1.9	12.3	12.34	338.6

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 11:12
Period End: 3/13/2011 12:11
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 11:12	31.4	9552	0.006	2.9	2.0	12.7	12.42	346.2
3/13/2011 11:13	31	9553	0.006	3.0	2.1	13.1	12.41	345.4
3/13/2011 11:14	30.8	9550	0.006	3.0	2.1	13.0	12.44	343.6
3/13/2011 11:15	31	9552	0.005	3.0	2.1	13.1	12.48	344.7
3/13/2011 11:16	31.1	9548	0.005	3.0	2.1	13.1	12.44	345.3
3/13/2011 11:17	31.1	9549	0.006	2.9	2.0	12.6	12.43	345.7
3/13/2011 11:18	31.2	9550	0.006	2.9	2.0	12.6	12.43	345.7
3/13/2011 11:19	31	9552	0.006	2.8	1.9	12.2	12.44	345.4
3/13/2011 11:20	31	9549	0.005	2.9	2.0	12.8	12.45	345.7
3/13/2011 11:21	31.1	9547	0.005	2.9	2.0	12.6	12.44	346.3
3/13/2011 11:22	30.9	9549	0.006	2.9	2.0	12.5	12.43	346.1
3/13/2011 11:23	31.1	9547	0.006	2.9	2.0	12.6	12.43	346.4
3/13/2011 11:24	31.1	9550	0.006	2.9	2.0	12.6	12.43	346.3
3/13/2011 11:25	31.1	9549	0.005	2.7	1.9	11.7	12.43	346.2
3/13/2011 11:26	31.1	9547	0.005	2.7	1.9	11.7	12.43	346.3
3/13/2011 11:27	31.1	9544	0.005	2.8	1.9	12.3	12.43	346.5
3/13/2011 11:28	31.4	9543	0.005	2.8	1.9	12.4	12.43	346.9
3/13/2011 11:29	31.1	9541	0.006	2.8	1.9	12.3	12.41	346.4
3/13/2011 11:30	31	9544	0.006	2.8	1.9	12.2	12.43	345.7
3/13/2011 11:31	31.2	9545	0.005	2.9	2.0	12.9	12.45	346.1
3/13/2011 11:32	30.9	9544	0.005	2.9	2.0	12.5	12.44	346.3
3/13/2011 11:33	31.3	9544	0.005	2.9	2.0	12.6	12.43	346.6
3/13/2011 11:34	30.9	9540	0.006	2.9	2.0	12.5	12.43	346.3
3/13/2011 11:35	31.1	9544	0.006	2.9	2.0	12.6	12.44	346.2
3/13/2011 11:36	31.2	9546	0.006	2.8	1.9	12.3	12.41	346.3
3/13/2011 11:37	30.9	9547	0.006	2.8	1.9	12.2	12.43	345.2
3/13/2011 11:38	31	9542	0.005	2.9	2.0	12.8	12.45	345.5
3/13/2011 11:39	31.1	9549	0.005	2.9	2.0	12.6	12.44	346.4
3/13/2011 11:40	31.1	9549	0.006	2.9	2.0	12.6	12.43	346.3
3/13/2011 11:41	31.2	9549	0.006	2.8	1.9	12.3	12.41	346
3/13/2011 11:42	30.9	9549	0.005	2.6	1.8	11.1	12.38	345.1
3/13/2011 11:43	30.8	9555	0.005	2.8	2.0	12.2	12.45	344.1
3/13/2011 11:44	31.1	9550	0.005	2.8	2.0	12.3	12.45	345.3
3/13/2011 11:45	31	9550	0.005	2.8	1.9	12.2	12.4	345.5
3/13/2011 11:46	31.1	9552	0.005	2.9	2.0	12.6	12.42	345
3/13/2011 11:47	30.9	9552	0.005	2.9	2.0	12.5	12.42	344.8
3/13/2011 11:48	30.8	9551	0.005	2.9	2.0	12.4	12.43	344.1
3/13/2011 11:49	31.1	9554	0.005	2.9	2.0	12.8	12.47	345.2
3/13/2011 11:50	30.9	9549	0.005	2.9	2.0	12.5	12.43	345.5
3/13/2011 11:51	30.9	9555	0.006	2.8	1.9	12.2	12.41	345.2
3/13/2011 11:52	31	9552	0.006	2.8	1.9	12.2	12.43	344.2
3/13/2011 11:53	30.8	9552	0.005	2.9	2.0	12.7	12.47	344.8
3/13/2011 11:54	31.1	9555	0.005	2.9	2.0	12.6	12.42	345.4
3/13/2011 11:55	30.9	9559	0.005	2.8	1.9	12.2	12.4	344.8
3/13/2011 11:56	30.9	9563	0.005	2.8	1.9	12.2	12.44	344.3
3/13/2011 11:57	30.9	9563	0.005	2.7	1.9	11.9	12.45	344.7
3/13/2011 11:58	30.9	9563	0.005	2.7	1.9	11.7	12.44	344.9
3/13/2011 11:59	30.9	9568	0.005	2.7	1.9	11.7	12.42	344.6
3/13/2011 12:00	30.9	9568	0.005	2.8	1.9	12.2	12.43	344.3
3/13/2011 12:01	31.1	9564	0.005	2.8	1.9	12.3	12.42	344.7
3/13/2011 12:02	30.8	9568	0.005	2.9	2.0	12.4	12.43	344.3
3/13/2011 12:03	30.9	9570	0.005	2.9	2.0	12.5	12.42	344
3/13/2011 12:04	30.9	9563	0.005	2.9	2.0	12.5	12.44	344.4
3/13/2011 12:05	30.9	9558	0.005	2.8	1.9	12.2	12.38	343.7
3/13/2011 12:06	30.7	9561	0.006	2.9	2.0	12.4	12.4	342
3/13/2011 12:07	30.7	9563	0.005	3.0	2.1	13.0	12.48	342.9
3/13/2011 12:08	31	9563	0.005	3.0	2.1	13.1	12.44	343.9
3/13/2011 12:09	30.9	9557	0.005	2.9	2.0	12.5	12.43	344.4
3/13/2011 12:10	31	9555	0.006	2.9	2.0	12.5	12.42	345.1
3/13/2011 12:11	31	9553	0.006	2.8	1.9	12.2	12.39	345.7
Final Average*	31	9553	0.005	2.9	2.0	12.4	12.43	345.2
Maximum*	31.4	9570	0.006	3.0	2.1	13.1	12.48	346.9
Minimum*	30.7	9540	0.005	2.6	1.8	11.1	12.38	342

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 12:27
Period End: 3/13/2011 13:26
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 12:27	31.1	9549	0.006	2.7	1.9	11.7	12.4	344.9
3/13/2011 12:28	30.8	9546	0.005	2.7	1.9	11.6	12.42	344.1
3/13/2011 12:29	31	9547	0.005	2.8	1.9	12.2	12.42	344.1
3/13/2011 12:30	30.7	9541	0.005	2.9	2.0	12.4	12.44	343.8
3/13/2011 12:31	31.1	9536	0.005	2.9	2.0	12.6	12.42	345.2
3/13/2011 12:32	30.9	9544	0.005	2.8	1.9	12.2	12.39	344.5
3/13/2011 12:33	30.9	9545	0.005	2.9	2.0	12.5	12.42	343.4
3/13/2011 12:34	30.9	9547	0.005	3.0	2.1	13.0	12.44	344.3
3/13/2011 12:35	31	9547	0.005	2.9	2.0	12.5	12.43	345.3
3/13/2011 12:36	31.1	9549	0.005	2.9	2.0	12.6	12.39	345.3
3/13/2011 12:37	30.9	9549	0.006	2.8	1.9	12.2	12.38	344.5
3/13/2011 12:38	30.8	9546	0.005	2.8	1.9	12.2	12.4	342.2
3/13/2011 12:39	30.8	9546	0.005	2.9	2.0	12.7	12.47	341.8
3/13/2011 12:40	30.8	9537	0.005	2.9	2.0	12.4	12.44	340.9
3/13/2011 12:41	31.2	9540	0.005	2.9	2.0	12.6	12.4	340.3
3/13/2011 12:42	30.8	9545	0.006	2.7	1.9	11.6	12.38	337.9
3/13/2011 12:43	30.9	9542	0.006	2.7	1.9	11.7	12.41	335.7
3/13/2011 12:44	30.6	9549	0.005	2.7	1.9	11.5	12.39	335.1
3/13/2011 12:45	30.8	9543	0.005	2.8	1.9	12.2	12.42	334.4
3/13/2011 12:46	30.8	9546	0.005	2.8	1.9	12.2	12.44	335.4
3/13/2011 12:47	30.8	9545	0.005	2.8	1.9	12.2	12.4	335.4
3/13/2011 12:48	30.9	9544	0.005	2.9	2.0	12.5	12.4	336.1
3/13/2011 12:49	30.8	9543	0.006	2.9	2.0	12.4	12.4	335
3/13/2011 12:50	30.9	9541	0.006	2.9	2.0	12.5	12.44	335.3
3/13/2011 12:51	30.9	9542	0.006	2.9	2.0	12.5	12.39	335.4
3/13/2011 12:52	30.8	9542	0.006	2.8	1.9	12.2	12.38	334
3/13/2011 12:53	30.7	9547	0.006	2.8	1.9	12.1	12.39	333.2
3/13/2011 12:54	30.8	9550	0.005	3.0	2.1	13.0	12.42	333.5
3/13/2011 12:55	30.6	9552	0.005	3.0	2.1	12.9	12.37	333.9
3/13/2011 12:56	30.8	9549	0.005	2.9	2.0	12.4	12.4	333.6
3/13/2011 12:57	30.8	9547	0.005	3.0	2.1	13.0	12.44	334.6
3/13/2011 12:58	31	9545	0.006	2.9	2.0	12.5	12.43	335.3
3/13/2011 12:59	30.9	9544	0.006	2.9	2.0	12.5	12.41	336
3/13/2011 13:00	31	9542	0.006	2.7	1.9	11.7	12.38	335.9
3/13/2011 13:01	30.8	9544	0.006	2.7	1.9	11.6	12.43	334.6
3/13/2011 13:02	30.9	9542	0.005	2.8	1.9	12.2	12.42	335.2
3/13/2011 13:03	30.8	9547	0.006	2.7	1.9	11.6	12.36	334.3
3/13/2011 13:04	30.7	9552	0.006	2.7	1.9	11.6	12.42	333.2
3/13/2011 13:05	30.8	9550	0.005	3.0	2.1	13.0	12.46	334
3/13/2011 13:06	30.7	9552	0.005	2.9	2.0	12.4	12.43	334.5
3/13/2011 13:07	31	9550	0.006	2.8	1.9	12.2	12.4	335.5
3/13/2011 13:08	30.9	9552	0.006	2.8	1.9	12.2	12.41	335.1
3/13/2011 13:09	30.9	9552	0.005	2.8	1.9	12.2	12.43	335
3/13/2011 13:10	30.9	9555	0.005	2.8	1.9	12.2	12.4	335.4
3/13/2011 13:11	30.8	9552	0.005	2.8	1.9	12.2	12.36	334.4
3/13/2011 13:12	30.8	9550	0.005	2.9	2.0	12.4	12.42	333.8
3/13/2011 13:13	30.8	9550	0.005	2.9	2.0	12.4	12.36	334
3/13/2011 13:14	30.6	9552	0.005	2.9	2.0	12.4	12.38	332.7
3/13/2011 13:15	30.6	9549	0.005	2.8	1.9	12.1	12.41	333.4
3/13/2011 13:16	30.8	9546	0.005	2.8	1.9	12.2	12.42	334.2
3/13/2011 13:17	30.8	9541	0.005	2.8	1.9	12.2	12.4	334.9
3/13/2011 13:18	31	9543	0.005	2.7	1.9	11.7	12.38	333.6
3/13/2011 13:19	30.5	9547	0.006	2.8	1.9	12.1	12.39	332.1
3/13/2011 13:20	30.9	9543	0.005	3.0	2.1	13.0	12.45	333.5
3/13/2011 13:21	30.7	9547	0.005	2.9	2.0	12.4	12.42	334.4
3/13/2011 13:22	31	9547	0.005	2.8	1.9	12.2	12.4	335.6
3/13/2011 13:23	30.8	9549	0.006	2.8	1.9	12.2	12.36	334.5
3/13/2011 13:24	30.6	9545	0.006	2.8	1.9	12.1	12.4	332.6
3/13/2011 13:25	30.8	9545	0.005	2.9	2.0	12.4	12.42	332.7
3/13/2011 13:26	30.7	9545	0.005	2.8	1.9	12.1	12.4	333.1
Final Average*	30.8	9546	0.005	2.8	2.0	12.3	12.41	336.8
Maximum*	31.2	9555	0.006	3.0	2.1	13.0	12.47	345.3
Minimum*	30.5	9536	0.005	2.7	1.9	11.5	12.36	332.1

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 13:39
Period End: 3/13/2011 13:59
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 13:39	30.8	9535	0.005	2.9	2	12.4	12.41	331.8
3/13/2011 13:40	30.8	9535	0.005	2.8	1.9	12.2	12.37	330.6
3/13/2011 13:41	30.6	9533	0.005	2.8	1.9	12.1	12.41	329.7
3/13/2011 13:42	30.7	9534	0.005	2.8	1.9	12.1	12.4	330.3
3/13/2011 13:43	30.7	9531	0.005	2.8	1.9	12.1	12.39	329.6
3/13/2011 13:44	30.6	9533	0.005	2.9	2	12.4	12.43	329.8
3/13/2011 13:45	30.8	9531	0.005	2.9	2	12.4	12.44	330.7
3/13/2011 13:46	30.9	9533	0.005	2.7	1.9	11.7	12.39	331.5
3/13/2011 13:47	30.7	9535	0.006	2.7	1.9	11.6	12.39	330.6
3/13/2011 13:48	30.8	9533	0.006	2.7	1.9	11.6	12.42	330.2
3/13/2011 13:49	30.6	9533	0.005	2.8	1.9	12.1	12.43	330.3
3/13/2011 13:50	30.9	9535	0.005	2.8	1.9	12.2	12.42	331.1
3/13/2011 13:51	30.7	9536	0.006	2.9	2	12.4	12.42	331
3/13/2011 13:52	30.8	9534	0.006	2.9	2	12.4	12.41	330.7
3/13/2011 13:53	30.8	9535	0.006	2.8	1.9	12.2	12.4	330
3/13/2011 13:54	30.6	9535	0.006	2.8	1.9	12.1	12.39	328.9
3/13/2011 13:55	30.8	9536	0.005	2.9	2	12.4	12.44	329.3
3/13/2011 13:56	30.7	9534	0.005	2.8	1.9	12.1	12.42	330.2
3/13/2011 13:57	30.8	9535	0.006	2.7	1.9	11.6	12.4	330.2
3/13/2011 13:58	30.5	9537	0.006	2.8	1.9	12.1	12.41	329.4
3/13/2011 13:59	30.7	9538	0.005	2.8	1.9	12.1	12.43	330.3
Final Average*	30.7	9534	0.005	2.8	1.9	12.1	12.41	330.3
Maximum*	30.9	9538	0.006	2.9	2	12.4	12.44	331.8
Minimum*	30.5	9531	0.005	2.7	1.9	11.6	12.37	328.9

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 14:11
Period End: 3/13/2011 14:31
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 14:11	30.6	9535	0.005	2.8	1.9	12.1	12.42	329.7
3/13/2011 14:12	30.8	9534	0.005	2.8	1.9	12.2	12.42	330.4
3/13/2011 14:13	30.9	9534	0.005	2.7	1.9	11.7	12.42	330
3/13/2011 14:14	30.8	9534	0.006	2.8	1.9	12.2	12.41	328.8
3/13/2011 14:15	30.8	9535	0.005	2.7	1.9	11.6	12.41	328
3/13/2011 14:16	30.8	9549	0.005	2.7	1.9	11.6	12.39	326.8
3/13/2011 14:17	30.7	9547	0.005	2.7	1.9	11.6	12.43	327.6
3/13/2011 14:18	30.8	9545	0.005	2.7	1.9	11.6	12.41	329.6
3/13/2011 14:19	30.9	9538	0.005	2.7	1.9	11.7	12.4	330
3/13/2011 14:20	30.7	9533	0.005	2.8	1.9	12.1	12.4	330.2
3/13/2011 14:21	30.9	9533	0.005	2.8	1.9	12.2	12.41	331
3/13/2011 14:22	30.8	9535	0.005	2.8	1.9	12.2	12.4	331.1
3/13/2011 14:23	30.6	9533	0.005	2.9	2	12.4	12.42	330.5
3/13/2011 14:24	30.9	9535	0.005	2.9	2	12.5	12.43	331.3
3/13/2011 14:25	30.7	9536	0.005	2.8	1.9	12.1	12.36	330.7
3/13/2011 14:26	30.6	9534	0.005	2.9	2	12.4	12.41	329.1
3/13/2011 14:27	30.6	9536	0.005	2.8	1.9	12.1	12.43	329.3
3/13/2011 14:28	30.7	9533	0.005	2.8	1.9	12.1	12.42	330
3/13/2011 14:29	30.7	9534	0.005	2.7	1.9	11.6	12.35	329.2
3/13/2011 14:30	30.5	9535	0.005	2.8	2	12.1	12.46	328.6
3/13/2011 14:31	30.6	9533	0.005	2.9	2	12.4	12.44	329.3
Final Average*	30.7	9536	0.005	2.8	1.9	12.0	12.41	329.6
Maximum*	30.9	9549	0.006	2.9	2	12.5	12.46	331.3
Minimum*	30.5	9533	0.005	2.7	1.9	11.6	12.35	326.8

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 14:41
Period End: 3/13/2011 15:01
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 14:41	30.4	9535	0.005	2.8	1.9	12.0	12.4	327.6
3/13/2011 14:42	30.6	9537	0.005	2.9	2	12.4	12.42	328.3
3/13/2011 14:43	30.9	9540	0.005	2.8	1.9	12.2	12.41	328.4
3/13/2011 14:44	30.5	9541	0.005	2.8	1.9	12.1	12.41	327.2
3/13/2011 14:45	30.6	9545	0.006	2.7	1.9	11.5	12.39	326
3/13/2011 14:46	30.5	9539	0.006	2.8	1.9	12.1	12.44	325.7
3/13/2011 14:47	30.8	9543	0.005	2.8	1.9	12.2	12.41	327.2
3/13/2011 14:48	30.5	9541	0.006	2.7	1.9	11.5	12.42	327.7
3/13/2011 14:49	30.8	9539	0.006	2.8	1.9	12.2	12.43	329.1
3/13/2011 14:50	30.5	9542	0.006	2.7	1.9	11.5	12.41	329.6
3/13/2011 14:51	30.8	9539	0.006	2.6	1.8	11.1	12.41	330
3/13/2011 14:52	30.8	9542	0.005	2.6	1.8	11.1	12.43	330.9
3/13/2011 14:53	30.7	9537	0.006	2.6	1.8	11.0	12.42	331
3/13/2011 14:54	30.9	9535	0.006	2.6	1.8	11.1	12.4	330.7
3/13/2011 14:55	30.5	9531	0.006	2.7	1.9	11.5	12.38	329.7
3/13/2011 14:56	30.7	9536	0.006	2.8	1.9	12.1	12.41	329.4
3/13/2011 14:57	30.7	9532	0.005	2.8	1.9	12.1	12.42	329.6
3/13/2011 14:58	30.7	9533	0.005	2.9	2	12.4	12.41	330.5
3/13/2011 14:59	30.9	9533	0.006	2.8	1.9	12.2	12.4	330.9
3/13/2011 15:00	30.6	9549	0.006	2.8	1.9	12.1	12.4	330
3/13/2011 15:01	30.6	9551	0.006	2.8	1.9	12.1	12.44	330.3
Final Average*	30.7	9539	0.006	2.8	1.9	11.8	12.41	329
Maximum*	30.9	9551	0.006	2.9	2	12.4	12.44	331
Minimum*	30.4	9531	0.005	2.6	1.8	11.0	12.38	325.7

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 15:11
Period End: 3/13/2011 15:31
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 15:11	30.9	9551	0.006	2.7	1.9	11.7	12.42	330.7
3/13/2011 15:12	30.8	9555	0.006	2.7	1.9	11.6	12.4	329.8
3/13/2011 15:13	30.7	9558	0.006	2.7	1.9	11.6	12.4	327.9
3/13/2011 15:14	30.7	9556	0.006	2.8	1.9	12.1	12.43	326.6
3/13/2011 15:15	30.5	9556	0.005	2.7	1.9	11.5	12.44	327
3/13/2011 15:16	30.7	9555	0.005	2.8	1.9	12.1	12.43	328.5
3/13/2011 15:17	30.8	9556	0.006	2.7	1.9	11.6	12.4	329.7
3/13/2011 15:18	30.7	9555	0.006	2.7	1.9	11.6	12.4	329.6
3/13/2011 15:19	30.7	9553	0.006	2.7	1.9	11.6	12.41	329.9
3/13/2011 15:20	30.6	9556	0.005	2.7	1.9	11.5	12.41	330.8
3/13/2011 15:21	30.9	9554	0.006	2.7	1.9	11.7	12.4	331.2
3/13/2011 15:22	30.6	9555	0.005	2.7	1.9	11.5	12.38	330.4
3/13/2011 15:23	30.6	9555	0.005	2.7	1.9	11.5	12.36	329.1
3/13/2011 15:24	30.6	9561	0.005	2.7	1.9	11.5	12.4	328.9
3/13/2011 15:25	30.5	9552	0.005	2.8	1.9	12.1	12.43	329.7
3/13/2011 15:26	30.8	9554	0.005	2.7	1.9	11.6	12.39	330.8
3/13/2011 15:27	30.6	9552	0.006	2.6	1.8	11.0	12.39	330.3
3/13/2011 15:28	30.7	9554	0.006	2.7	1.9	11.6	12.4	329.5
3/13/2011 15:29	30.6	9550	0.006	2.8	1.9	12.1	12.42	329.1
3/13/2011 15:30	30.7	9550	0.005	2.8	1.9	12.1	12.43	329.8
3/13/2011 15:31	30.7	9554	0.006	2.8	1.9	12.1	12.41	330.2
Final Average*	30.7	9554	0.006	2.7	1.9	11.7	12.41	329.5
Maximum*	30.9	9561	0.006	2.8	1.9	12.1	12.44	331.2
Minimum*	30.5	9550	0.005	2.6	1.8	11.0	12.36	326.6

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 15:41
Period End: 3/13/2011 16:01
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 15:41	30.7	9544	0.006	2.6	1.8	11.0	12.39	326.3
3/13/2011 15:42	30.6	9545	0.005	2.6	1.8	11.0	12.41	325.7
3/13/2011 15:43	30.7	9550	0.005	2.6	1.8	11.0	12.38	327
3/13/2011 15:44	30.7	9554	0.006	2.6	1.8	11.0	12.41	327.6
3/13/2011 15:45	30.6	9553	0.006	2.7	1.9	11.5	12.41	328.3
3/13/2011 15:46	30.7	9558	0.006	2.8	1.9	12.1	12.43	328.9
3/13/2011 15:47	30.7	9560	0.006	2.8	1.9	12.1	12.43	329.9
3/13/2011 15:48	30.8	9562	0.006	2.8	1.9	12.2	12.41	331
3/13/2011 15:49	30.7	9559	0.006	2.7	1.9	11.6	12.36	330.3
3/13/2011 15:50	30.5	9567	0.006	2.8	1.9	12.1	12.43	329.2
3/13/2011 15:51	30.8	9562	0.005	2.9	2	12.7	12.46	330.4
3/13/2011 15:52	30.6	9559	0.005	2.8	1.9	12.1	12.42	330.1
3/13/2011 15:53	30.9	9567	0.005	2.8	1.9	12.2	12.41	331.1
3/13/2011 15:54	30.8	9565	0.006	2.7	1.9	11.6	12.39	331.7
3/13/2011 15:55	30.7	9570	0.006	2.7	1.9	11.6	12.39	330.6
3/13/2011 15:56	30.6	9566	0.005	2.6	1.8	11.0	12.4	329.3
3/13/2011 15:57	30.5	9563	0.005	2.7	1.9	11.5	12.39	328.7
3/13/2011 15:58	30.6	9559	0.005	2.7	1.9	11.5	12.39	328.5
3/13/2011 15:59	30.4	9561	0.005	2.6	1.8	10.9	12.43	328.6
3/13/2011 16:00	30.8	9556	0.005	2.7	1.9	11.6	12.43	330.5
3/13/2011 16:01	30.7	9549	0.005	2.7	1.9	11.6	12.42	330.7
Final Average*	30.7	9559	0.005	2.7	1.9	11.6	12.41	329.3
Maximum*	30.9	9570	0.006	2.9	2	12.7	12.46	331.7
Minimum*	30.4	9544	0.005	2.6	1.8	10.9	12.36	325.7

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 16:59
Period End: 3/13/2011 17:19
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 16:59	30.8	9538	0.006	0.9	0.6	3.9	12.44	344.6
3/13/2011 17:00	30.8	9542	0.006	1.0	0.7	4.4	12.44	343.8
3/13/2011 17:01	30.9	9535	0.006	0.9	0.6	3.9	12.44	343.7
3/13/2011 17:02	30.7	9534	0.006	0.8	0.6	3.3	12.43	343.2
3/13/2011 17:03	30.9	9544	0.006	0.9	0.6	3.9	12.44	343.5
3/13/2011 17:04	30.6	9545	0.006	0.9	0.6	3.8	12.43	343
3/13/2011 17:05	30.8	9546	0.006	0.9	0.6	3.9	12.43	342.9
3/13/2011 17:06	30.9	9547	0.005	0.9	0.6	3.9	12.42	343
3/13/2011 17:07	30.6	9540	0.005	0.8	0.6	3.3	12.4	342.2
3/13/2011 17:08	30.7	9539	0.005	0.9	0.6	3.9	12.41	341.7
3/13/2011 17:09	30.7	9539	0.005	0.9	0.6	3.9	12.43	342
3/13/2011 17:10	31	9539	0.005	1.0	0.7	4.5	12.44	343.7
3/13/2011 17:11	30.7	9535	0.005	0.9	0.6	3.9	12.42	343.2
3/13/2011 17:12	30.9	9538	0.006	0.9	0.6	3.9	12.43	343.2
3/13/2011 17:13	30.8	9539	0.005	0.9	0.6	3.9	12.43	343.1
3/13/2011 17:14	30.8	9537	0.005	1.0	0.7	4.4	12.43	343
3/13/2011 17:15	30.8	9539	0.005	1.0	0.7	4.4	12.43	343
3/13/2011 17:16	30.8	9540	0.005	0.9	0.6	3.9	12.43	343.4
3/13/2011 17:17	30.9	9541	0.005	1.0	0.7	4.4	12.42	343.5
3/13/2011 17:18	30.8	9542	0.006	0.9	0.6	3.9	12.43	343.1
3/13/2011 17:19	30.8	9541	0.005	0.9	0.6	3.9	12.45	343.2
Final Average*	30.8	9540	0.005	0.9	0.6	4.0	12.43	343.1
Maximum*	31	9547	0.006	1.0	0.7	4.5	12.45	344.6
Minimum*	30.6	9534	0.005	0.8	0.6	3.3	12.4	341.7

*Does not include Invalid Averaging Periods ("N/A")

Babcock & Wilcox Power Generation Group NetDAHS
Average Values Report
Version 59
Generated 3/13/2011 15:30

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/13/2011 17:29
Period End: 3/13/2011 17:49
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_CT_GAS #/sec	3C_DB_GAS #/Hr	3CNOXMMBTU #/MBTU	3C_CO ppm	3C_COCORR ppm	3C_COLBHR #/Hr	3C_O2 %	3C_ST_MW MW
3/13/2011 17:29	30.8	9544	0.005	1.0	0.7	4.4	12.43	347
3/13/2011 17:30	31	9542	0.005	1.0	0.7	4.5	12.44	349.1
3/13/2011 17:31	30.9	9543	0.005	0.9	0.6	3.9	12.44	350.3
3/13/2011 17:32	30.9	9542	0.006	0.9	0.6	3.9	12.42	349.3
3/13/2011 17:33	31	9541	0.006	1.0	0.7	4.5	12.42	348.3
3/13/2011 17:34	30.8	9545	0.006	0.9	0.6	3.9	12.43	348.4
3/13/2011 17:35	30.7	9544	0.006	1.0	0.7	4.4	12.43	347.5
3/13/2011 17:36	30.8	9542	0.005	1.0	0.7	4.4	12.43	347.1
3/13/2011 17:37	30.9	9545	0.006	0.9	0.6	3.9	12.43	346.8
3/13/2011 17:38	30.8	9545	0.006	0.9	0.6	3.9	12.42	346.1
3/13/2011 17:39	30.7	9546	0.006	1.0	0.7	4.4	12.42	345.1
3/13/2011 17:40	30.9	9549	0.005	0.9	0.6	3.9	12.42	344.9
3/13/2011 17:41	30.8	9542	0.005	1.0	0.7	4.4	12.42	344.6
3/13/2011 17:42	30.9	9544	0.005	1.0	0.7	4.4	12.43	344.2
3/13/2011 17:43	30.9	9543	0.005	1.0	0.7	4.4	12.43	344.6
3/13/2011 17:44	30.9	9540	0.005	1.0	0.7	4.4	12.42	344.9
3/13/2011 17:45	30.9	9541	0.006	1.0	0.7	4.4	12.42	344.6
3/13/2011 17:46	31	9546	0.006	0.9	0.6	3.9	12.43	344.8
3/13/2011 17:47	31	9545	0.006	0.9	0.6	3.9	12.43	344.8
3/13/2011 17:48	30.8	9545	0.006	0.9	0.6	3.9	12.43	344.2
3/13/2011 17:49	31	9546	0.006	1.0	0.7	4.5	12.44	344.4
Final Average*	30.9	9544	0.006	1.0	0.7	4.2	12.43	346.2
Maximum*	31	9549	0.006	1.0	0.7	4.5	12.44	350.3
Minimum*	30.7	9540	0.005	0.9	0.6	3.9	12.42	344.2

*Does not include Invalid Averaging Periods ("N/A")

CEMS AND REFERENCE METHOD DATA

Reference Method Data

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,872	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,787,227	SCFH

Weather Data

Barometric Pressure	30.28	in. Hg
Relative Humidity	42	%
Ambient Temperature	72	°F
Specific Humidity	0.006905	lb H_2O / lb air

Unit Data

Unit Load	343.4	megawatts
Stack Exhaust Flow (M19)	61,486,652	SCFH

Base W/Db Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 09:56:01	11880	12.52	2.52	1.14
03/13/11 09:56:31	11910	12.50	2.43	1.04
03/13/11 09:57:01	11940	12.49	2.37	1.06
03/13/11 09:57:31	11970	12.50	2.38	1.13
03/13/11 09:58:01	12000	12.44	2.41	1.03
03/13/11 09:58:31	12030	12.45	2.55	0.99
03/13/11 09:59:01	12060	12.44	2.63	1.06
03/13/11 09:59:31	12090	12.44	2.64	0.96
03/13/11 10:00:01	12120	12.46	2.60	1.07
03/13/11 10:00:31	12150	12.50	2.50	1.14
03/13/11 10:01:01	12180	12.46	2.37	1.07
03/13/11 10:01:31	12210	12.42	2.35	1.08
03/13/11 10:02:01	12240	12.42	2.48	0.98
03/13/11 10:02:31	12270	12.48	2.51	1.12
03/13/11 10:03:01	12300	12.52	2.39	1.17
03/13/11 10:03:31	12330	12.52	2.28	1.23
03/13/11 10:04:01	12360	12.50	2.29	1.15
03/13/11 10:04:31	12390	12.45	2.37	1.02
03/13/11 10:05:01	12420	12.45	2.51	1.08
03/13/11 10:05:31	12450	12.47	2.60	1.07
03/13/11 10:06:01	12480	12.46	2.66	1.01
03/13/11 10:06:31	12510	12.44	2.70	1.04
03/13/11 10:07:01	12540	12.43	2.78	0.99
03/13/11 10:07:31	12570	12.46	2.71	0.95
03/13/11 10:08:01	12600	12.52	2.56	1.08
03/13/11 10:08:31	12630	12.54	2.37	1.17
03/13/11 10:09:01	12660	12.50	2.26	1.11
03/13/11 10:09:31	12690	12.52	2.33	1.18
03/13/11 10:10:01	12720	12.50	2.40	1.05
03/13/11 10:10:31	12750	12.49	2.54	0.96
03/13/11 10:11:01	12780	12.45	2.64	1.04
03/13/11 10:11:31	12810	12.45	2.72	0.99
03/13/11 10:12:01	12840	12.46	2.79	0.99
03/13/11 10:12:31	12870	12.49	2.70	1.05
03/13/11 10:13:01	12900	12.51	2.62	1.12
03/13/11 10:13:31	12930	12.50	2.56	1.03
03/13/11 10:14:01	12960	12.45	2.56	1.04
03/13/11 10:14:31	12990	12.48	2.65	1.05
03/13/11 10:15:01	13020	12.48	2.68	1.13
03/13/11 10:15:31	13050	12.47	2.69	1.06
03/13/11 10:16:01	13080	12.43	2.64	1.13
03/13/11 10:16:31	13110	12.42	2.68	1.11
03/13/11 10:17:01	13140	12.42	2.72	1.06
03/13/11 10:17:31	13170	12.47	2.67	1.09
03/13/11 10:18:01	13200	12.51	2.46	1.18
03/13/11 10:18:31	13230	12.52	2.25	1.27
03/13/11 10:19:01	13260	12.49	2.19	1.23
03/13/11 10:19:31	13290	12.51	2.21	1.13
03/13/11 10:20:01	13320	12.46	2.29	1.19
03/13/11 10:20:31	13350	12.44	2.15	1.22
03/13/11 10:21:01	13380	12.43	2.05	1.32
03/13/11 10:21:31	13410	12.41	2.39	1.37
03/13/11 10:22:01	13440	12.38	2.59	1.33
03/13/11 10:22:31	13470	12.37	2.54	1.13
03/13/11 10:23:01	13500	12.38	2.47	1.08

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,872	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,787,227	SCFH

Weather Data

Barometric Pressure	30.28	in. Hg
Relative Humidity	42	%
Ambient Temperature	72	°F
Specific Humidity	0.006905	lb H_2O / lb air

Unit Data

Unit Load	343.4	megawatts
Stack Exhaust Flow (M19)	61,486,652	SCFH

Base W/Db Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 10:23:31	13530	12.37	2.42	1.12
03/13/11 10:24:01	13560	12.43	2.41	1.10
03/13/11 10:24:31	13590	12.48	2.25	1.22
03/13/11 10:25:01	13620	12.47	2.06	1.19
03/13/11 10:25:31	13650	12.44	1.98	1.18
03/13/11 10:26:01	13680	12.41	2.04	1.10
03/13/11 10:26:31	13710	12.39	2.14	1.09
03/13/11 10:27:01	13740	12.40	2.21	1.13
03/13/11 10:27:31	13770	12.44	2.18	1.08
03/13/11 10:28:01	13800	12.45	2.09	1.03
03/13/11 10:28:31	13830	12.44	1.98	1.08
03/13/11 10:29:01	13860	12.41	1.95	1.15
03/13/11 10:29:31	13890	12.41	2.01	1.10
03/13/11 10:30:01	13920	12.43	2.03	1.09
03/13/11 10:30:31	13950	12.46	2.00	1.21
03/13/11 10:31:01	13980	12.47	1.91	1.16
03/13/11 10:31:31	14010	12.45	1.89	1.17
03/13/11 10:32:01	14040	12.44	1.89	1.16
03/13/11 10:32:31	14070	12.43	1.95	1.17
03/13/11 10:33:01	14100	12.42	2.03	1.17
03/13/11 10:33:31	14130	12.43	2.05	1.14
03/13/11 10:34:01	14160	12.42	2.07	1.08
03/13/11 10:34:31	14190	12.45	2.06	1.10
03/13/11 10:35:01	14220	12.46	1.97	1.13
03/13/11 10:35:31	14250	12.44	1.90	1.12
03/13/11 10:36:01	14280	12.43	1.89	1.08
03/13/11 10:36:31	14310	12.43	1.98	1.12
03/13/11 10:37:01	14340	12.42	2.03	1.04
03/13/11 10:37:31	14370	12.44	2.06	1.08
03/13/11 10:38:01	14400	12.44	1.98	1.00
03/13/11 10:38:31	14430	12.43	1.88	1.10
03/13/11 10:39:01	14460	12.41	1.87	1.03
03/13/11 10:39:31	14490	12.45	1.91	0.98
03/13/11 10:40:01	14520	12.46	1.83	1.07
03/13/11 10:40:31	14550	12.44	1.74	1.06
03/13/11 10:41:01	14580	12.45	1.76	1.08
03/13/11 10:41:31	14610	12.45	1.78	1.05
03/13/11 10:42:01	14640	12.44	1.80	1.11
03/13/11 10:42:31	14670	12.41	1.81	1.06
03/13/11 10:43:01	14700	12.42	1.87	1.05
03/13/11 10:43:31	14730	12.42	1.88	1.06
03/13/11 10:44:01	14760	12.46	1.85	1.06
03/13/11 10:44:31	14790	12.45	1.79	1.11
03/13/11 10:45:01	14820	12.41	1.79	0.99
03/13/11 10:45:31	14850	12.36	1.86	1.02
03/13/11 10:46:01	14880	12.38	1.92	1.02
03/13/11 10:46:31	14910	12.42	1.97	1.12
03/13/11 10:47:01	14940	12.42	1.87	1.02
03/13/11 10:47:31	14970	12.47	1.81	1.11
03/13/11 10:48:01	15000	12.47	1.73	1.07
03/13/11 10:48:31	15030	12.47	1.71	1.13
03/13/11 10:49:01	15060	12.43	1.79	1.10
03/13/11 10:49:31	15090	12.42	1.90	1.04
03/13/11 10:50:01	15120	12.42	1.98	1.07
03/13/11 10:50:31	15150	12.44	2.07	1.00

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,872	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,787,227	SCFH

Weather Data

Barometric Pressure	30.28	in. Hg
Relative Humidity	42	%
Ambient Temperature	72	°F
Specific Humidity	0.006905	lb H_2O / lb air

Unit Data

Unit Load	343.4	megawatts
Stack Exhaust Flow (M19)	61,486,652	SCFH

Base W/Db Load, Run - 1

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 10:51:01	15180	12.41	2.10	0.96
03/13/11 10:51:31	15210	12.43	2.16	1.01
03/13/11 10:52:01	15240	12.43	2.19	0.99
03/13/11 10:52:31	15270	12.44	2.14	1.00
03/13/11 10:53:01	15300	12.45	2.10	1.04
03/13/11 10:53:31	15330	12.46	2.06	1.00
03/13/11 10:54:01	15360	12.44	2.08	1.04
03/13/11 10:54:31	15390	12.43	2.12	1.00
03/13/11 10:55:01	15420	12.42	2.18	0.97
03/13/11 10:55:31	15450	12.44	2.14	0.95
RAW AVERAGE		**12.45**	**2.22**	**1.09**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.00	-0.01	0.03
	Final Zero	0.09	-0.14	-0.11
	Avg. Zero	0.05	-0.08	-0.04
	Initial UpScale	12.11	4.99	5.07
	Final UpScale	12.17	4.87	5.06
	Avg. UpScale	12.14	4.93	5.07
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.41	2.26	1.09
Concentration (ppm@ 15%O_2)	N/A	1.57	0.76
Emission Rate (lb/hr)	N/A	16.59	4.86
Emission Rate (lb/MMBtu)	N/A	0.006	0.002

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,860	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,770,510	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	345.2	megawatts
Stack Exhaust Flow (M19)	61,174,737	SCFH

Base W/Db Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 11:12:01	16440	12.44	1.94	1.00
03/13/11 11:12:31	16470	12.43	2.02	1.06
03/13/11 11:13:01	16500	12.41	2.07	1.06
03/13/11 11:13:31	16530	12.43	2.11	0.93
03/13/11 11:14:01	16560	12.43	2.11	0.92
03/13/11 11:14:31	16590	12.46	2.02	0.96
03/13/11 11:15:01	16620	12.51	1.92	1.00
03/13/11 11:15:31	16650	12.49	1.78	1.05
03/13/11 11:16:01	16680	12.47	1.80	1.01
03/13/11 11:16:31	16710	12.46	1.85	1.01
03/13/11 11:17:01	16740	12.44	1.92	0.99
03/13/11 11:17:31	16770	12.45	2.00	1.01
03/13/11 11:18:01	16800	12.45	2.06	0.88
03/13/11 11:18:31	16830	12.45	2.10	0.94
03/13/11 11:19:01	16860	12.46	2.11	0.88
03/13/11 11:19:31	16890	12.47	2.07	0.96
03/13/11 11:20:01	16920	12.48	1.99	0.95
03/13/11 11:20:31	16950	12.48	1.91	0.96
03/13/11 11:21:01	16980	12.46	1.89	0.96
03/13/11 11:21:31	17010	12.46	1.91	0.97
03/13/11 11:22:01	17040	12.45	1.94	0.96
03/13/11 11:22:31	17070	12.47	1.95	0.96
03/13/11 11:23:01	17100	12.45	1.96	0.87
03/13/11 11:23:31	17130	12.47	2.00	0.97
03/13/11 11:24:01	17160	12.47	2.00	0.92
03/13/11 11:24:31	17190	12.47	1.99	0.93
03/13/11 11:25:01	17220	12.47	2.02	0.92
03/13/11 11:25:31	17250	12.47	2.03	0.96
03/13/11 11:26:01	17280	12.47	1.95	0.99
03/13/11 11:26:31	17310	12.49	1.94	0.88
03/13/11 11:27:01	17340	12.49	1.93	0.93
03/13/11 11:27:31	17370	12.49	1.94	0.94
03/13/11 11:28:01	17400	12.48	1.93	1.01
03/13/11 11:28:31	17430	12.46	1.93	0.92
03/13/11 11:29:01	17460	12.45	1.98	0.98
03/13/11 11:29:31	17490	12.46	2.03	0.95
03/13/11 11:30:01	17520	12.47	2.02	0.91
03/13/11 11:30:31	17550	12.48	2.01	0.96
03/13/11 11:31:01	17580	12.49	1.98	0.96
03/13/11 11:31:31	17610	12.51	1.94	0.94
03/13/11 11:32:01	17640	12.49	1.92	0.94
03/13/11 11:32:31	17670	12.48	1.90	1.01
03/13/11 11:33:01	17700	12.49	1.92	0.93
03/13/11 11:33:31	17730	12.49	1.94	0.99
03/13/11 11:34:01	17760	12.47	1.94	0.92
03/13/11 11:34:31	17790	12.47	1.98	0.99
03/13/11 11:35:01	17820	12.49	2.00	0.97
03/13/11 11:35:31	17850	12.50	2.03	0.87
03/13/11 11:36:01	17880	12.48	2.17	0.92
03/13/11 11:36:31	17910	12.46	2.20	0.93
03/13/11 11:37:01	17940	12.46	2.25	0.96
03/13/11 11:37:31	17970	12.49	2.29	0.95
03/13/11 11:38:01	18000	12.51	2.20	0.97
03/13/11 11:38:31	18030	12.50	2.13	1.00
03/13/11 11:39:01	18060	12.51	2.12	0.92

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,860	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,770,510	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	345.2	megawatts
Stack Exhaust Flow (M19)	61,174,737	SCFH

Base W/Db Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 11:39:31	18090	12.49	2.12	0.92
03/13/11 11:40:01	18120	12.48	2.19	0.87
03/13/11 11:40:31	18150	12.49	2.21	0.92
03/13/11 11:41:01	18180	12.47	2.25	0.87
03/13/11 11:41:31	18210	12.47	2.27	0.90
03/13/11 11:42:01	18240	12.47	2.24	0.90
03/13/11 11:42:31	18270	12.42	2.22	0.93
03/13/11 11:43:01	18300	12.45	2.20	0.90
03/13/11 11:43:31	18330	12.52	2.17	0.92
03/13/11 11:44:01	18360	12.52	2.04	1.01
03/13/11 11:44:31	18390	12.50	1.95	1.01
03/13/11 11:45:01	18420	12.46	1.99	0.91
03/13/11 11:45:31	18450	12.45	2.10	0.94
03/13/11 11:46:01	18480	12.46	2.19	0.90
03/13/11 11:46:31	18510	12.48	2.24	0.92
03/13/11 11:47:01	18540	12.47	2.19	0.98
03/13/11 11:47:31	18570	12.47	2.16	0.95
03/13/11 11:48:01	18600	12.46	2.16	1.00
03/13/11 11:48:31	18630	12.49	2.15	0.96
03/13/11 11:49:01	18660	12.53	2.11	0.98
03/13/11 11:49:31	18690	12.52	1.98	1.01
03/13/11 11:50:01	18720	12.49	1.99	0.91
03/13/11 11:50:31	18750	12.48	2.09	0.93
03/13/11 11:51:01	18780	12.46	2.17	0.88
03/13/11 11:51:31	18810	12.46	2.26	0.83
03/13/11 11:52:01	18840	12.47	2.32	0.80
03/13/11 11:52:31	18870	12.50	2.31	0.88
03/13/11 11:53:01	18900	12.53	2.19	0.94
03/13/11 11:53:31	18930	12.53	2.00	0.96
03/13/11 11:54:01	18960	12.54	1.95	1.06
03/13/11 11:54:31	18990	12.54	2.11	0.88
03/13/11 11:55:01	19020	12.51	2.53	0.88
03/13/11 11:55:31	19050	12.53	2.68	0.91
03/13/11 11:56:01	19080	12.56	2.72	0.89
03/13/11 11:56:31	19110	12.57	2.63	0.86
03/13/11 11:57:01	19140	12.56	2.58	0.87
03/13/11 11:57:31	19170	12.57	2.57	0.91
03/13/11 11:58:01	19200	12.56	2.57	0.86
03/13/11 11:58:31	19230	12.56	2.55	0.88
03/13/11 11:59:01	19260	12.53	2.63	0.86
03/13/11 11:59:31	19290	12.54	2.72	0.79
03/13/11 12:00:01	19320	12.56	2.77	0.89
03/13/11 12:00:31	19350	12.56	2.71	0.91
03/13/11 12:01:01	19380	12.55	2.66	0.89
03/13/11 12:01:31	19410	12.55	2.67	0.86
03/13/11 12:02:01	19440	12.53	2.73	0.73
03/13/11 12:02:31	19470	12.56	2.70	0.85
03/13/11 12:03:01	19500	12.56	2.67	0.86
03/13/11 12:03:31	19530	12.53	2.64	0.97
03/13/11 12:04:01	19560	12.56	2.64	0.91
03/13/11 12:04:31	19590	12.55	2.57	0.88
03/13/11 12:05:01	19620	12.51	2.56	0.90
03/13/11 12:05:31	19650	12.50	2.68	0.84
03/13/11 12:06:01	19680	12.48	2.76	0.89
03/13/11 12:06:31	19710	12.52	2.77	0.82

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,860	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,770,510	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	345.2	megawatts
Stack Exhaust Flow (M19)	61,174,737	SCFH

Base W/Db Load, Run - 2

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 12:07:01	19740	12.59	2.62	0.89
03/13/11 12:07:31	19770	12.61	2.40	1.03
03/13/11 12:08:01	19800	12.57	2.36	1.02
03/13/11 12:08:31	19830	12.57	2.45	0.90
03/13/11 12:09:01	19860	12.56	2.57	0.92
03/13/11 12:09:31	19890	12.55	2.68	0.89
03/13/11 12:10:01	19920	12.55	2.76	0.80
03/13/11 12:10:31	19950	12.54	2.87	0.80
03/13/11 12:11:01	19980	12.52	2.96	0.85
03/13/11 12:11:31	20010	12.50	2.96	0.84
RAW AVERAGE		**12.50**	**2.22**	**0.93**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.09	-0.14	-0.11
	Final Zero	0.11	-0.10	-0.16
	Avg. Zero	0.10	-0.12	-0.14
	Initial UpScale	12.17	4.87	5.06
	Final UpScale	12.19	4.86	5.09
	Avg. UpScale	12.18	4.87	5.08
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.42	2.32	1.00
Concentration (ppm@ 15%O_2)	N/A	1.61	0.70
Emission Rate (lb/hr)	N/A	16.94	4.46
Emission Rate (lb/MMBtu)	N/A	0.006	0.002

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,753,885	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	336.8	megawatts
Stack Exhaust Flow (M19)	61,070,395	SCFH

Base W/Db Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 12:27:01	20940	12.52	2.86	0.81
03/13/11 12:27:31	20970	12.55	2.82	0.76
03/13/11 12:28:01	21000	12.57	2.77	0.83
03/13/11 12:28:31	21030	12.56	2.66	0.85
03/13/11 12:29:01	21060	12.56	2.62	0.85
03/13/11 12:29:31	21090	12.57	2.58	0.81
03/13/11 12:30:01	21120	12.57	2.60	0.82
03/13/11 12:30:31	21150	12.59	2.56	0.89
03/13/11 12:31:01	21180	12.58	2.49	0.89
03/13/11 12:31:31	21210	12.56	2.53	0.79
03/13/11 12:32:01	21240	12.54	2.64	0.75
03/13/11 12:32:31	21270	12.55	2.76	0.74
03/13/11 12:33:01	21300	12.55	2.80	0.84
03/13/11 12:33:31	21330	12.57	2.73	0.87
03/13/11 12:34:01	21360	12.58	2.59	0.84
03/13/11 12:34:31	21390	12.59	2.47	0.90
03/13/11 12:35:01	21420	12.58	2.47	0.80
03/13/11 12:35:31	21450	12.57	2.49	0.79
03/13/11 12:36:01	21480	12.55	2.56	0.76
03/13/11 12:36:31	21510	12.54	2.66	0.78
03/13/11 12:37:01	21540	12.52	2.78	0.72
03/13/11 12:37:31	21570	12.52	2.87	0.82
03/13/11 12:38:01	21600	12.55	2.81	0.83
03/13/11 12:38:31	21630	12.55	2.73	0.87
03/13/11 12:39:01	21660	12.61	2.58	0.82
03/13/11 12:39:31	21690	12.62	2.42	0.86
03/13/11 12:40:01	21720	12.60	2.37	0.90
03/13/11 12:40:31	21750	12.58	2.49	0.88
03/13/11 12:41:01	21780	12.57	2.60	0.86
03/13/11 12:41:31	21810	12.54	2.77	0.85
03/13/11 12:42:01	21840	12.53	2.84	0.83
03/13/11 12:42:31	21870	12.53	2.90	0.82
03/13/11 12:43:01	21900	12.55	2.99	0.78
03/13/11 12:43:31	21930	12.57	2.84	0.80
03/13/11 12:44:01	21960	12.56	2.69	0.83
03/13/11 12:44:31	21990	12.54	2.60	0.85
03/13/11 12:45:01	22020	12.54	2.64	0.80
03/13/11 12:45:31	22050	12.59	2.60	0.93
03/13/11 12:46:01	22080	12.60	2.48	0.97
03/13/11 12:46:31	22110	12.58	2.37	0.95
03/13/11 12:47:01	22140	12.57	2.46	0.89
03/13/11 12:47:31	22170	12.56	2.53	0.95
03/13/11 12:48:01	22200	12.54	2.67	0.84
03/13/11 12:48:31	22230	12.55	2.72	0.85
03/13/11 12:49:01	22260	12.54	2.78	0.79
03/13/11 12:49:31	22290	12.56	2.90	0.70
03/13/11 12:50:01	22320	12.60	2.87	0.78
03/13/11 12:50:31	22350	12.59	2.74	0.85
03/13/11 12:51:01	22380	12.55	2.66	0.91
03/13/11 12:51:31	22410	12.54	2.72	0.74
03/13/11 12:52:01	22440	12.52	2.86	0.80
03/13/11 12:52:31	22470	12.54	2.91	0.75
03/13/11 12:53:01	22500	12.55	2.88	0.80
03/13/11 12:53:31	22530	12.55	2.73	0.83
03/13/11 12:54:01	22560	12.60	2.64	0.82

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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,753,885	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	336.8	megawatts
Stack Exhaust Flow (M19)	61,070,395	SCFH

Base W/Db Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 12:54:31	22590	12.58	2.48	0.87
03/13/11 12:55:01	22620	12.53	2.44	0.87
03/13/11 12:55:31	22650	12.53	2.54	0.79
03/13/11 12:56:01	22680	12.53	2.62	0.90
03/13/11 12:56:31	22710	12.58	2.66	0.88
03/13/11 12:57:01	22740	12.62	2.63	0.90
03/13/11 12:57:31	22770	12.60	2.51	0.88
03/13/11 12:58:01	22800	12.59	2.60	0.92
03/13/11 12:58:31	22830	12.60	2.73	0.86
03/13/11 12:59:01	22860	12.58	2.83	0.81
03/13/11 12:59:31	22890	12.57	2.89	0.82
03/13/11 13:00:01	22920	12.56	2.97	0.87
03/13/11 13:00:31	22950	12.55	3.08	0.72
03/13/11 13:01:01	22980	12.58	3.07	0.68
03/13/11 13:01:31	23010	12.61	2.92	0.78
03/13/11 13:02:01	23040	12.60	2.72	0.79
03/13/11 13:02:31	23070	12.60	2.64	0.78
03/13/11 13:03:01	23100	12.56	2.62	0.84
03/13/11 13:03:31	23130	12.53	2.78	0.72
03/13/11 13:04:01	23160	12.54	2.92	0.73
03/13/11 13:04:31	23190	12.62	2.85	0.83
03/13/11 13:05:01	23220	12.64	2.64	0.92
03/13/11 13:05:31	23250	12.64	2.49	0.98
03/13/11 13:06:01	23280	12.61	2.46	0.91
03/13/11 13:06:31	23310	12.59	2.50	0.85
03/13/11 13:07:01	23340	12.54	2.64	0.77
03/13/11 13:07:31	23370	12.50	2.72	0.86
03/13/11 13:08:01	23400	12.49	2.43	0.88
03/13/11 13:08:31	23430	12.50	2.39	0.87
03/13/11 13:09:01	23460	12.51	2.33	0.84
03/13/11 13:09:31	23490	12.52	2.18	0.83
03/13/11 13:10:01	23520	12.52	2.10	0.96
03/13/11 13:10:31	23550	12.50	2.11	0.83
03/13/11 13:11:01	23580	12.46	2.13	0.90
03/13/11 13:11:31	23610	12.47	2.21	0.87
03/13/11 13:12:01	23640	12.51	2.21	0.88
03/13/11 13:12:31	23670	12.52	2.09	0.87
03/13/11 13:13:01	23700	12.46	1.95	0.96
03/13/11 13:13:31	23730	12.45	2.01	0.88
03/13/11 13:14:01	23760	12.45	2.09	0.85
03/13/11 13:14:31	23790	12.49	2.06	0.91
03/13/11 13:15:01	23820	12.51	2.00	0.91
03/13/11 13:15:31	23850	12.50	1.97	0.91
03/13/11 13:16:01	23880	12.52	1.95	0.94
03/13/11 13:16:31	23910	12.53	2.02	0.94
03/13/11 13:17:01	23940	12.50	2.07	0.89
03/13/11 13:17:31	23970	12.49	2.14	0.86
03/13/11 13:18:01	24000	12.49	2.17	0.86
03/13/11 13:18:31	24030	12.47	2.22	0.89
03/13/11 13:19:01	24060	12.43	2.25	0.83
03/13/11 13:19:31	24090	12.49	2.27	0.85
03/13/11 13:20:01	24120	12.54	2.15	0.94
03/13/11 13:20:31	24150	12.54	1.99	0.99
03/13/11 13:21:01	24180	12.51	1.93	0.92
03/13/11 13:21:31	24210	12.51	1.99	0.83

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Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,753,885	SCFH

Weather Data

Barometric Pressure	30.30	in. Hg
Relative Humidity	36	%
Ambient Temperature	74	°F
Specific Humidity	0.006321	lb H_2O / lb air

Unit Data

Unit Load	336.8	megawatts
Stack Exhaust Flow (M19)	61,070,395	SCFH

Base W/Db Load, Run - 3

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 13:22:01	24240	12.49	2.09	0.78
03/13/11 13:22:31	24270	12.47	2.20	0.88
03/13/11 13:23:01	24300	12.45	2.28	0.89
03/13/11 13:23:31	24330	12.44	2.36	0.89
03/13/11 13:24:01	24360	12.45	2.41	0.91
03/13/11 13:24:31	24390	12.50	2.33	0.93
03/13/11 13:25:01	24420	12.50	2.14	0.92
03/13/11 13:25:31	24450	12.50	2.03	0.92
03/13/11 13:26:01	24480	12.47	1.97	1.02
03/13/11 13:26:31	24510	12.47	1.97	0.96
RAW AVERAGE		**12.54**	**2.51**	**0.85**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	**(ppmvd)**	**(ppmvd)**
Bias	**Initial Zero**	0.11	-0.10	-0.16
	Final Zero	0.11	-0.14	-0.19
	Avg. Zero	0.11	-0.12	-0.18
	Initial UpScale	12.19	4.86	5.09
	Final UpScale	12.19	4.87	5.07
	Avg. UpScale	12.19	4.87	5.08
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.45	2.60	0.96
Concentration (ppm@ 15%O_2)	N/A	1.82	0.67
Emission Rate (lb/hr)	N/A	18.98	4.26
Emission Rate (lb/MMBtu)	N/A	0.007	0.002

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Mitsubishi, 501G, Unit 3C
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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,745,378	SCFH

Weather Data

Barometric Pressure	30.26	in. Hg
Relative Humidity	42	%
Ambient Temperature	76	°F
Specific Humidity	0.007915	lb H_2O / lb air

Unit Data

Unit Load	330.3	megawatts
Stack Exhaust Flow (M19)	60,374,788	SCFH

Base W/Db Load, Run - 4

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 13:39:01	25260	12.47	2.08	0.83
03/13/11 13:39:31	25290	12.47	2.09	0.84
03/13/11 13:40:01	25320	12.45	2.10	0.84
03/13/11 13:40:31	25350	12.44	2.14	0.85
03/13/11 13:41:01	25380	12.44	2.18	0.81
03/13/11 13:41:31	25410	12.51	2.17	0.88
03/13/11 13:42:01	25440	12.50	2.03	0.89
03/13/11 13:42:31	25470	12.46	1.95	0.91
03/13/11 13:43:01	25500	12.44	1.98	0.91
03/13/11 13:43:31	25530	12.45	2.06	0.86
03/13/11 13:44:01	25560	12.48	2.04	0.97
03/13/11 13:44:31	25590	12.51	1.96	0.91
03/13/11 13:45:01	25620	12.53	1.91	1.02
03/13/11 13:45:31	25650	12.51	1.93	0.99
03/13/11 13:46:01	25680	12.47	2.01	0.84
03/13/11 13:46:31	25710	12.47	2.19	0.80
03/13/11 13:47:01	25740	12.46	2.31	0.88
03/13/11 13:47:31	25770	12.44	2.36	0.92
03/13/11 13:48:01	25800	12.47	2.35	0.86
03/13/11 13:48:31	25830	12.49	2.31	0.82
03/13/11 13:49:01	25860	12.48	2.21	0.82
03/13/11 13:49:31	25890	12.48	2.19	0.84
03/13/11 13:50:01	25920	12.47	2.18	0.80
03/13/11 13:50:31	25950	12.48	2.20	0.87
03/13/11 13:51:01	25980	12.48	2.22	0.81
03/13/11 13:51:31	26010	12.47	2.22	0.79
03/13/11 13:52:01	26040	12.47	2.24	0.83
03/13/11 13:52:31	26070	12.46	2.25	0.90
03/13/11 13:53:01	26100	12.46	2.25	0.85
03/13/11 13:53:31	26130	12.44	2.26	0.78
03/13/11 13:54:01	26160	12.45	2.29	0.83
03/13/11 13:54:31	26190	12.47	2.08	0.83
03/13/11 13:55:01	26220	12.46	2.25	0.82
03/13/11 13:55:31	26250	12.45	2.26	0.85
03/13/11 13:56:01	26280	12.45	2.27	0.92
03/13/11 13:56:31	26310	12.44	2.27	0.75
03/13/11 13:57:01	26340	12.44	2.25	0.67
03/13/11 13:57:31	26370	12.44	2.25	0.75
03/13/11 13:58:01	26400	12.44	2.28	0.84
03/13/11 13:58:31	26430	12.47	2.29	0.87
03/13/11 13:59:01	26460	12.49	2.20	0.89
03/13/11 13:59:31	26490	12.48	2.10	0.90
RAW AVERAGE		**12.47**	**2.17**	**0.85**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.11	-0.14	-0.19
	Final Zero	0.08	-0.17	-0.12
	Avg. Zero	0.10	-0.16	-0.16
	Initial UpScale	12.19	4.87	5.07
	Final UpScale	12.18	4.88	5.07
	Avg. UpScale	12.19	4.88	5.07
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.38	2.28	0.95
Concentration (ppm@ 15%O_2)	N/A	1.58	0.66
Emission Rate (lb/hr)	N/A	16.44	4.17
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

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Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,745,424	SCFH

Weather Data

Barometric Pressure	30.26	in. Hg
Relative Humidity	42	%
Ambient Temperature	77	°F
Specific Humidity	0.008186	lb H_2O / lb air

Unit Data

Unit Load	329.6	megawatts
Stack Exhaust Flow (M19)	60,289,970	SCFH

Base W/Db Load, Run - 5

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 14:11:01	27180	12.42	2.07	0.90
03/13/11 14:11:31	27210	12.46	2.22	0.91
03/13/11 14:12:01	27240	12.45	2.23	0.87
03/13/11 14:12:31	27270	12.46	2.16	0.88
03/13/11 14:13:01	27300	12.47	2.13	0.87
03/13/11 14:13:31	27330	12.45	2.11	0.92
03/13/11 14:14:01	27360	12.44	2.13	0.81
03/13/11 14:14:31	27390	12.44	2.18	0.83
03/13/11 14:15:01	27420	12.44	2.15	0.81
03/13/11 14:15:31	27450	12.43	2.10	0.82
03/13/11 14:16:01	27480	12.39	2.05	0.82
03/13/11 14:16:31	27510	12.44	2.05	0.84
03/13/11 14:17:01	27540	12.45	2.00	0.88
03/13/11 14:17:31	27570	12.46	1.91	0.95
03/13/11 14:18:01	27600	12.46	1.88	0.90
03/13/11 14:18:31	27630	12.42	1.85	0.82
03/13/11 14:19:01	27660	12.40	1.92	0.84
03/13/11 14:19:31	27690	12.43	1.99	0.79
03/13/11 14:20:01	27720	12.44	1.97	0.83
03/13/11 14:20:31	27750	12.43	1.97	0.84
03/13/11 14:21:01	27780	12.44	1.94	0.90
03/13/11 14:21:31	27810	12.43	1.95	0.81
03/13/11 14:22:01	27840	12.42	1.99	0.84
03/13/11 14:22:31	27870	12.42	2.02	0.78
03/13/11 14:23:01	27900	12.44	2.01	0.82
03/13/11 14:23:31	27930	12.45	1.97	0.88
03/13/11 14:24:01	27960	12.45	1.96	0.88
03/13/11 14:24:31	27990	12.46	1.90	0.92
03/13/11 14:25:01	28020	12.42	1.89	0.87
03/13/11 14:25:31	28050	12.36	1.96	0.87
03/13/11 14:26:01	28080	12.39	2.08	0.83
03/13/11 14:26:31	28110	12.43	2.03	0.90
03/13/11 14:27:01	28140	12.45	1.91	0.90
03/13/11 14:27:31	28170	12.46	1.79	0.96
03/13/11 14:28:01	28200	12.44	1.75	0.84
03/13/11 14:28:31	28230	12.42	1.80	0.89
03/13/11 14:29:01	28260	12.37	1.86	0.89
03/13/11 14:29:31	28290	12.37	1.94	0.88
03/13/11 14:30:01	28320	12.43	1.99	0.91
03/13/11 14:30:31	28350	12.49	1.85	0.93
03/13/11 14:31:01	28380	12.48	1.71	1.07
03/13/11 14:31:31	28410	12.45	1.71	1.01
RAW AVERAGE		**12.43**	**1.98**	**0.87**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.08	-0.17	-0.12
	Final Zero	0.08	-0.17	-0.08
	Avg. Zero	0.08	-0.17	-0.10
	Initial UpScale	12.18	4.88	5.07
	Final UpScale	12.15	4.84	5.07
	Avg. UpScale	12.17	4.86	5.07
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.37	2.11	0.93
Concentration (ppm@ 15%O_2)	N/A	1.46	0.64
Emission Rate (lb/hr)	N/A	15.16	4.06
Emission Rate (lb/MMBtu)	N/A	0.005	0.001

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Mitsubishi, 501G, Unit 3C
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Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,745,493	SCFH

Weather Data

Barometric Pressure	30.23	in. Hg
Relative Humidity	43	%
Ambient Temperature	77	°F
Specific Humidity	0.008392	lb H_2O / lb air

Unit Data

Unit Load	329.0	megawatts
Stack Exhaust Flow (M19)	60,359,188	SCFH

Base W/Db Load, Run - 6

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 14:41:01	28980	12.40	1.98	0.83
03/13/11 14:41:31	29010	12.43	1.98	0.97
03/13/11 14:42:01	29040	12.44	1.96	0.94
03/13/11 14:42:31	29070	12.45	1.87	0.98
03/13/11 14:43:01	29100	12.46	1.86	0.95
03/13/11 14:43:31	29130	12.43	1.93	0.97
03/13/11 14:44:01	29160	12.43	2.04	0.87
03/13/11 14:44:31	29190	12.42	2.09	0.95
03/13/11 14:45:01	29220	12.41	2.17	0.78
03/13/11 14:45:31	29250	12.42	2.23	0.87
03/13/11 14:46:01	29280	12.43	2.24	0.89
03/13/11 14:46:31	29310	12.45	2.18	0.93
03/13/11 14:47:01	29340	12.44	2.08	0.94
03/13/11 14:47:31	29370	12.42	2.05	0.99
03/13/11 14:48:01	29400	12.42	2.09	0.92
03/13/11 14:48:31	29430	12.44	2.17	0.98
03/13/11 14:49:01	29460	12.44	2.20	0.83
03/13/11 14:49:31	29490	12.44	2.22	0.88
03/13/11 14:50:01	29520	12.43	2.21	0.80
03/13/11 14:50:31	29550	12.43	2.19	0.83
03/13/11 14:51:01	29580	12.41	2.25	0.91
03/13/11 14:51:31	29610	12.43	2.29	0.93
03/13/11 14:52:01	29640	12.44	2.21	0.88
03/13/11 14:52:31	29670	12.43	2.14	0.91
03/13/11 14:53:01	29700	12.43	2.16	0.86
03/13/11 14:53:31	29730	12.42	2.18	0.79
03/13/11 14:54:01	29760	12.42	2.19	0.76
03/13/11 14:54:31	29790	12.41	2.24	0.95
03/13/11 14:55:01	29820	12.40	2.26	0.90
03/13/11 14:55:31	29850	12.39	2.25	0.94
03/13/11 14:56:01	29880	12.42	2.25	0.93
03/13/11 14:56:31	29910	12.42	2.19	0.94
03/13/11 14:57:01	29940	12.40	2.09	0.99
03/13/11 14:57:31	29970	12.44	2.04	0.91
03/13/11 14:58:01	30000	12.45	2.04	0.99
03/13/11 14:58:31	30030	12.41	2.02	0.96
03/13/11 14:59:01	30060	12.41	2.11	0.94
03/13/11 14:59:31	30090	12.40	2.19	0.94
03/13/11 15:00:01	30120	12.40	2.28	0.89
03/13/11 15:00:31	30150	12.41	2.32	0.81
03/13/11 15:01:01	30180	12.43	2.31	0.86
03/13/11 15:01:31	30210	12.43	2.23	0.81
RAW AVERAGE		**12.42**	**2.14**	**0.90**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.08	-0.17	-0.08
	Final Zero	0.07	-0.17	-0.21
	Avg. Zero	0.08	-0.17	-0.15
	Initial UpScale	12.15	4.84	5.07
	Final UpScale	12.14	4.81	5.03
	Avg. UpScale	12.15	4.83	5.05
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.38	2.28	0.99
Concentration (ppm@ 15%O_2)	N/A	1.58	0.69
Emission Rate (lb/hr)	N/A	16.46	4.35
Emission Rate (lb/MMBtu)	N/A	0.006	0.002

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West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,745,836	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	43	%
Ambient Temperature	77	°F
Specific Humidity	0.008394	lb H_2O / lb air

Unit Data

Unit Load	329.5	megawatts
Stack Exhaust Flow (M19)	60,476,303	SCFH

Base W/Db Load, Run - 7

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 15:11:01	30780	12.43	2.14	0.92
03/13/11 15:11:31	30810	12.43	2.24	0.90
03/13/11 15:12:01	30840	12.42	2.28	0.95
03/13/11 15:12:31	30870	12.40	2.33	0.90
03/13/11 15:13:01	30900	12.40	2.40	0.76
03/13/11 15:13:31	30930	12.41	2.46	0.82
03/13/11 15:14:01	30960	12.43	2.41	0.77
03/13/11 15:14:31	30990	12.45	2.35	0.85
03/13/11 15:15:01	31020	12.45	2.24	0.89
03/13/11 15:15:31	31050	12.46	2.19	0.82
03/13/11 15:16:01	31080	12.45	2.17	0.78
03/13/11 15:16:31	31110	12.45	2.13	0.85
03/13/11 15:17:01	31140	12.43	2.17	0.79
03/13/11 15:17:31	31170	12.41	2.23	0.82
03/13/11 15:18:01	31200	12.42	2.29	0.81
03/13/11 15:18:31	31230	12.43	2.27	0.84
03/13/11 15:19:01	31260	12.44	2.23	0.79
03/13/11 15:19:31	31290	12.45	2.15	0.78
03/13/11 15:20:01	31320	12.44	2.11	0.91
03/13/11 15:20:31	31350	12.44	2.12	0.86
03/13/11 15:21:01	31380	12.43	2.13	0.93
03/13/11 15:21:31	31410	12.43	2.18	0.80
03/13/11 15:22:01	31440	12.44	2.17	0.85
03/13/11 15:22:31	31470	12.41	2.15	0.76
03/13/11 15:23:01	31500	12.39	2.14	0.86
03/13/11 15:23:31	31530	12.40	2.11	0.90
03/13/11 15:24:01	31560	12.43	2.02	0.83
03/13/11 15:24:31	31590	12.43	1.94	0.93
03/13/11 15:25:01	31620	12.47	1.89	0.88
03/13/11 15:25:31	31650	12.46	1.83	0.91
03/13/11 15:26:01	31680	12.43	1.86	0.93
03/13/11 15:26:31	31710	12.42	2.01	0.88
03/13/11 15:27:01	31740	12.40	2.16	0.77
03/13/11 15:27:31	31770	12.42	2.27	0.86
03/13/11 15:28:01	31800	12.42	2.29	0.88
03/13/11 15:28:31	31830	12.43	2.27	0.93
03/13/11 15:29:01	31860	12.43	2.24	0.87
03/13/11 15:29:31	31890	12.44	2.18	0.85
03/13/11 15:30:01	31920	12.45	2.14	0.87
03/13/11 15:30:31	31950	12.44	2.11	0.85
03/13/11 15:31:01	31980	12.43	2.12	0.87
03/13/11 15:31:31	32010	12.44	2.15	0.85
RAW AVERAGE		12.43	2.17	0.85

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.07	-0.17	-0.21
	Final Zero	0.06	-0.16	-0.08
	Avg. Zero	0.07	-0.17	-0.15
	Initial UpScale	12.14	4.81	5.03
	Final UpScale	12.13	4.84	5.03
	Avg. UpScale	12.14	4.83	5.03
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.40	2.31	0.95
Concentration (ppm@ 15%O_2)	N/A	1.60	0.66
Emission Rate (lb/hr)	N/A	16.68	4.17
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,842	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,745,950	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	44	%
Ambient Temperature	76	°F
Specific Humidity	0.008308	lb H_2O / lb air

Unit Data

Unit Load	329.3	megawatts
Stack Exhaust Flow (M19)	60,483,243	SCFH

Base W/Db Load, Run - 8

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 15:41:01	32580	12.41	2.19	0.89
03/13/11 15:41:31	32610	12.42	2.21	0.80
03/13/11 15:42:01	32640	12.44	2.17	0.91
03/13/11 15:42:31	32670	12.44	2.11	0.82
03/13/11 15:43:01	32700	12.44	2.11	0.92
03/13/11 15:43:31	32730	12.41	2.14	0.86
03/13/11 15:44:01	32760	12.42	2.21	0.87
03/13/11 15:44:31	32790	12.45	2.25	0.84
03/13/11 15:45:01	32820	12.44	2.21	0.89
03/13/11 15:45:31	32850	12.44	2.21	0.86
03/13/11 15:46:01	32880	12.44	2.25	0.87
03/13/11 15:46:31	32910	12.46	2.26	0.85
03/13/11 15:47:01	32940	12.46	2.24	0.85
03/13/11 15:47:31	32970	12.45	2.24	0.88
03/13/11 15:48:01	33000	12.46	2.27	0.91
03/13/11 15:48:31	33030	12.44	2.25	0.87
03/13/11 15:49:01	33060	12.42	2.28	0.86
03/13/11 15:49:31	33090	12.38	2.30	0.84
03/13/11 15:50:01	33120	12.41	2.34	0.82
03/13/11 15:50:31	33150	12.47	2.27	0.89
03/13/11 15:51:01	33180	12.50	2.08	0.93
03/13/11 15:51:31	33210	12.49	1.97	0.90
03/13/11 15:52:01	33240	12.47	1.96	0.91
03/13/11 15:52:31	33270	12.44	1.98	0.96
03/13/11 15:53:01	33300	12.45	2.04	0.85
03/13/11 15:53:31	33330	12.45	2.08	0.82
03/13/11 15:54:01	33360	12.43	2.14	0.90
03/13/11 15:54:31	33390	12.41	2.16	0.78
03/13/11 15:55:01	33420	12.41	2.24	0.79
03/13/11 15:55:31	33450	12.42	2.26	0.74
03/13/11 15:56:01	33480	12.44	2.18	0.79
03/13/11 15:56:31	33510	12.44	2.12	0.82
03/13/11 15:57:01	33540	12.41	2.02	0.92
03/13/11 15:57:31	33570	12.43	1.96	0.84
03/13/11 15:58:01	33600	12.44	1.95	0.91
03/13/11 15:58:31	33630	12.42	1.89	0.89
03/13/11 15:59:01	33660	12.46	1.87	0.89
03/13/11 15:59:31	33690	12.45	1.83	0.96
03/13/11 16:00:01	33720	12.46	1.85	0.84
03/13/11 16:00:31	33750	12.46	1.88	0.94
03/13/11 16:01:01	33780	12.46	1.92	0.82
03/13/11 16:01:31	33810	12.45	2.03	0.90
RAW AVERAGE		**12.44**	**2.12**	**0.87**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.06	-0.16	-0.08
Bias	Final Zero	0.07	-0.08	-0.10
Bias	Avg. Zero	0.07	-0.12	-0.09
Bias	Initial UpScale	12.13	4.84	5.03
Bias	Final UpScale	12.16	4.87	4.98
Bias	Avg. UpScale	12.15	4.86	5.01
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.40	2.22	0.92
Concentration (ppm@ 15%O_2)	N/A	1.54	0.64
Emission Rate (lb/hr)	N/A	16.02	4.06
Emission Rate (lb/MMBtu)	N/A	0.006	0.001

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,848	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,753,748	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	44	%
Ambient Temperature	75	°F
Specific Humidity	0.008032	lb H_2O / lb air

Unit Data

Unit Load	343.1	megawatts
Stack Exhaust Flow (M19)	60,167,116	SCFH

Base W/Db Load, Run - 9

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 16:59:01	37260	12.36	2.86	0.97
03/13/11 16:59:31	37290	12.37	2.75	0.94
03/13/11 17:00:01	37320	12.38	2.65	0.93
03/13/11 17:00:31	37350	12.37	2.58	0.95
03/13/11 17:01:01	37380	12.37	2.56	1.01
03/13/11 17:01:31	37410	12.37	2.56	0.92
03/13/11 17:02:01	37440	12.37	2.58	0.92
03/13/11 17:02:31	37470	12.35	2.62	0.81
03/13/11 17:03:01	37500	12.36	2.59	0.97
03/13/11 17:03:31	37530	12.37	2.53	0.88
03/13/11 17:04:01	37560	12.37	2.47	0.90
03/13/11 17:04:31	37590	12.36	2.43	0.90
03/13/11 17:05:01	37620	12.37	2.41	0.97
03/13/11 17:05:31	37650	12.35	2.39	0.92
03/13/11 17:06:01	37680	12.35	2.36	0.97
03/13/11 17:06:31	37710	12.36	2.31	0.93
03/13/11 17:07:01	37740	12.34	2.32	0.93
03/13/11 17:07:31	37770	12.35	2.33	0.90
03/13/11 17:08:01	37800	12.33	2.32	0.94
03/13/11 17:08:31	37830	12.35	2.24	0.98
03/13/11 17:09:01	37860	12.35	2.16	0.98
03/13/11 17:09:31	37890	12.36	2.11	0.96
03/13/11 17:10:01	37920	12.39	2.09	1.05
03/13/11 17:10:31	37950	12.37	2.08	1.08
03/13/11 17:11:01	37980	12.35	2.15	0.95
03/13/11 17:11:31	38010	12.34	2.27	0.98
03/13/11 17:12:01	38040	12.35	2.37	0.94
03/13/11 17:12:31	38070	12.37	2.40	0.93
03/13/11 17:13:01	38100	12.36	2.39	0.93
03/13/11 17:13:31	38130	12.36	2.31	0.98
03/13/11 17:14:01	38160	12.35	2.26	1.01
03/13/11 17:14:31	38190	12.34	2.27	0.94
03/13/11 17:15:01	38220	12.35	2.31	0.92
03/13/11 17:15:31	38250	12.35	2.30	1.04
03/13/11 17:16:01	38280	12.35	2.32	0.98
03/13/11 17:16:31	38310	12.35	2.33	0.98
03/13/11 17:17:01	38340	12.34	2.35	0.95
03/13/11 17:17:31	38370	12.34	2.36	0.96
03/13/11 17:18:01	38400	12.33	2.41	0.95
03/13/11 17:18:31	38430	12.34	2.40	0.86
03/13/11 17:19:01	38460	12.36	2.39	0.96
03/13/11 17:19:31	38490	12.36	2.34	0.98
RAW AVERAGE		**12.36**	**2.39**	**0.95**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	**Initial Zero**	0.07	-0.08	-0.10
	Final Zero	0.00	-0.16	-0.12
	Avg. Zero	0.04	-0.12	-0.11
	Initial UpScale	12.16	4.87	4.98
	Final UpScale	12.10	4.82	5.07
	Avg. UpScale	12.13	4.85	5.03
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.33	2.49	1.02
Concentration (ppm@ 15%O_2)	N/A	1.71	0.70
Emission Rate (lb/hr)	N/A	17.88	4.44
Emission Rate (lb/MMBtu)	N/A	0.006	0.002

Florida Power and Light
March 13, 2011
Mitsubishi, 501G, Unit 3C
West County Energy Center

Fuel Data

Fuel Fd factor	8,710	SCF exh/MMBtu
Fuel Heating Value (HHV)	1,029	Btu/SCF fuel
Turbine Fuel Flow	1,854	lb/min
Duct Burner Fuel Flow	159	lb/min
Total Fuel Flow	2,762,072	SCFH

Weather Data

Barometric Pressure	30.22	in. Hg
Relative Humidity	43	%
Ambient Temperature	74	°F
Specific Humidity	0.007586	lb H_2O / lb air

Unit Data

Unit Load	346.2	megawatts
Stack Exhaust Flow (M19)	60,627,137	SCFH

Base W/Db Load, Run - 10

Date/Time (mm/dd/yy hh:mm:ss)	Elapsed Time (seconds)	O_2 (%)	NOx (ppmvd)	CO (ppmvd)
03/13/11 17:29:01	39060	12.34	2.36	1.02
03/13/11 17:29:31	39090	12.34	2.36	0.94
03/13/11 17:30:01	39120	12.34	2.36	0.98
03/13/11 17:30:31	39150	12.35	2.36	1.02
03/13/11 17:31:01	39180	12.35	2.36	0.97
03/13/11 17:31:31	39210	12.34	2.35	0.93
03/13/11 17:32:01	39240	12.34	2.38	0.97
03/13/11 17:32:31	39270	12.33	2.43	0.94
03/13/11 17:33:01	39300	12.32	2.46	1.00
03/13/11 17:33:31	39330	12.32	2.48	1.00
03/13/11 17:34:01	39360	12.33	2.50	1.00
03/13/11 17:34:31	39390	12.33	2.46	0.96
03/13/11 17:35:01	39420	12.33	2.41	1.01
03/13/11 17:35:31	39450	12.35	2.39	0.99
03/13/11 17:36:01	39480	12.35	2.33	1.01
03/13/11 17:36:31	39510	12.35	2.34	1.02
03/13/11 17:37:01	39540	12.34	2.37	0.98
03/13/11 17:37:31	39570	12.34	2.38	0.98
03/13/11 17:38:01	39600	12.33	2.38	0.91
03/13/11 17:38:31	39630	12.33	2.40	0.95
03/13/11 17:39:01	39660	12.33	2.40	1.10
03/13/11 17:39:31	39690	12.32	2.40	0.97
03/13/11 17:40:01	39720	12.33	2.37	1.04
03/13/11 17:40:31	39750	12.34	2.36	0.91
03/13/11 17:41:01	39780	12.32	2.35	1.01
03/13/11 17:41:31	39810	12.33	2.37	0.96
03/13/11 17:42:01	39840	12.33	2.39	1.02
03/13/11 17:42:31	39870	12.33	2.37	1.00
03/13/11 17:43:01	39900	12.34	2.39	0.98
03/13/11 17:43:31	39930	12.33	2.38	1.03
03/13/11 17:44:01	39960	12.33	2.39	0.95
03/13/11 17:44:31	39990	12.32	2.40	1.04
03/13/11 17:45:01	40020	12.31	2.43	0.96
03/13/11 17:45:31	40050	12.33	2.44	0.98
03/13/11 17:46:01	40080	12.31	2.44	0.91
03/13/11 17:46:31	40110	12.33	2.45	1.01
03/13/11 17:47:01	40140	12.34	2.41	0.98
03/13/11 17:47:31	40170	12.32	2.39	0.93
03/13/11 17:48:01	40200	12.31	2.41	0.92
03/13/11 17:48:31	40230	12.30	2.42	0.99
03/13/11 17:49:01	40260	12.32	2.40	0.96
03/13/11 17:49:31	40290	12.34	2.39	0.93
RAW AVERAGE		**12.33**	**2.40**	**0.98**

		O_2	NOx	CO
	Serial Number:	INST-N2-0001	INST-N2-0001	INST-CO-0015
		(%)	(ppmvd)	(ppmvd)
Bias	Initial Zero	0.00	-0.16	-0.12
Bias	Final Zero	-0.04	-0.12	-0.03
Bias	Avg. Zero	-0.02	-0.14	-0.08
Bias	Initial UpScale	12.10	4.82	5.07
Bias	Final UpScale	12.03	4.84	5.03
Bias	Avg. UpScale	12.07	4.83	5.05
Upscale Cal Gas		12.10	4.93	4.92

EMISSIONS DATA	O_2	NOx	CO
Corrected Raw Average (ppm/% dry basis)	12.37	2.52	1.01
Concentration (ppm@ 15%O_2)	N/A	1.74	0.70
Emission Rate (lb/hr)	N/A	18.21	4.46
Emission Rate (lb/MMBtu)	N/A	0.006	0.002

APPENDIX C

CALIBRATION GAS CERTIFICATIONS

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: ALAS-55510

AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-86523-002

1290 COMBERMERE STREET

TROY, MI 48083

Customer

AIR LIQUIDE AMERICA L.P.

AIR HYGIENE

1319 NORTH PEORIA AVE

TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM019345 **Certification Date:** 05Apr2010 **Exp. Date:** 04Apr2013

Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	8.91 %	+/- 1%	Direct NIST and VSL
OXYGEN	12.1 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.

** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	01Apr2010	NDIR
CAI/110P/V03018	17Mar2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis — Second Triad Analysis — Calibration Curve

CARBON DIOXIDE

Date: 09Apr2010	Response Unit:MV	
Z1=0.00000	R1=100.0000	T1=56.20000
R2=100.0000	Z2=0.00000	T2=56.16000
Z3=0.00000	T3=56.24000	R3=100.1500
Avg. Concentration:	8.916 %	

Concentration=A+Bx+Cx2+Dx3+Ex4

r=0.999989193

Constants:	A=-0.00227705
B=0.142642211	C=-0.0004667
D=0.0000133988	E=0

OXYGEN

Date: 09Apr2010	Response Unit:%	
Z1=0.00000	R1=23.20000	T1=12.11000
R2=23.20000	Z2=0.00000	T2=12.10000
Z3=0.00000	T3=12.09000	R3=23.19000
Avg. Concentration:	12.08 %	

Concentration=A+Bx+Cx2+Dx3+Ex4

r=0.9999996862

Constants:	A=-0.0380151
B=1.001181065	C=0
D=0	E=0

APPROVED BY: aDru

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

P.O. No.: ALAS-56936
AIR LIQUIDE AMERICA SPECIALTY GASES LLC Project No.: 05-88735-006
1290 COMBERMERE STREET
TROY, MI 48083

Customer

AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM004185 **Certification Date:** 21Jun2010 **Exp. Date:** 20Jun2013
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ANALYTICAL ACCURACY**	TRACEABILITY
CARBON DIOXIDE	19.1	%	+/- 1%	Direct NIST and VSL
OXYGEN	21.1	%	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** *Do not use when cylinder pressure is below 150 psig.*
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2300	01Nov2010	1D002807	23.04 %	CARBON DIOXIDE
NTRM 2350	01Dec2011	K016398	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
PIR/2000/609015	07Jun2010	NDIR
CAI/110P/V03018	11Jun2010	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis — Second Triad Analysis — Calibration Curve

CARBON DIOXIDE

First Triad Analysis			Calibration Curve	
Date: 21Jun2010	Response Unit:MV		Concentration=A+Bx+Cx2+Dx3+Ex4	
Z1=0.00000	R1=100.0000	T1=90.42000	r=0.999986	
R2=100.0000	Z2=0.00000	T2=90.50000	Constants:	A=-0.00585731
Z3=0.00000	T3=90.50000	R3=100.0000	B=0.131065552	C=-0.0001375
Avg. Concentration:	19.07	%	D=1.12705E-05	E=0

OXYGEN

First Triad Analysis			Calibration Curve	
Date: 21Jun2010	Response Unit:%		Concentration=A+Bx+Cx2+Dx3+Ex4	
Z1=0.00000	R1=23.20000	T1=21.15000	r=0.999999	
R2=23.20000	Z2=0.00000	T2=21.15000	Constants:	A=-0.00484606
Z3=0.00000	T3=21.15000	R3=23.20000	B=0.999830474	C=0
Avg. Concentration:	21.14	%	D=0	E=0

Special Notes: PART# AH095

APPROVED BY: ____________________
JEFF CROTEAU

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: 11010210
Document # : 40522095-002

Customer

AIR HYGIENE INTERNATIONAL

MIKE SCOTT
5634 S 122ND E AVE
TULSA OK 74146
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL191 **Certification Date:** 15Feb2011 **Exp. Date:** 16Aug2011
Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	4.89	PPM	+/- 1%	Direct NIST and VSL
CARBON MONOXIDE	4.92	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	4.93	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION		COMPONENT
NTRM 2629	15Aug2013	KAL003004	19.83	PPM	NITRIC OXIDE
NTRM 2635	05May2016	KAL003163	25.21	PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
ECO PHYSICS/CLD 84M/84M0359	07Feb2011	CHEMI
SIEMENS I/ULTRAMAT 6E/N1-VN-0545	25Jan2011	NDIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

NITRIC OXIDE

First Triad Analysis:

Date: 08Feb2011	Response Unit: MV	
Z1=0.00000	R1=19.83000	T1=4.85900
R2=19.84000	Z2=0.00000	T2=4.86000
Z3=0.00000	T3=4.85700	R3=19.84000
Avg. Concentration:	4.889	PPM

Second Triad Analysis:

Date: 15Feb2011	Response Unit: MV	
Z1=0.00000	R1=19.72000	T1=4.83700
R2=19.73000	Z2=0.00000	T2=4.83400
Z3=0.00000	T3=4.83100	R3=19.73000
Avg. Concentration:	4.891	PPM

Calibration Curve:

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.9999

Constants:	A=0.036017895
B=0.999152579	C=0
D=0	E=0

CARBON MONOXIDE

First Triad Analysis:

Date: 08Feb2011	Response Unit: MV	
Z1=0.00000	R1=25.40000	T1=4.60000
R2=25.40000	Z2=0.00000	T2=4.60000
Z3=0.00000	T3=4.60000	R3=25.40000
Avg. Concentration:	4.898	PPM

Second Triad Analysis:

Date: 15Feb2011	Response Unit: MV	
Z1=0.00000	R1=25.21000	T1=4.61000
R2=25.21000	Z2=0.00000	T2=4.61000
Z3=0.00000	T3=4.61000	R3=25.21000
Avg. Concentration:	4.944	PPM

Calibration Curve:

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.9999

Constants:	A=0.02020944
B=1.096985091	C=-0.0077427
D=0.000148781	E=0

Special Notes: AH070

APPROVED BY: HILARY THATCHER

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALASG-55510
Project No.: 05-86916-005

Customer
AIR LIQUIDE AMERICA L.P.

AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

P

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: AAL13310 **Certification Date:** 22Apr2010 **Exp. Date:** 21Apr2012
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	12.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	12.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
	02Oct2010	KAL003166	25.21 PPM	CARBON MONOXIDE
NTRM 2629	01Jun2010	KAL004325	20.36 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//0928621	02Apr2010	FTIR
ECO PHYSICS/CLD 84M/84M0359	19Apr2010	CHEMI

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis	Second Triad Analysis	Calibration Curve
CARBON MONOXIDE		
Date: 14Apr2010 Response Unit:PPM	Date: 21Apr2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.05307 R1=25.30663 T1=12.10338	Z1=-0.06291 R1=25.26965 T1=12.17129	r=9.99986E-1
R2=25.31267 Z2=-0.05306 T2=12.12388	R2=25.30621 Z2=-0.02751 T2=12.19590	Constants: A=0.00000E+0
Z3=-0.03830 T3=12.14423 R3=25.34334	Z3=0.02191 T3=12.19939 R3=25.34779	B=8.81389E-1 C=5.84000E-4
Avg. Concentration: 12.09 PPM	Avg. Concentration: 12.15 PPM	D=1.00000E-6 E=0.00000E+0
NITRIC OXIDE		
Date: 14Apr2010 Response Unit:MV	Date: 21Apr2010 Response Unit: MV	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00000 R1=20.33000 T1=12.05000	Z1=0.00000 R1=20.29000 T1=11.96000	r=0.999989
R2=20.35000 Z2=0.00000 T2=12.05000	R2=20.28000 Z2=0.00000 T2=11.96000	Constants: A=0.052499
Z3=0.00000 T3=12.05000 R3=20.34000	Z3=0.00000 T3=11.96000 R3=20.29000	B=0.998591 C=0.000000
Avg. Concentration: 12.11 PPM	Avg. Concentration: 12.04 PPM	D=0.000000 E=0.000000

Special Notes: AH072 Lot Number: 0586916005

APPROVED BY: ______________
Rob. McCrandall

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

COMPLIANCE CLASS

Dual-Analyzed Calibration Standard

1290 COMBERMERE STREET, TROY, MI 48083 Phone: 248-589-2950 Fax: 248-589-2134

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
1290 COMBERMERE STREET
TROY, MI 48083

P.O. No.: ALAS-59094
Project No.: 05-91737-001

Customer
AIR LIQUIDE AMERICA L.P.
AIR HYGIENE
1319 NORTH PEORIA AVE
TULSA OK 74106

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM041691 **Certification Date:** 28Sep2010 **Exp. Date:** 29Mar2011
Cylinder Pressure*:** 1950 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITROGEN DIOXIDE	48.2	PPM	+/- 2%	NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2654	02Oct2012	AAL069467	487.0 PPM	NITROGEN DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
AMETEK 921/921 CE NO2/AW-921-S281	17Sep2010	UV

Special Notes: PART# AH032 RANGE: 45-50 PPM
LOT # 0591737001

APPROVED BY: HILARY THATCHER

APPENDIX D

QUALITY ASSURANCE AND QUALITY CONTROL DATA

QA/QC PROGRAM

Air Hygiene ensures the quality and validity of its emission measurement and reporting procedures through a rigorous quality assurance (QA) program. The program is developed and administered by an internal QA team and encompasses five major areas:

1. QA reviews of reports, laboratory work, and field testing
2. Equipment calibration and maintenance
3. Chain-of-custody
4. Training
5. Knowledge of current test methods

Each of these areas is discussed individually below.

QA Reviews

Air Hygiene's review procedure includes review of each source test report, along with laboratory and fieldwork, by the QA Team. The most important review is the one that takes place before a test program begins. The QA Team works closely with technical division personnel to prepare and review test protocols. Test protocol review includes selection of appropriate test procedures, evaluation of interferences or other restrictions that might preclude use of standard test procedures, and evaluation and/or development of alternate procedures.

Equipment Calibration and Maintenance

The equipment used to conduct the emission measurements is maintained according to the manufacturer's instructions to ensure proper operation. In addition to the maintenance program, calibrations are carried out on each measurement device according to the schedule outlined by the Environmental Protection Agency. Quality control checks are also conducted in the field for each test program.

Chain-of-Custody

Air Hygiene maintains full chain-of-custody documentation on all samples and data sheets. In addition to normal documentation of changes between field sample custodians, laboratory personnel, and field test personnel, Air Hygiene documents every individual who handles any test component in the field (e.g., probe wash, impinger loading and recovery, filter loading and recovery, etc.). Samples are stored in a locked area to which only Air Hygiene personnel have access. Field data sheets are secured at Air Hygiene's offices upon return from the field.

Training

Personnel's training is essential to ensure quality testing. Air Hygiene has formal and informal training programs, which include:

1. Attendance at EPA-sponsored training courses
2. Enrollment in EPA correspondence courses
3 A requirement for all technicians to read and understand Air Hygiene's QA manual
4. In-house training and QA meetings on a regular basis
5. Maintenance of training records

Knowledge of Current Test Methods

With the constant updating of standard test methods and the wide variety of emerging test procedures, it is essential that any qualified source tester keep abreast of new developments. Air Hygiene subscribes to services, which provide updates on EPA reference methods, rules, and regulations. Additionally, source test personnel regularly attend and present papers at testing and emission-related seminars and conferences. Air Hygiene personnel maintain membership in the Air and Waste Management Association and the American Industrial Hygiene Association.

COMBUSTION TESTING QUALITY ASSURANCE ACTIVITIES

A number of quality assurance activities were undertaken before, during, and after this testing project. This section of the report combined with the documentation in Appendix C describes each of those activities.

Each instrument's response was checked and adjusted in the field prior to the collection of data via multi-point calibration. The instrument's linearity was checked by adjusting its zero and span responses to zero nitrogen and an upscale calibration gas in the range of the expected concentrations. The instrument response was then challenged with other calibration gases of known concentration and accepted as being linear if the response of the other calibration gases agreed within plus or minus two percent of the range of predicted values. NO_2 to NO conversion was checked via direct connect with an EPA Protocol certified concentration of NO_2 in a balance of nitrogen. Conversion was verified to be between 90 and 110 percent.

After each test run, the analyzers were checked for zero and span drift. This allowed each test run to be bracketed by calibrations and documents the precision of the data just collected. The criterion for acceptable data is that the instrument drift is no more than three percent of the full-scale response. The quality assurance worksheets in the following pages summarize all multipoint calibration checks and zero to span checks performed during the tests. These worksheets (as prepared from the data records of Appendix A) show that no drifts in excess of three percent occurred in the zero to span checks following each test run.

The sampling systems were leak checked by demonstrating that a vacuum greater than 10 in Hg could be held for at least one minute with a decline of less than one inch of Hg. A leak test was conducted after the sample system was set up and before the system was dismantled. This test was conducted to ensure that ambient air had not diluted the sample. Any leakage detected prior to the tests would be repaired and another leak check conducted before testing commenced. No leaks were found during the pre or post-test leak checks.

The absence of leaks in the sampling system was also verified by a sampling system bias check. The sampling system's integrity was tested by comparing the responses of the analyzers to the calibration gases introduced via two paths. The first path was directly into the analyzer and the second path via the sample system at the sample probe. Any difference in the instrument responses by these two methods was attributed to sampling system bias or leakage. The criterion for acceptance is agreement within five percent of the span of the analyzer.

The control gases used to calibrate the instruments were analyzed and certified by the compressed gas vendors to plus or minus one percent accuracy for all gases. EPA Protocol No. 1 was used, where applicable to assign the concentration values traceable to the National Institute of Standards and Technology (NIST), Standard Reference Materials (SRM's). The gas calibration sheets as prepared by the vendor are contained in Appendix C.

Air Hygiene collected and reported the enclosed test data in accordance with the procedures and quality assurance activities described in this test report. Air Hygiene makes no warranty as to the suitability of the test methods. Air Hygiene also assumes no liability relating to the interpretation and use of the test data.

INSTRUMENTAL ANALYSIS
QUALITY ASSURANCE DATA

Date: March 12-13, 2011
Company: Florida Power and Light
Location: Loxahatchee, Florida
Techs: JRF

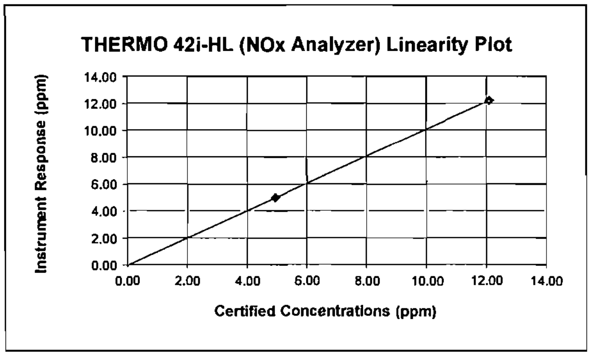
Sample System Leak Check

Date	Sample System	Leak Rate (l/min)
March 12-13, 2011	1	0

Calibration Date: March 13, 2011
Client: Florida Power and Light

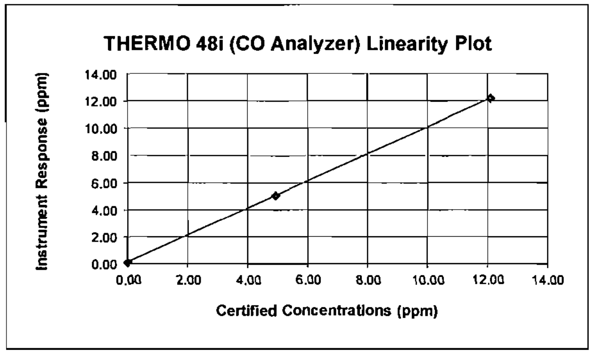
NOx Span (ppm) = 12.10

THERMO 42i-HL (NOx Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	-0.05	-0.41	0.05	YES (%)
4.93	4.99	0.50	0.06	YES (%)
12.10	12.22	0.99	0.12	YES (%)
Linearity = 0.987				



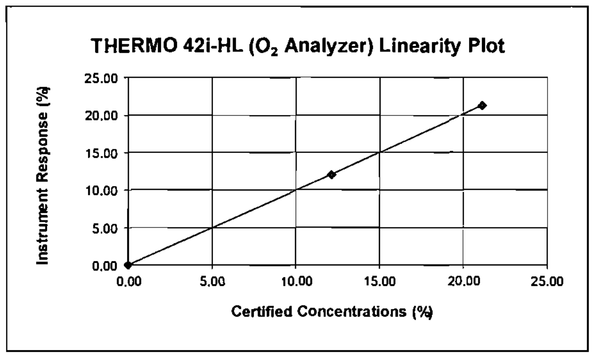
CO Span (ppm) = 12.10

THERMO 48i (CO Analyzer)				
Certified Concentration (ppm)	Instrument Response (ppm)	Calibration Error (%)	Absolute Conc. (ppm)	Pass or Fail (±2%, ≤0.5ppm)
0.00	0.16	1.32	0.16	YES (%)
4.92	5.08	1.32	0.16	YES (%)
12.10	12.20	0.83	0.10	YES (%)
Linearity = 1.005				



O_2 Span (%) = 21.10

THERMO 42I-HL (O_2 Analyzer)				
Certified Concentration (%)	Instrument Response (%)	Calibration Error (%)	Absolute Conc. (%)	Pass or Fail (±2%, ≤0.5%)
0.00	0.10	0.47	0.10	YES (%)
12.10	12.04	-0.28	0.06	YES (%)
21.10	21.26	0.76	0.16	YES (%)
Linearity = 0.998				



NOx Converter Efficiency

Date: March 13, 2011

Analyzer: INST-N2-0001

RM 7E, (12-17-09), Sections 7.1.4; 8.2.4.1; 12.7; and 13.5 Introduce NO_2 to the analyzer and record the NOx concentration displayed. ... Calculate the converter efficiency using Equation 7E-7. The specification for converter efficiency must be met. ... Air Hygiene also references ALT-0013 for specific NO_2 concentration (40-60 ppm) and EPA Traceability Protocol requirements (±2%).

Audit Gas:	NO_2 Concentration (C_v), ppmvd	**48.20**
Converter Efficiency Calculations:		
	Analyzer Reading, NO Channel, ppmvd	**1.83**
	Analyzer Reading, NOx Channel, ppmvd	**48.48**
	Analyzer Reading, NO_2 Channel ($C_{Dir(NO2)}$), ppmvd	**46.65**
	Converter Efficiency, %	**96.78**

RM 7E, (08-15-06), 13.5 NO2 to NO Conversion Efficiency Test (as applicable). The NO2 to NO conversion efficiency, calculated according to Equation 7E-7 or Equation 7E-9, must be greater than or equal to 90 percent.

$$Eff_{NO2} = \left(\frac{C_{Dir}}{C_V}\right) \times 100 \quad \text{Eq. 7E-7} = \frac{46.65 \text{ ppmvd}}{48.20 \text{ ppmvd}} \times 100 = 96.78\%$$

Date/Time	Elapsed Time	NOx	NO
mm/dd/yy hh:mm:ss	Seconds	ppmvd	ppmvd
03/13/11 06:58:01	1200	36.93	2.46
03/13/11 06:58:31	1230	45.61	2.01
03/13/11 06:59:01	1260	47.04	1.95
03/13/11 06:59:31	1290	47.70	1.91
03/13/11 07:00:01	1320	48.14	1.86
03/13/11 07:00:31	***1350***	***48.48***	***1.83***
03/13/11 07:01:01	1380	48.70	1.81
03/13/11 07:01:31	1410	37.23	1.72

DRIFT AND BIAS CHECK			
Strat Test Pre and Post QA/QC Check	**O2**	**CO**	**NOx**
Initial Zero	0.01	0.08	-0.10
Final Zero	0.15	0.07	-0.25
Avg. Zero	0.08	0.08	-0.18
Initial UpScale	12.11	4.84	4.99
Final UpScale	12.28	4.79	4.87
Avg. UpScale	12.20	4.82	4.93
Sys Resp (Zero)	0.05	0.04	0.05
Sys Resp (Upscale)	12.29	5.01	5.03
Upscale Cal Gas	12.10	4.92	4.93
Initial Zero Bias	-0.19%	0.33%	-1.24%
Final Zero Bias	0.47%	0.25%	-2.48%
Zero Drift	0.66%	0.08%	1.24%
Initial Upscale Bias	-0.85%	-1.40%	-0.33%
Final Upscale Bias	-0.05%	-1.82%	-1.32%
Upscale Drift	0.81%	0.41%	0.99%
Alternative Specification Abs Diff **Initial Zero**	0.04	0.04	0.15
Final Zero	0.10	0.03	0.30
Initial Upscale	0.18	0.17	0.04
Final Upscale	0.01	0.22	0.16
Calibration Span	21.10	12.10	12.10
3% of Range (drift)	0.63	0.36	0.36
5% of Range (bias)	1.06	0.61	0.61

Respone Time (min)	0.7	1.3	1.3
Sys. Response (min)		1.3	

Date/Time mm/dd/yy hh:mm:ss	z	O2 %	s	z	CO ppm	s	z	NOx ppm	s	**INJECTIONS**
03/12/11 09:10:07		13.05			0.57			3.17		x
03/12/11 09:10:17		13.04			0.55			3.16		
03/12/11 09:10:27		**11.98**			0.60			3.18		
03/12/11 09:10:37		8.13			0.58			3.17		
03/12/11 09:10:47		**11.91**	x		0.45			3.12		
03/12/11 09:10:57		**12.07**		x	**0.16**			2.84		
03/12/11 09:11:07		**12.09**			**0.07**			1.35		
03/12/11 09:11:17		**12.10**			**0.01**		x	**0.05**		
03/12/11 09:11:27		**12.11**			**0.01**			**-0.11**		
03/12/11 09:11:37		**12.09**			**-0.03**			**-0.23**		
03/12/11 09:11:47		**12.10**			**0.02**			**-0.25**		
03/12/11 09:11:57		**12.10**			**-0.01**			**-0.26**		
03/12/11 09:12:07		**12.11**			**-0.02**			**-0.26**		
03/12/11 09:12:17		**12.08**			**-0.09**			**-0.25**		
03/12/11 09:12:27		**12.10**			**-0.01**			**-0.28**		
03/12/11 09:12:37		**12.10**			**0.16**			**-0.27**		
03/12/11 09:12:47		**12.11**			**0.07**			**-0.27**		
03/12/11 09:12:57		**12.09**			**0.08**			**-0.27**		x
03/12/11 09:13:07		**12.10**			**0.05**			**-0.26**		
03/12/11 09:13:17		**11.63**			**0.07**			**-0.29**		
03/12/11 09:13:27		2.16			**0.24**			**-0.29**		
03/12/11 09:13:37	x	**0.07**			1.19			**0.10**		
03/12/11 09:13:47		**0.01**			2.61			2.12		
03/12/11 09:13:57		**-0.02**			3.79			3.76		
03/12/11 09:14:07		**-0.02**			4.46			4.30		
03/12/11 09:14:17		**-0.03**			**4.69**	x		**4.83**	x	
03/12/11 09:14:27		**-0.03**			**4.79**			**4.86**		
03/12/11 09:14:37		**-0.03**			**4.80**			**4.89**		
03/12/11 09:14:47		**-0.03**			**4.80**			**4.90**		
03/12/11 09:14:57		**-0.05**			**4.83**			**4.92**		
03/12/11 09:15:07		**-0.04**			**4.74**			**4.92**		

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 1	O_2	NOx	CO
Raw Average	12.45	2.22	1.09
Corrected Average	12.41	2.26	1.09
Initial Zero	0.00	-0.01	0.03
Final Zero	0.09	-0.14	-0.11
Avg. Zero	0.05	-0.08	-0.04
Initial UpScale	12.11	4.99	5.07
Final UpScale	12.17	4.87	5.06
Avg. UpScale	12.14	4.93	5.07
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.47%	0.33%	-1.07%
Final Zero Bias	-0.05%	-0.74%	-2.23%
Zero Drift	0.43%	1.07%	1.16%
Initial Upscale Bias	0.33%	0.00%	-0.08%
Final Upscale Bias	0.62%	-0.99%	-0.17%
Upscale Drift	0.28%	0.99%	0.08%
Alternative Specification Abs Diff: Initial Zero	0.10	0.04	0.13
Alternative Specification Abs Diff: Final Zero	0.01	0.09	0.27
Alternative Specification Abs Diff: Initial Upscale	0.07	0.00	0.01
Alternative Specification Abs Diff: Final Upscale	0.13	0.12	0.02
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 2	O_2	NOx	CO
Raw Average	12.50	2.22	0.93
Corrected Average	12.42	2.32	1.00
Initial Zero	0.09	-0.14	-0.11
Final Zero	0.11	-0.10	-0.16
Avg. Zero	0.10	-0.12	-0.14
Initial UpScale	12.17	4.87	5.06
Final UpScale	12.19	4.86	5.09
Avg. UpScale	12.18	4.87	5.08
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.05%	-0.74%	-2.23%
Final Zero Bias	0.05%	-0.41%	-2.64%
Zero Drift	0.09%	0.33%	0.41%
Initial Upscale Bias	0.62%	-0.99%	-0.17%
Final Upscale Bias	0.71%	-1.07%	0.08%
Upscale Drift	0.09%	0.08%	0.25%
Alternative Specification Abs Diff: Initial Zero	0.01	0.09	0.27
Alternative Specification Abs Diff: Final Zero	0.01	0.05	0.32
Alternative Specification Abs Diff: Initial Upscale	0.13	0.12	0.02
Alternative Specification Abs Diff: Final Upscale	0.15	0.13	0.01
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 3	O_2	NOx	CO
Raw Average	12.54	2.51	0.85
Corrected Average	12.45	2.60	0.96
Initial Zero	0.11	-0.10	-0.16
Final Zero	0.11	-0.14	-0.19
Avg. Zero	0.11	-0.12	-0.18
Initial UpScale	12.19	4.86	5.09
Final UpScale	12.19	4.87	5.07
Avg. UpScale	12.19	4.87	5.08
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.05%	-0.41%	-2.64%
Final Zero Bias	0.05%	-0.74%	-2.89%
Zero Drift	0.00%	0.33%	0.25%
Initial Upscale Bias	0.71%	-1.07%	0.08%
Final Upscale Bias	0.71%	-0.99%	-0.08%
Upscale Drift	0.00%	0.08%	0.17%
Alternative Specification Abs Diff — Initial Zero	0.01	0.05	0.32
Final Zero	0.01	0.09	0.35
Initial Upscale	0.15	0.13	0.01
Final Upscale	0.15	0.12	0.01
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 4	O_2	NOx	CO
Raw Average	12.47	2.17	0.85
Corrected Average	12.38	2.28	0.95
Initial Zero	0.11	-0.14	-0.19
Final Zero	0.08	-0.17	-0.12
Avg. Zero	0.10	-0.16	-0.16
Initial UpScale	12.19	4.87	5.07
Final UpScale	12.18	4.88	5.07
Avg. UpScale	12.19	4.88	5.07
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	0.05%	-0.74%	-2.89%
Final Zero Bias	-0.09%	-0.99%	-2.31%
Zero Drift	0.14%	0.25%	0.58%
Initial Upscale Bias	0.71%	-0.99%	-0.08%
Final Upscale Bias	0.66%	-0.91%	-0.08%
Upscale Drift	0.05%	0.08%	0.00%
Alternative Specification Abs Diff — Initial Zero	0.01	0.09	0.35
Final Zero	0.02	0.12	0.28
Initial Upscale	0.15	0.12	0.01
Final Upscale	0.14	0.11	0.01
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK				
	Base W/Db Load, Run - 5	O_2	NOx	CO
	Raw Average	12.43	1.98	0.87
	Corrected Average	12.37	2.11	0.93
	Initial Zero	0.08	-0.17	-0.12
	Final Zero	0.08	-0.17	-0.08
	Avg. Zero	0.08	-0.17	-0.10
	Initial UpScale	12.18	4.88	5.07
	Final UpScale	12.15	4.84	5.07
	Avg. UpScale	12.17	4.86	5.07
	Sys Resp (Zero)	0.10	-0.05	0.16
	Sys Resp (Upscale)	12.04	4.99	5.08
	Upscale Cal Gas	12.10	4.93	4.92
	Initial Zero Bias	-0.09%	-0.99%	-2.31%
	Final Zero Bias	-0.09%	-0.99%	-1.98%
	Zero Drift	0.00%	0.00%	0.33%
	Initial Upscale Bias	0.66%	-0.91%	-0.08%
	Final Upscale Bias	0.52%	-1.24%	-0.08%
	Upscale Drift	0.14%	0.33%	0.00%
Alternative Specification Abs Diff	Initial Zero	0.02	0.12	0.28
	Final Zero	0.02	0.12	0.24
	Initial Upscale	0.14	0.11	0.01
	Final Upscale	0.11	0.15	0.01
	Calibration Span	21.10	12.10	12.10
	3% of Cal. Span (drift)	0.63	0.36	0.36
	5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK				
	Base W/Db Load, Run - 6	O_2	NOx	CO
	Raw Average	12.42	2.14	0.90
	Corrected Average	12.38	2.28	0.99
	Initial Zero	0.08	-0.17	-0.08
	Final Zero	0.07	-0.17	-0.21
	Avg. Zero	0.08	-0.17	-0.15
	Initial UpScale	12.15	4.84	5.07
	Final UpScale	12.14	4.81	5.03
	Avg. UpScale	12.15	4.83	5.05
	Sys Resp (Zero)	0.10	-0.05	0.16
	Sys Resp (Upscale)	12.04	4.99	5.08
	Upscale Cal Gas	12.10	4.93	4.92
	Initial Zero Bias	-0.09%	-0.99%	-1.98%
	Final Zero Bias	-0.14%	-0.99%	-3.06%
	Zero Drift	0.05%	0.00%	1.07%
	Initial Upscale Bias	0.52%	-1.24%	-0.08%
	Final Upscale Bias	0.47%	-1.49%	-0.41%
	Upscale Drift	0.05%	0.25%	0.33%
Alternative Specification Abs Diff	Initial Zero	0.02	0.12	0.24
	Final Zero	0.03	0.12	0.37
	Initial Upscale	0.11	0.15	0.01
	Final Upscale	0.10	0.18	0.05
	Calibration Span	21.10	12.10	12.10
	3% of Cal. Span (drift)	0.63	0.36	0.36
	5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 7	O_2	NOx	CO
Raw Average	12.43	2.17	0.85
Corrected Average	12.40	2.31	0.95
Initial Zero	0.07	-0.17	-0.21
Final Zero	0.06	-0.16	-0.08
Avg. Zero	0.07	-0.17	-0.15
Initial UpScale	12.14	4.81	5.03
Final UpScale	12.13	4.84	5.03
Avg. UpScale	12.14	4.83	5.03
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.14%	-0.99%	-3.06%
Final Zero Bias	-0.19%	-0.91%	-1.98%
Zero Drift	0.05%	0.08%	1.07%
Initial Upscale Bias	0.47%	-1.49%	-0.41%
Final Upscale Bias	0.43%	-1.24%	-0.41%
Upscale Drift	0.05%	0.25%	0.00%
Alternative Specification Abs Diff: Initial Zero	0.03	0.12	0.37
Final Zero	0.04	0.11	0.24
Initial Upscale	0.10	0.18	0.05
Final Upscale	0.09	0.15	0.05
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 8	O_2	NOx	CO
Raw Average	12.44	2.12	0.87
Corrected Average	12.40	2.22	0.92
Initial Zero	0.06	-0.16	-0.08
Final Zero	0.07	-0.08	-0.10
Avg. Zero	0.07	-0.12	-0.09
Initial UpScale	12.13	4.84	5.03
Final UpScale	12.16	4.87	4.98
Avg. UpScale	12.15	4.86	5.01
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.19%	-0.91%	-1.98%
Final Zero Bias	-0.14%	-0.25%	-2.15%
Zero Drift	0.05%	0.66%	0.17%
Initial Upscale Bias	0.43%	-1.24%	-0.41%
Final Upscale Bias	0.57%	-0.99%	-0.83%
Upscale Drift	0.14%	0.25%	0.41%
Alternative Specification Abs Diff: Initial Zero	0.04	0.11	0.24
Final Zero	0.03	0.03	0.26
Initial Upscale	0.09	0.15	0.05
Final Upscale	0.12	0.12	0.10
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 9	O_2	NOx	CO
Raw Average	12.36	2.39	0.95
Corrected Average	12.33	2.49	1.02
Initial Zero	0.07	-0.08	-0.10
Final Zero	0.00	-0.16	-0.12
Avg. Zero	0.04	-0.12	-0.11
Initial UpScale	12.16	4.87	4.98
Final UpScale	12.10	4.82	5.07
Avg. UpScale	12.13	4.85	5.03
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.14%	-0.25%	-2.15%
Final Zero Bias	-0.47%	-0.91%	-2.31%
Zero Drift	0.33%	0.66%	0.17%
Initial Upscale Bias	0.57%	-0.99%	-0.83%
Final Upscale Bias	0.28%	-1.40%	-0.08%
Upscale Drift	0.28%	0.41%	0.74%
Alternative Specification Abs Diff — Initial Zero	0.03	0.03	0.26
Alternative Specification Abs Diff — Final Zero	0.10	0.11	0.28
Alternative Specification Abs Diff — Initial Upscale	0.12	0.12	0.10
Alternative Specification Abs Diff — Final Upscale	0.06	0.17	0.01
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

DRIFT AND BIAS CHECK			
Base W/Db Load, Run - 10	O_2	NOx	CO
Raw Average	12.33	2.40	0.98
Corrected Average	12.37	2.52	1.01
Initial Zero	0.00	-0.16	-0.12
Final Zero	-0.04	-0.12	-0.03
Avg. Zero	-0.02	-0.14	-0.08
Initial UpScale	12.10	4.82	5.07
Final UpScale	12.03	4.84	5.03
Avg. UpScale	12.07	4.83	5.05
Sys Resp (Zero)	0.10	-0.05	0.16
Sys Resp (Upscale)	12.04	4.99	5.08
Upscale Cal Gas	12.10	4.93	4.92
Initial Zero Bias	-0.47%	-0.91%	-2.31%
Final Zero Bias	-0.66%	-0.58%	-1.57%
Zero Drift	0.19%	0.33%	0.74%
Initial Upscale Bias	0.28%	-1.40%	-0.08%
Final Upscale Bias	-0.05%	-1.24%	-0.41%
Upscale Drift	0.33%	0.17%	0.33%
Alternative Specification Abs Diff — Initial Zero	0.10	0.11	0.28
Alternative Specification Abs Diff — Final Zero	0.14	0.07	0.19
Alternative Specification Abs Diff — Initial Upscale	0.06	0.17	0.01
Alternative Specification Abs Diff — Final Upscale	0.01	0.15	0.05
Calibration Span	21.10	12.10	12.10
3% of Cal. Span (drift)	0.63	0.36	0.36
5% of Cal. Span (bias)	1.06	0.61	0.61

APPENDIX E

STRATIFICATION TEST DATA

Source Information	
Company	Florida Power and Light
Plant Name	West County Energy Center
Equipment	Mitsubishi 501G
Location	Loxahatchee, Florida

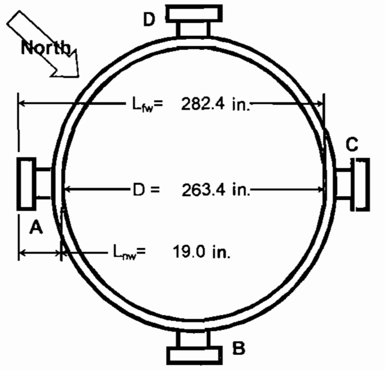
Test Information	
Date	03/12/11
Project #	cis-10-westcounty.fl-rata#1
Unit Number	3C
Load	Base Load
Number of Ports Available	4
Number of Ports Used	4

Stack and Test Type			
○	Isokinetic Traverse (Wet Chemistry Testing)		**Circular Stack**
○	Velocity Traverse (Flow and Flow RATA Test)		
○	*Stratification Traverse (Compliance Test)*	☐ RM 20	
◉	**Stratification Traverse (RATA)**	☐ Part 60 ☑ Part 75	

METHOD 1 - STRATIFICATION TEST FOR A CIRCULAR SOURCE

Company	Florida Power and Light	**Date**	03/12/11
Plant Name	West County Energy Center	**Project #**	cis-10-westcounty.fl-rata#1
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

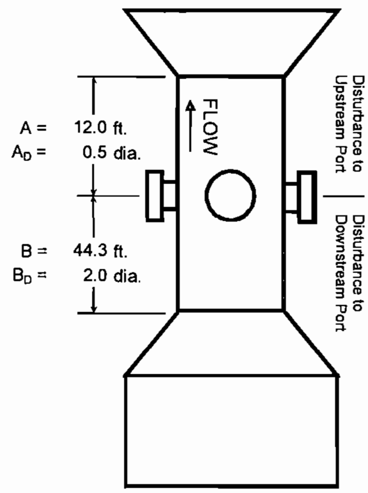
Circular Stack or Duct Diameter			
Distance to Far Wall of Stack	(L_{fw})	282.38	in.
Distance to Near Wall of Stack	(L_{nw})	19.00	in.
Diameter of Stack	(D)	263.38	in.
Area of Stack	(A_s)	378.35	ft^2



Distance from Disturbances to Port			
Distance Upstream	(A)	144.00	in.
Diameters Upstream	(A_D)	0.55	diameters
Distance Downstream	(B)	531.75	in.
Diameters Downstream	(B_D)	2.02	diameters

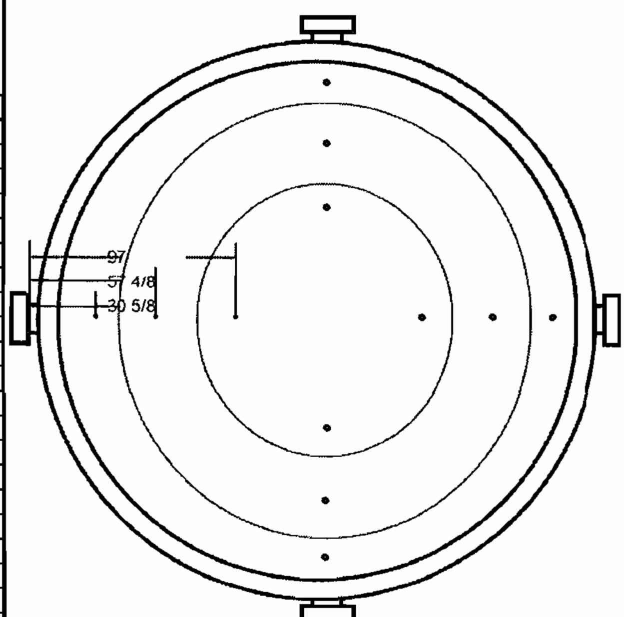
Number of Traverse Points Required					
Diameters to Flow Disturbance		Minimum Number of[1] Traverse Points		Minimum Number of Traverse Points Comp Stratification	
Down (B_D) Stream	Up (A_D) Stream	Particulate Points	Velocity Points	Criteria	Points
2.00-4.99	0.50-1.24	24	16	○ RM 7E 8.1.2	12 RM1 pts
5.00-5.99	1.25-1.49	20	16	○ Alt 7E 8.1.2	3 points
6.00-6.99	1.50-1.74	16	12		
7.00-7.99	1.75-1.99	12	12		
>= 8.00	>=2.00	8 or 12[2]	8 or 12[2]	**Minimum Number of Traverse Points RATA Stratification**	
Upstream Spec		24	16		
Downstream Spec		24	16		
Traverse Pts Required		24	16	**Criteria**	**Points**
				◉ Part75/60	12 RM1 pts
				○ 75 abrv (a)	3 points
				○ 75 abrv (b)	6 points
					12 points

[1] Check Minimum Number of Points for the Upstream and Downstream conditions, then use the largest.
[2] 8 for Circular Stacks 12 to 24 inches
12 for Circular Stacks over 24 inches



Number of Traverse Points Used				
4	**Ports by**	3	**Pts / port**	**Stratification Traverse (RATA)**
12	**Pts Used**	12	**Required**	

Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	4.4%	11 5/8	30 5/8
2	14.6%	38 4/8	57 4/8
3	29.6%	78	97
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			



STRATIFICATION TRAVERSE (RATA) RESULTS

Company	Florida Power and Light	Date	03/12/11
Plant Name	West County Energy Center	Project #	cis-10-westcounty.fl-rata#1
Equipment	Mitsubishi 501G	# of Ports Available	4
Location	Loxahatchee, Florida	# of Ports Used	4

Stack Dimensions			
Diameter or Length of Stack	(D)	263.38	in.
Width of Stack	(W)		in.
Area of Stack	(A_s)	378.35	ft^2

Traverse Data			
4	Ports by	3	Pts / port
12	Pts Used	12	Required
Run Start	9:19:07	Run End	9:59:37

Traverse Point	Time Per Point	Point Start Time	Point Stop Time (Reading)	O2	Percent Difference	CO	Percent Difference	NOx	Percent Difference
	min.	hh:mm:ss	hh:mm:ss	%	%	ppm	%	ppm	%
D-3	3.00	9:19:07	9:22:07	13.11	0.46%	0.55	0.30%	3.14	8.37%
D-2	3.00	9:22:07	9:25:07	13.10	0.53%	0.56	2.13%	2.88	0.60%
D-1	3.00	9:25:07	9:28:07	13.12	0.38%	0.60	9.42%	2.96	2.16%
C-3	4.50	9:28:07	9:32:37	13.15	0.15%	0.58	5.78%	3.14	8.37%
C-2	3.00	9:32:37	9:35:37	13.15	0.15%	0.65	**18.54%**	2.69	7.16%
C-1	3.00	9:35:37	9:38:37	13.14	0.23%	0.57	3.95%	2.84	1.98%
B-3	5.00	9:38:37	9:43:37	13.18	0.08%	0.55	0.30%	3.37	**16.31%**
B-2	3.00	9:43:37	9:46:37	13.19	0.15%	0.54	1.52%	2.76	4.75%
B-1	3.00	9:46:37	9:49:37	13.19	0.15%	0.50	8.81%	2.47	14.75%
A-3	4.00	9:49:37	9:53:37	13.22	0.38%	0.50	8.81%	3.36	15.96%
A-2	3.00	9:53:37	9:56:37	13.24	0.53%	0.50	8.81%	2.67	7.85%
A-1	3.00	9:56:37	9:59:37	13.25	**0.61%**	0.48	12.46%	2.49	14.06%
Average				13.17		0.55		2.90	

RATA SAMPLE POINTS FOR CIRCULAR STACK

Company	Florida Power and Light	**Date**	03/12/11
Plant Name	West County Energy Center	**Project #**	cis-10-westcounty.fl-rata#1
Equipment	Mitsubishi 501G	**# of Ports Available**	4
Location	Loxahatchee, Florida	**# of Ports Used**	4

Stack Dimensions				**Traverse Data**			
Diameter or Length of Stack	(D)	263.38	in.	4	**Ports by**	3	**Pts / port**
Width of Stack	(W)		in.	12	**Pts Used**	12	**Required**
Area of Stack	(A_s)	378.35	ft^2	**Run Start**	9:19:07	**Run End**	9:59:37

40 CFR 75 Criteria

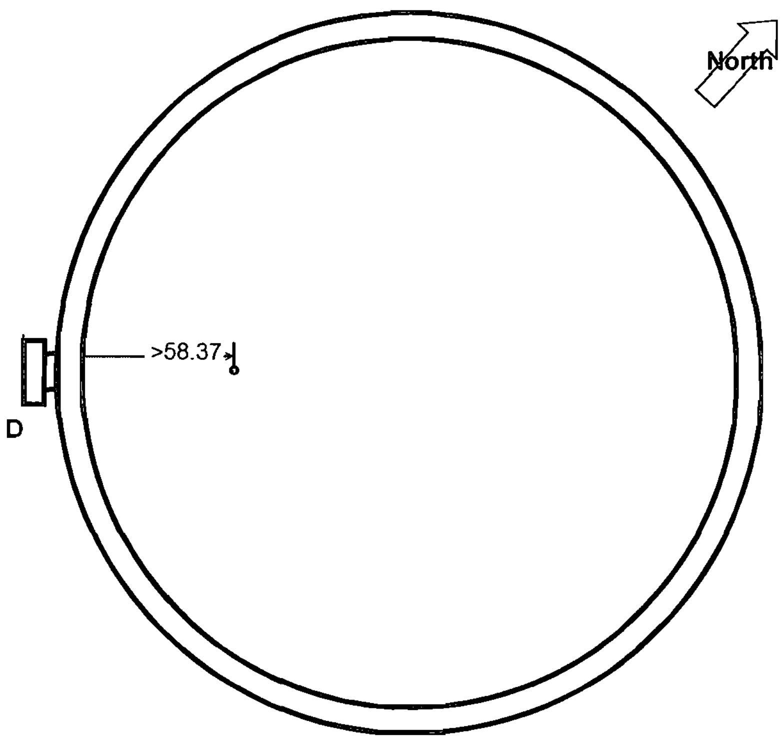
Stratification Results	
Maximum Percent Difference	18.54 % for CO
Maximum Pollutant Conc. Diff.	0.47 ppm for NOx
Maximum Diluent Conc. Diff.	0.08 % for O2
Stack Diameter	263.38 in.

Traverse Point Number	**Percent of Stack Diameter**	**Distance from Inside Wall**	**Distance Including Reference Length**
	%	in.	in.
1	>14.95%	>39.37	>58.37
2			
3			

Stratification Conclusions	
Maximum % Diff.	Percent Diff. >10% Failed Stratification Test
Maximum Conc. Diff.	Conc. Diff. ≤ 0.3% Passed 6.5.6.3(b) Criteria
Stack Diameter	D > 93.6 in.

Passed Strat. Test Under 6.5.6.3(b) Criteria

Test Type
- ☐ Moisture, for MW
- ☐ Moisture, for wet-to-dry
- ☑ Gas
- ☐ Use 6.5.6.3(a) points?
- ☐ 6.5.6(b)(2) alt. points could apply



APPENDIX 2

40CFR75 QA CERT TEST DETAIL REPORT

ECMPS Client Tool

Version 1.0 2011 Q1

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL): 56407

State: FL

County: Palm Beach

Unit/Stack/Pipe ID: WCCT3C

7-Day Calibration

Component ID:	C01	**Component Type:**	NOX	**Test Completion:**	02/23/2011 15:40
Test Number:	7DAY-Q12011-C01-1	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported Results	Reported APS	Recalculated Results	Recalculated APS
02/16/2011 10	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 10	HIGH	176.200	88.1	175.500	0.30		0.40	
02/18/2011 06	ZERO	0.000	0	0.000	0.00		0.00	
02/18/2011 06	HIGH	176.200	88.1	175.800	0.20		0.20	
02/19/2011 15	ZERO	0.000	0	-0.100	0.10		0.10	
02/19/2011 15	HIGH	176.200	88.1	174.100	1.00		1.10	
02/20/2011 15	ZERO	0.000	0	-0.100	0.10		0.10	
02/20/2011 15	HIGH	176.200	88.1	173.700	1.30		1.30	
02/21/2011 15	ZERO	0.000	0	-0.100	0.10		0.10	
02/21/2011 15	HIGH	176.200	88.1	174.000	1.10		1.10	
02/22/2011 15	ZERO	0.000	0	-0.100	0.10		0.10	
02/22/2011 15	HIGH	176.200	88.1	172.600	1.80		1.80	
02/23/2011 15	ZERO	0.000	0	-0.200	0.10		0.10	
02/23/2011 15	HIGH	176.200	88.1	172.200	2.00		2.00	

Additional Information:

No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: WCCT3C

7-Day Calibration

Component ID: C01 **Component Type:** NOX **Test Completion:** 02/24/2011 15:38
Test Number: 7DAY-Q12011-C01-2 **Reason for Test:** INITIAL **Reported Test Results:** PASSAPS
Span Scale Level: Low **Span Value:** 10.000 **EPA Calculated Result:** PASSAPS

Evaluation Status: No Errors **Submission Status:** Not submitted
Submission Date/Time:

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported Results	Reported APS	Recalculated Results	Recalculated APS
02/18/2011 06	ZERO	0.000	0	0.000	0.00		0.00	
02/18/2011 06	HIGH	8.600	86	8.400	2.00		2.00	
02/19/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/19/2011 15	HIGH	8.600	86	8.300	0.30	Y	0.00	Y
02/20/2011 15	ZERO	0.000	0	-0.100	1.00		1.00	
02/20/2011 15	HIGH	8.600	86	8.300	0.30	Y	0.00	Y
02/21/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/21/2011 15	HIGH	8.600	86	8.400	2.00		2.00	
02/22/2011 15	ZERO	0.000	0	-0.100	1.00		1.00	
02/22/2011 15	HIGH	8.600	86	8.300	0.30	Y	0.00	Y
02/23/2011 15	ZERO	0.000	0	-0.100	1.00		1.00	
02/23/2011 15	HIGH	8.600	86	8.200	0.40	Y	0.00	Y
02/24/2011 15	ZERO	0.000	0	-0.100	1.00		1.00	
02/24/2011 15	HIGH	8.600	86	8.200	0.40	Y	0.00	Y

Additional Information:
No comment.

*Performance Spec: CE <= 2.5% of Span Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: **WCCT3C**

7-Day Calibration

Component ID:	C02	**Component Type:**	O2	**Test Completion:**	02/23/2011 15:43
Test Number:	7DAY-Q12011-C02-3	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported Results	Reported APS	Recalculated Results	Recalculated APS
02/16/2011 10	ZERO	0.000	0	0.000	0.00		0.00	
02/16/2011 10	HIGH	20.900	83.6	20.970	0.10		0.10	
02/18/2011 06	ZERO	0.000	0	0.000	0.00		0.00	
02/18/2011 06	HIGH	20.900	83.6	20.930	0.00		0.00	
02/19/2011 15	ZERO	0.000	0	0.000	0.00		0.00	
02/19/2011 15	HIGH	20.900	83.6	20.870	0.00		0.00	
02/20/2011 15	ZERO	0.000	0	0.010	0.00		0.00	
02/20/2011 15	HIGH	20.900	83.6	20.890	0.00		0.00	
02/21/2011 15	ZERO	0.000	0	0.010	0.00		0.00	
02/21/2011 15	HIGH	20.900	83.6	20.820	0.10		0.10	
02/22/2011 15	ZERO	0.000	0	0.020	0.00		0.00	
02/22/2011 15	HIGH	20.900	83.6	20.840	0.10		0.10	
02/23/2011 15	ZERO	0.000	0	0.010	0.00		0.00	
02/23/2011 15	HIGH	20.900	83.6	20.870	0.00		0.00	

Additional Information:

No comment.

*Performance Spec: CE <= 2.5% of Span   Alternate Performance Spec: |R-A| <= 5 ppm (Appendix A &3.1)

Facility Name: **West County Energy Center**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Facility ID (ORISPL): **56407**

Unit/Stack/Pipe ID: **WCCT3C**

Cycle Time Test

Component ID:	C02	**Component Type:**	O2	**Test Completion:**	03/14/2011 10:41
Test Number:	CYCL-Q12011-C02-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	3	**Calculated Total Cycle Time:**	3		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/14	10:15	10:17	ZERO	0.000	13.100	0.070	2	2
2011/03/14	10:39	10:41	HIGH	20.900	13.100	20.910	2	2

Additional Information:

No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Unit/Stack/Pipe ID: **WCCT3C**

Cycle Time Test

Component ID:	C01	**Component Type:**	NOX	**Test Completion:**	03/14/2011 10:33
Test Number:	CYCL-Q12011-C01-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	3	**Calculated Total Cycle Time:**	3		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/14	10:14	10:17	ZERO	0.000	0.500	-0.100	3	3
2011/03/14	10:31	10:33	HIGH	176.200	0.500	174.300	2	2

Additional Information:

No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: **WCCT3C**

Cycle Time Test

Component ID:	C01	**Component Type:**	NOX	**Test Completion:**	03/14/2011 10:25
Test Number:	CYCL-Q12011-C01-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	Low	**Span Value:**	10.000	**EPA Calculated Result:**	PASSED
Total Cycle Time:	3	**Calculated Total Cycle Time:**	3		
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
				Submission Date/Time:	

Date	Start Time	End Time	Gas Level	Reference Gas Value	Stable Values		Injection Cycle Time	
					Starting	Ending	Results	Recalculated
2011/03/14	10:14	10:17	ZERO	0.000	0.500	-0.100	3	3
2011/03/14	10:23	10:25	HIGH	8.615	0.500	8.300	2	2

Additional Information:

No comment.

*Performance Spec: Cycle Time <= 15 minutes (Appendix A &3.5)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: **WCCT3C**

Fuel Flowmeter Accuracy Test

Component ID: C04
Component Type: GFFM
Test Number: FFAC-Q22010-C04-83

Test Completion: 05/13/2010 09:00
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.2	0.2	0.2	12/16/2010 00

Additional Information:

No comment.

Unit/Stack/Pipe ID: **WCCT3C**

Fuel Flowmeter Accuracy Test

Component ID: C06
Component Type: OFFM
Test Number: FFAC-Q32009-C06-95

Test Completion: 08/28/2009 10:54
Reported Test Results: PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors

Submission Status: Not submitted
Submission Date/Time:

Accuracy Test Method	High Level Accuracy	Mid Level Accuracy	Low Level Accuracy	Reinstallation Date/Hour
LCRM	0.0	0.0	0.0	12/16/2010 00

Additional Information:

No comment.

Facility Name: **West County Energy Center**
Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report
March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: WCCT3C

Linearity Check

Component ID:	C02	**Component Type:**	O2	**Test Completion:**	03/14/2011 16:25
Test Number:	LINE-Q12011-C02-12	**Reason for Test:**	QA	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	25.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	22.600	22.600	13.800	13.800	6.240	6.240
Mass CEM Value	22.473	22.473	13.723	13.723	6.310	6.310
Alt. Perf. Indicator						
Results	0.6	0.6	0.6	0.6	1.1	1.1

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/14/2011 16:02	HIGH	22.440	22.600	90.4%
03/14/2011 16:14	HIGH	22.500	22.600	90.4%
03/14/2011 16:25	HIGH	22.480	22.600	90.4%
03/14/2011 15:55	LOW	6.180	6.240	25.0%
03/14/2011 16:18	LOW	6.380	6.240	25.0%
03/14/2011 16:07	LOW	6.370	6.240	25.0%
03/14/2011 15:59	MID	13.700	13.800	55.2%
03/14/2011 16:11	MID	13.710	13.800	55.2%
03/14/2011 16:22	MID	13.760	13.800	55.2%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: WCCT3C

Linearity Check

Component ID:	C01	**Component Type:**	NOX	**Test Completion:**	03/14/2011 15:50
Test Number:	LINE-Q12011-C01-10	**Reason for Test:**	QA	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	200.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Not submitted
Grace period Tested?				**Submission Date/Time:**	

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	176.200	176.200	110.700	110.700	51.100	51.100
Mass CEM Value	173.433	173.433	107.367	107.367	50.200	50.200
Alt. Perf. Indicator						
Results	1.6	1.6	3.0	3.0	1.8	1.8

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
03/14/2011 15:43	LOW	49.900	51.100	25.6%
03/14/2011 15:31	LOW	49.900	51.100	25.6%
03/14/2011 15:19	LOW	50.800	51.100	25.6%
03/14/2011 15:47	MID	107.200	110.700	55.4%
03/14/2011 15:23	MID	107.700	110.700	55.4%
03/14/2011 15:35	MID	107.200	110.700	55.4%
03/14/2011 15:50	HIGH	173.000	176.200	88.1%
03/14/2011 15:26	HIGH	173.700	176.200	88.1%
03/14/2011 15:38	HIGH	173.600	176.200	88.1%

Additional Information:

No comment.

*Performance Spec: LE <= 5.0% of Reference Value; Alternate Performance Spec: |R-A| <= 5ppm (Appendix A &3.2)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

QA/Cert Test Detail Report

March 28, 2011 07:05 PM

Unit/Stack/Pipe ID: WCCT3C

Relative Accuracy Test

System ID:	C01	**System Parameter:**	NOX	**Test Completion:**	03/13/2011 17:49
Test Number:	RATA-Q12011-C01-	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSAPS
# of Op. Levels:	1	**Grace Period Test?**		**EPA Calculated Result:**	PASSAPS
Evaluation Status:	No Errors			**Reported BAF:**	1.104
Submission Status:	Not submitted			**EPA Calculated BAF:**	1.104
Submission Date:				**RATA Frequency:**	4QTRS

Operating Level: High

Reference Method Used: 7E,3A: NOX RM 7E and CO2/O2 RM 3A

Summary Statistics:

	Reported	Recalculated		Reported	Recalculated
Mean of Monitoring System	0.005	0.005	**Relative Accuracy**	16.31	16.31
Mean of Reference Method Values	0.006	0.006	**Bias Adjustment Factor**	1.104	1.104
Mean of Difference	0.001	0.001	**APS Indicator**	Y	Y
Standard Deviation of Difference	0.001	0.001	**T-Value**	2.306	2.306
Confidence Coefficient	0.000	0.000	**Gross Unit Load or Velocity**	336	336

Run Data:

Run	Start Date	End Date	Run Status	Monitoring System Value	Reference Method Value	Gross Load or Velocity
1	03/13/2011 09:56	03/13/2011 10:55	RUNUSED	0.005	0.006	343
2	03/13/2011 11:12	03/13/2011 12:11	RUNUSED	0.005	0.006	345
3	03/13/2011 12:27	03/13/2011 13:26	NOTUSED	0.005	0.007	337
4	03/13/2011 13:39	03/13/2011 13:59	RUNUSED	0.005	0.006	330
5	03/13/2011 14:11	03/13/2011 14:31	RUNUSED	0.005	0.005	330
6	03/13/2011 14:41	03/13/2011 15:01	RUNUSED	0.006	0.006	329
7	03/13/2011 15:11	03/13/2011 15:31	RUNUSED	0.006	0.006	330
8	03/13/2011 15:41	03/13/2011 16:01	RUNUSED	0.005	0.006	329
9	03/13/2011 16:59	03/13/2011 17:19	RUNUSED	0.005	0.006	343
10	03/13/2011 17:29	03/13/2011 17:49	RUNUSED	0.006	0.006	346

Facility Name: West County Energy Center

QA/Cert Test Detail Report
March 28, 2011 07:05 PM

Facility ID (ORISPL): 56407

Additional Information:

No comment.

*Performance Spec: RA <= 10% or Mean Difference <= +/- 2.0fps:
Reduced Frequency Spec: RA <= 7.5% or Mean Difference +/- 1.5 fps (Appendix A &3.3.4)

Unit/Stack/Pipe ID: WCCT3C

Transmitter Transducer Test

Component ID: C05 **Component Type:** GFFM **Test Completion:** 03/03/2010 12:00
Test Number: FFAT-Q12010-C05-93 **Reason for Test:** QA **Reported Test Results:** PASSED
EPA Calculated Result: PASSED

Evaluation Status: No Errors **Submission Status:** Not submitted
Submission Date/Time:

High Level Accuracy	High Level Accuracy Specification	Mid Level Accuracy	Mid Level Accuracy Specification	Low Level Accuracy	Low Level Accuracy Specification
0.5	AGA3	0.5	AGA3	0.5	AGA3

Additional Information:

No comment.

Unit/Stack/Pipe ID: WCCT3C

Primary Element Inspection

System ID: **System Type:** **Test Completion:** 02/19/2011 00:00
Component ID: C05 **Component Type:** GFFM **Reported Test Results:** PASSED
Test Number: PEI-110219-C05-3 **Reason for Test:** INITIAL **Grace Period Test?**

Evaluation Status: No Errors **Submission Status:** Not submitted
Test Description:

Additional Information:

No comment.

APPENDIX 3

CEMS CALIBRATION DRIFT REPORTS

Daily Stack Calibration Report
Generated: 2/24/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/24/2011
Period End: 2/24/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm	3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm	3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %	3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm	3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm	3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	%		0	Error %	Part75 Allowable Units	%	
02/24/2011	15:30	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/24/2011	15:30	3C_COHIGH	CO	SPAN	1048.000	1106.800	58.800	4.9	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/24/2011	15:30	3C_COLOW	CO	ZERO	0.000	0.400	0.400	4.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/24/2011	15:30	3C_COLOW	CO	SPAN	8.600	9.100	0.500	5.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/24/2011	15:30	3C_NOXHIGH	NOx	ZERO	0.000	-0.200	-0.200	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/24/2011	15:30	3C_NOXHIGH	NOx	SPAN	176.200	171.800	-4.400	-2.2	20.0	10.0	PASS	0	-2.2	10.000	5.0	PASS
02/24/2011	15:30	3C_NOXLOW	NOx	ZERO	0.000	-0.100	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/24/2011	15:30	3C_NOXLOW	NOx	SPAN	8.600	8.200	-0.400	-4.0	1.0	10.0	PASS	0	-4.0	5.000	5.0	PASS
02/24/2011	15:30	3C_O2	O2	ZERO	0.000	0.010	0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/24/2011	15:30	3C_O2	O2	SPAN	20.900	20.870	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/24/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/24/2011
Period End: 2/24/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.6	0.1%	58.8	4.9%
3C_COLOW	CO	0.4	4.0%	0.5	5.0%
3C_NOXHIGH	NOx	0.2	0.1%	4.4	2.2%
3C_NOXLOW	NOx	0.1	1.0%	0.4	4.0%
3C_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.600	- N/A -	58.800	- N/A -
3C_COLOW	CO	0.400	- N/A -	0.500	- N/A -
3C_NOXHIGH	NOx	0.200	0.1%	4.400	2.2%
3C_NOXLOW	NOx	0.100	1.0%	0.400	4.0%
3C_O2	O2	0.010	- N/A -	0.030	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/23/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/23/2011
Period End: 2/23/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm	3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm	3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %	3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm	3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm	3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/23/2011	15:30	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/23/2011	15:30	3C_COHIGH	CO	SPAN	1048.000	1104.600	56.600	4.7	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/23/2011	15:30	3C_COLOW	CO	ZERO	0.000	0.400	0.400	4.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/23/2011	15:30	3C_COLOW	CO	SPAN	8.600	9.100	0.500	5.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/23/2011	15:30	3C_NOXHIGH	NOx	ZERO	0.000	-0.200	-0.200	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/23/2011	15:30	3C_NOXHIGH	NOx	SPAN	176.200	172.200	-4.000	-2.0	20.0	10.0	PASS	0	-2.0	10.000	5.0	PASS
02/23/2011	15:30	3C_NOXLOW	NOx	ZERO	0.000	-0.100	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/23/2011	15:30	3C_NOXLOW	NOx	SPAN	8.600	8.200	-0.400	-4.0	1.0	10.0	PASS	0	-4.0	5.000	5.0	PASS
02/23/2011	15:30	3C_O2	O2	ZERO	0.000	0.010	0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/23/2011	15:30	3C_O2	O2	SPAN	20.900	20.870	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/23/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/23/2011
Period End: 2/23/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.6	0.1%	56.6	4.7%
3C_COLOW	CO	0.4	4.0%	0.5	5.0%
3C_NOXHIGH	NOx	0.2	0.1%	4.0	2.0%
3C_NOXLOW	NOx	0.1	1.0%	0.4	4.0%
3C_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.600	- N/A -	56.600	- N/A -
3C_COLOW	CO	0.400	- N/A -	0.500	- N/A -
3C_NOXHIGH	NOx	0.200	0.1%	4.000	2.0%
3C_NOXLOW	NOx	0.100	1.0%	0.400	4.0%
3C_O2	O2	0.010	- N/A -	0.030	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/22/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/22/2011
Period End: 2/22/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm	3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm	3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %	3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm	3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm	3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/22/2011	15:40	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:40	3C_COHIGH	CO	SPAN	1048.000	1095.700	47.700	4.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:40	3C_COLOW	CO	ZERO	0.000	0.400	0.400	4.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:40	3C_COLOW	CO	SPAN	8.600	9.000	0.400	4.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/22/2011	15:40	3C_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/22/2011	15:40	3C_NOXHIGH	NOx	SPAN	176.200	172.600	-3.600	-1.8	20.0	10.0	PASS	0	-1.8	10.000	5.0	PASS
02/22/2011	15:40	3C_NOXLOW	NOx	ZERO	0.000	-0.100	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/22/2011	15:40	3C_NOXLOW	NOx	SPAN	8.600	8.300	-0.300	-3.0	1.0	10.0	PASS	0	-3.0	5.000	5.0	PASS
02/22/2011	15:40	3C_O2	O2	ZERO	0.000	0.020	0.020	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/22/2011	15:40	3C_O2	O2	SPAN	20.900	20.840	-0.060	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/22/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/22/2011
Period End: 2/22/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.6	0.1%	47.7	4.0%
3C_COLOW	CO	0.4	4.0%	0.4	4.0%
3C_NOXHIGH	NOx	0.1	0.1%	3.6	1.8%
3C_NOXLOW	NOx	0.1	1.0%	0.3	3.0%
3C_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.600	- N/A -	47.700	- N/A -
3C_COLOW	CO	0.400	- N/A -	0.400	- N/A -
3C_NOXHIGH	NOx	0.100	0.1%	3.600	1.8%
3C_NOXLOW	NOx	0.100	1.0%	0.300	3.0%
3C_O2	O2	0.020	- N/A -	0.060	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:

3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm

Span of Analyzers:

3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/21/2011	15:40	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:40	3C_COHIGH	CO	SPAN	1048.000	1091.700	43.700	3.6	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:40	3C_COLOW	CO	ZERO	0.000	0.300	0.300	3.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:40	3C_COLOW	CO	SPAN	8.600	9.000	0.400	4.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/21/2011	15:40	3C_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/21/2011	15:40	3C_NOXHIGH	NOx	SPAN	176.200	174.000	-2.200	-1.1	20.0	10.0	PASS	0	-1.1	10.000	5.0	PASS
02/21/2011	15:40	3C_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/21/2011	15:40	3C_NOXLOW	NOx	SPAN	8.600	8.400	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
02/21/2011	15:40	3C_O2	O2	ZERO	0.000	0.010	0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/21/2011	15:40	3C_O2	O2	SPAN	20.900	20.820	-0.080	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/21/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/21/2011
Period End: 2/21/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.6	0.1%	43.7	3.6%
3C_COLOW	CO	0.3	3.0%	0.4	4.0%
3C_NOXHIGH	NOx	0.1	0.1%	2.2	1.1%
3C_NOXLOW	NOx	0.0	0.0%	0.2	2.0%
3C_O2	O2	0.0	- N/A -	0.1	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.600	- N/A -	43.700	- N/A -
3C_COLOW	CO	0.300	- N/A -	0.400	- N/A -
3C_NOXHIGH	NOx	0.100	0.1%	2.200	1.1%
3C_NOXLOW	NOx	0.000	0.0%	0.200	2.0%
3C_O2	O2	0.010	- N/A -	0.080	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/19/2011
Period End: 2/19/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:					Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm		3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm		3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %		3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm		3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm		3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/19/2011	15:40	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:40	3C_COHIGH	CO	SPAN	1048.000	1072.900	24.900	2.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:40	3C_COLOW	CO	ZERO	0.000	0.200	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:40	3C_COLOW	CO	SPAN	8.600	8.800	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/19/2011	15:40	3C_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/19/2011	15:40	3C_NOXHIGH	NOx	SPAN	176.200	174.100	-2.100	-1.1	20.0	10.0	PASS	0	-1.1	10.000	5.0	PASS
02/19/2011	15:40	3C_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/19/2011	15:40	3C_NOXLOW	NOx	SPAN	8.600	8.300	-0.300	-3.0	1.0	10.0	PASS	0	-3.0	5.000	5.0	PASS
02/19/2011	15:40	3C_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/19/2011	15:40	3C_O2	O2	SPAN	20.900	20.870	-0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/19/2011
Period End: 2/19/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.6	0.1%	24.9	2.1%
3C_COLOW	CO	0.2	2.0%	0.2	2.0%
3C_NOXHIGH	NOx	0.1	0.1%	2.1	1.1%
3C_NOXLOW	NOx	0.0	0.0%	0.3	3.0%
3C_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

Channel		----ZERO---- Diff Units	Error %	----SPAN---- Diff Units	Error %
3C_COHIGH	CO	0.600	- N/A -	24.900	- N/A -
3C_COLOW	CO	0.200	- N/A -	0.200	- N/A -
3C_NOXHIGH	NOx	0.100	0.1%	2.100	1.1%
3C_NOXLOW	NOx	0.000	0.0%	0.300	3.0%
3C_O2	O2	0.000	- N/A -	0.030	- N/A -

Performance Specification

Channel		Part 60 PASS	FAIL	Part 75 PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/18/2011
Period End: 2/18/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm	3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm	3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %	3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm	3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm	3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	%		0	Error %	Part75 Allowable Units	%	
02/18/2011	15:40	3C_COHIGH	CO	ZERO	0.000	0.000	0.000	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:40	3C_COHIGH	CO	SPAN	1048.000	1067.800	19.800	1.7	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	06:17	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	06:17	3C_COHIGH	CO	SPAN	1048.000	1071.700	23.700	2.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:40	3C_COLOW	CO	ZERO	0.000	0.100	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:40	3C_COLOW	CO	SPAN	8.600	8.700	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	06:17	3C_COLOW	CO	ZERO	0.000	0.300	0.300	3.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	06:17	3C_COLOW	CO	SPAN	8.600	8.800	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/18/2011	15:40	3C_NOXHIGH	NOx	ZERO	0.000	-0.100	-0.100	-0.1	20.0	10.0	PASS	0	-0.1	10.000	5.0	PASS
02/18/2011	15:40	3C_NOXHIGH	NOx	SPAN	176.200	173.700	-2.500	-1.3	20.0	10.0	PASS	0	-1.3	10.000	5.0	PASS
02/18/2011	06:17	3C_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/18/2011	06:17	3C_NOXHIGH	NOx	SPAN	176.200	175.800	-0.400	-0.2	20.0	10.0	PASS	0	-0.2	10.000	5.0	PASS
02/18/2011	15:40	3C_NOXLOW	NOx	ZERO	0.000	-0.100	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/18/2011	15:40	3C_NOXLOW	NOx	SPAN	8.600	8.400	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
02/18/2011	06:17	3C_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/18/2011	06:17	3C_NOXLOW	NOx	SPAN	8.600	8.400	-0.200	-2.0	1.0	10.0	PASS	0	-2.0	5.000	5.0	PASS
02/18/2011	15:40	3C_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/18/2011	15:40	3C_O2	O2	SPAN	20.900	20.930	0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/18/2011	06:17	3C_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/18/2011	06:17	3C_O2	O2	SPAN	20.900	20.930	0.030	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/20/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/18/2011
Period End: 2/18/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3C_COHIGH	CO	0.3	0.1%	21.8	1.9%
3C_COLOW	CO	0.2	2.0%	0.1	1.5%
3C_NOXHIGH	NOx	0.1	0.1%	1.4	0.8%
3C_NOXLOW	NOx	0.1	0.5%	0.2	2.0%
3C_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3C_COHIGH	CO	0.300	- N/A -	21.750	- N/A -
3C_COLOW	CO	0.200	- N/A -	0.150	- N/A -
3C_NOXHIGH	NOx	0.050	0.1%	1.450	0.8%
3C_NOXLOW	NOx	0.050	0.5%	0.200	2.0%
3C_O2	O2	0.000	- N/A -	0.030	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Range of Analyzers:				Span of Analyzers:			
3C_NOXLOW	NOx	0.0	10.0 ppm	3C_NOXLOW	NOx	0.0	10.0 ppm
3C_NOXHIGH	NOx	0.0	200.0 ppm	3C_NOXHIGH	NOx	0.0	200.0 ppm
3C_O2	O2	0.00	25.00 %	3C_O2	O2	0.00	25.00 %
3C_COLOW	CO	0.0	10.0 ppm	3C_COLOW	CO	0.0	10.0 ppm
3C_COHIGH	CO	0.0	1200.0 ppm	3C_COHIGH	CO	0.0	1200.0 ppm

Date	Time	Channel		Type	Target Units	Actual Units	Diff Units	Error %	Part60 Allowable Units	Part60 Allowable %		0	Error %	Part75 Allowable Units	Part75 Allowable %	
02/16/2011	15:40	3C_COHIGH	CO	ZERO	0.000	0.000	0.000	0.0	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:40	3C_COHIGH	CO	SPAN	1048.000	1061.300	13.300	1.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	10:17	3C_COHIGH	CO	ZERO	0.000	0.600	0.600	0.1	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	10:17	3C_COHIGH	CO	SPAN	1048.000	1062.500	14.500	1.2	240.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:40	3C_COLOW	CO	ZERO	0.000	0.000	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:40	3C_COLOW	CO	SPAN	8.600	8.600	0.000	0.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	10:17	3C_COLOW	CO	ZERO	0.000	0.200	0.200	2.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	10:17	3C_COLOW	CO	SPAN	8.600	8.700	0.100	1.0	2.0	20.0	PASS	0	- N/A -	- N/A -	- N/A -	- N/A -
02/16/2011	15:40	3C_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/16/2011	15:40	3C_NOXHIGH	NOx	SPAN	176.200	175.300	-0.900	-0.5	20.0	10.0	PASS	0	-0.5	10.000	5.0	PASS
02/16/2011	10:17	3C_NOXHIGH	NOx	ZERO	0.000	0.000	0.000	0.0	20.0	10.0	PASS	0	0.0	10.000	5.0	PASS
02/16/2011	10:17	3C_NOXHIGH	NOx	SPAN	176.200	175.500	-0.700	-0.3	20.0	10.0	PASS	0	-0.3	10.000	5.0	PASS
02/16/2011	15:40	3C_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	15:40	3C_NOXLOW	NOx	SPAN	8.600	8.500	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/16/2011	10:17	3C_NOXLOW	NOx	ZERO	0.000	0.000	0.000	0.0	1.0	10.0	PASS	0	0.0	5.000	5.0	PASS
02/16/2011	10:17	3C_NOXLOW	NOx	SPAN	8.600	8.500	-0.100	-1.0	1.0	10.0	PASS	0	-1.0	5.000	5.0	PASS
02/16/2011	15:40	3C_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/16/2011	15:40	3C_O2	O2	SPAN	20.900	20.890	-0.010	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/16/2011	10:17	3C_O2	O2	ZERO	0.000	0.000	0.000	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS
02/16/2011	10:17	3C_O2	O2	SPAN	20.900	20.970	0.070	- N/A -	2.0	- N/A -	PASS	0	- N/A -	1.000	- N/A -	PASS

FAIL = Difference Error > Regulations Allow
WARN = Error < Daily Allowed but > 5 Consecutive Days Allowed
TARG = Invalid Target (not within regulatory specs)
RDG = Reading exceeds "Range of Analyzer"
WD = Number of Consecutive Days in Warning - ('?' Not Available) - ('OOC' No Passed Cal. since a Failed Daily or 5 Days in Warning)
Note: 40CFR75 pass/fail determination is performed after rounding the value of Error%, or Drift, to one decimal place

Daily Stack Calibration Report
Generated: 2/16/2011

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 2/16/2011
Period End: 2/16/2011
Included Calibrations: **Daily (40CFR60)/(40CFR75)**

Part 60 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3C_COHIGH	CO	0.3	0.1%	13.9	1.2%
3C_COLOW	CO	0.1	1.0%	0.0	0.5%
3C_NOXHIGH	NOx	0.0	0.0%	0.8	0.4%
3C_NOXLOW	NOx	0.0	0.0%	0.1	1.0%
3C_O2	O2	0.0	- N/A -	0.0	- N/A -

Part 75 Calibration (Absolute Average DIFF and Calibration % Error)

		----ZERO----		----SPAN----	
Channel		Diff Units	Error %	Diff Units	Error %
3C_COHIGH	CO	0.300	- N/A -	13.900	- N/A -
3C_COLOW	CO	0.100	- N/A -	0.050	- N/A -
3C_NOXHIGH	NOx	0.000	0.0%	0.800	0.4%
3C_NOXLOW	NOx	0.000	0.0%	0.100	1.0%
3C_O2	O2	0.000	- N/A -	0.040	- N/A -

Performance Specification

		Part 60		Part 75	
Channel		PASS	FAIL	PASS	FAIL
3C_COHIGH	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_COLOW	CO	<=20.0%	>20.0%	- N/A -	- N/A -
3C_NOXHIGH	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_NOXLOW	NOx	<=10.0%	>10.0%	<=5.0%	>5.0%
3C_O2	O2	<=2.0%	>2.0%	<=1.0%	>1.0%

Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part60 Daily CO] Zero = 20.0 %Range, Span = 20.0 %Range
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf: [Part75 Daily NOx] Zero = 5.0 %Range, Span = 5.0 %Range, [Part60 Daily NOx] Zero = 10.0 %Range, Span = 10.0 %Range
AltPerf: [Part75 Daily NOx] Zero = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm), Span = 5 ppm (Range<=50 ppm)/10 ppm (50 ppm<Range<=200 ppm)
Perf:
[Part75 Daily O2] Zero = 1.0 %O2, Span = 1.0 %O2, [Part60 Daily O2] Zero = 2.0 %O2, Span = 2.0 %O2

APPENDIX 4

LINEARITY AND CGA SUMMARY TABLES

FLORIDA POWER & LIGHT
CONTINUOUS EMISSION MONITORS
LINEARITY CHECK WORKSHEET

Plant West County
Unit PWC 3C

Date 03/14/11 **Quarter** 1st, 2011
Technician J.R.Schwartz / J. Hewett

NOx ANALYZER
Manufacturer Thermo
Serial # 0934939234
Span Setting 0 - 200 ppm
Component ID A01
Monitoring Sys. ID A01
Unit/Stack ID PWC3C

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass / Fail
	1517	51.10	50.80	-0.30	<or= 5%		<or= 5ppm
Low	1529	51.10	49.90	-1.20		ALM025866	
	1541	51.10	49.90	-1.20	1.76		PASS
	1521	110.70	107.70	-3.00			
Mid	1533	110.70	107.20	-3.50		ALM063790	
	1545	110.70	107.20	-3.50	3.01		PASS
	1525	176.20	173.70	-2.50			
High	1537	176.20	173.60	-2.60		CC21072	
	1549	176.20	173.00	-3.20	1.57		PASS

CO ANALYZER
Manufacturer Thermo
Serial# CM09400114
Span Setting 0 - 1200 ppm
Component ID A02
Monitoring Sys. ID A02
Unit/Stack ID PWC3C

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass / Fail
	1517	301.00	300.00	-1.00	<or= 15%		
Low	1529	301.00	297.70	-3.30		ALM025866	
	1541	301.00	298.40	-2.60	0.76		PASS
	1521	662.00	652.70	-9.30			
Mid	1533	662.00	651.60	-10.40		ALM063790	
	1545	662.00	651.10	-10.90	1.54		PASS
	1525	1048.00	1094.20	46.20			
High	1537	1048.00	1094.90	46.90		CC21072	
	1549	1048.00	1097.00	49.00	4.52		PASS

CO ANALYZER
Manufacturer Thermo
Serial # CM09400114
Span Setting 0 - 10 ppm
Component ID A01
Monitoring Sys. ID A02
Unit/Stack ID PWC3C

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass / Fail
	1627	2.53	2.70	0.17	<or= 15%		
Low	1639	2.53	2.70	0.17		ALM016434	
	1651	2.53	2.70	0.17	6.72		PASS
	1631	5.57	5.60	0.03			
Mid	1643	5.57	5.90	0.33		ALM059441	
	1655	5.57	5.40	-0.17	1.14		PASS
	1635	8.56	8.10	-0.46			
High	1647	8.56	8.60	0.04		CC343664	
	1659	8.56	8.40	-0.16	2.26		PASS

O2 ANALYZER
Manufacturer Servomex
Serial # 01440DIV02/4249
Span Setting 0 - 25 %
Component ID A02
Monitoring Sys. ID A01
Unit/Stack ID PWC3C

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass / Fail
	1552	6.24	6.18	-0.06	<or= 5 %		<or= .5
Low	1604	6.24	6.37	0.13		ALM016434	
	1616	6.24	6.38	0.14	1.12		PASS
	1556	13.80	13.70	-0.10			
Mid	1608	13.80	13.71	-0.09		ALM032282	
	1620	13.80	13.76	-0.04	0.56		PASS
	1600	22.60	22.44	-0.16			
High	1612	22.60	22.50	-0.10		ALM008490	
	1624	22.60	22.48	-0.12	0.56		PASS

APPENDIX 5

CYCLE TIME SUPPORTING DOCUMENTATION

Font11

Babcock & Wilcox Power Generation Group NetDAHS©
Average Values Report
Version 59.0
Generated: 3/23/2011 16:09

Company: Florida Power & Light
Plant: West County Plant
City/St: Loxahatchee, FL 33470
Source: stack3c

Period Start: 3/14/2011 10:10
Period End: 3/14/2011 10:46
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start	3C_NOX ppm	3C_NOXLOW ppm	3C_NOXHIGH ppm	3C_O2 %	3C_MW_TOT MW
3/14/2011 10:10	0.7	0.7	0.7	13.07	387.6
3/14/2011 10:11	0.6	0.6	0.6	13.09	386.5
3/14/2011 10:12	0.6	0.6	0.6	13.11	385.0
3/14/2011 10:13	0.5	0.5	0.6	13.13	385.0
3/14/2011 10:14	0.5	0.5	0.6	13.11	385.4
3/14/2011 10:15	0.6	0.6	0.6	13.10	385.6
3/14/2011 10:16	1.3	1.3	1.3	4.57	385.2
3/14/2011 10:17	-0.1	-0.1	-0.1	0.07	385.7
3/14/2011 10:18	-0.1	-0.1	-0.1	0.05	386.6
3/14/2011 10:19	-0.1	-0.1	-0.1	0.03	386.7
3/14/2011 10:20	0.1	0.1	0.1	7.67	386.5
3/14/2011 10:21	0.5	0.5	0.5	13.06	386.7
3/14/2011 10:22	0.5	0.5	0.5	13.09	387.5
3/14/2011 10:23	0.5	0.5	0.5	13.09	388.1
3/14/2011 10:24	3.7	3.7	3.6	4.78	388.1
3/14/2011 10:25	8.3	8.3	8.0	0.06	387.7
3/14/2011 10:26	8.3	8.3	8.0	0.04	388.0
3/14/2011 10:27	8.3	8.4	8.0	0.03	386.6
3/14/2011 10:28	5.2	5.2	5.0	7.49	387.1
3/14/2011 10:29	0.5	0.5	0.6	13.06	387.5
3/14/2011 10:30	0.5	0.5	0.5	13.06	386.5
3/14/2011 10:31	0.5	0.5	0.5	13.06	385.7
3/14/2011 10:32	5.4	5.4	43.9	4.69	384.1
3/14/2011 10:33	10.1	10.1	174.3	0.06	384.0
3/14/2011 10:34	10.1	10.1	174.7	0.04	384.4
3/14/2011 10:35	37.6	10.1	174.9	0.03	385.4
3/14/2011 10:36	112.5	7.8	100.8	7.92	386.5
3/14/2011 10:37	1.6	1.6	1.5	13.01	386.7
3/14/2011 10:38	1.0	1.0	1.0	13.07	385.9
3/14/2011 10:39	0.7	0.7	0.7	13.10	386.5
3/14/2011 10:40	4.0	4.0	12.1	16.13	387.8
3/14/2011 10:41	0.0	0.0	0.1	20.91	388.2
3/14/2011 10:42	0.0	0.0	0.0	20.93	387.8
3/14/2011 10:43	0.0	0.0	0.0	20.95	387.6
3/14/2011 10:44	0.2	0.2	0.1	16.36	387.1
3/14/2011 10:45	0.5	0.5	0.5	13.15	387.7
3/14/2011 10:46	0.5	0.5	0.5	13.15	386.9
Final Average*	6.1	2.5	19.6	9.60	386.5
Maximum*	112.5	7.8	100.8	16.36	388.2
Minimum*	0.1	0.1	0.1	7.49	384.0

NOxH - 176.2 ppm
NOxL - 8.6 ppm
O_2 - 20.9%

*Does not include Invalid Averaging Periods ("N/A")

CUSTOM INSTRUMENTATION SERVICES CORPORATION

40 CFR 60 CO Response Time Test

SITE NAME West County

DATE 3/14/11

UNIT NUMBER 3C

Performed by Justin Hewett

Reference Gas Cylinder:	Label Concentration	Serial Number	Expiration Date
Nitrogen:		ALMØ25794	
CO / Low	8.563 ppm	CC343604	10-21-12

Nominal Stack Concentrations prior to test:

Oxygen: 13.12 % CO: 0.714 ppm

Record the following for reference to recorded DAHS data:

Gas Injection	Time	Analyzer Response	Response Time Seconds
Start of Test (Audit On)	17:50:00	0.714	
ON: Zero Gas	17:53:00	0.339	85
OFF: Zero Gas		0.214	
ON: CO/L	17:56:00	9.29	58
OFF: CO/L		9.13	
ON: Zero Gas	17:59:00	0.413	71
OFF: Zero Gas		0.277	
ON: CO/L	18:02:00	8.73	72
OFF: CO/L		9.18	
ON: Zero Gas	18:05:00	0.414	78
OFF: Zero Gas		0.201	
ON: CO/L	18:08:00	8.89	72
OFF: CO/L		9.10	
ON: Zero Gas	18:11:00	0.409	78
OFF: Zero Gas	18:14:00	0.152	
End of Test (Audit Off)	18:17:00	0.708	

APPENDIX 6

EPA PROTOCOL GAS CERTIFICATES

Airgas.

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E15A1668	Reference Number:	122-124238078-3
Cylinder Number:	CC343664	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 21, 2010	Valve Outlet:	660

Expiration Date: Oct 21, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NOx	8.500 PPM	8.615 PPM	G1	+/- 1% NIST Traceable
NITRIC OXIDE	8.500 PPM	8.615 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	8.500 PPM	8.563 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	080609	CC255244	10.04PPM CARBON MONOXIDE/NITROGEN	Jun 15, 2012
NTRM	100603	CC280952	20.34PPM NITRIC OXIDE/NITROGEN	Feb 01, 2013
NTRM	100603	CC280952 NOX	20.34PPM NOx/NITROGEN	Feb 01, 2013

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Horiba APMA-360 CO (0-50ppm)	Infrared	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010
TECO 42C NOX (0.05-100ppm)	Chemiluminescence	Sep 27, 2010

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

Airgas.

CERTIFICATE OF ANALYSIS
Grade of Product: EPA Protocol

Part Number:	E03NI99E15A0011	Reference Number:	122-124238078-2
Cylinder Number:	CC21072	Cylinder Volume:	144 Cu.Ft.
Laboratory:	ASG - Durham - NC	Cylinder Pressure:	2015 PSIG
Analysis Date:	Oct 19, 2010	Valve Outlet:	660

Expiration Date: Oct 19, 2012

Certification performed in accordance with "EPA Traceability Protocol (Sept. 1997)" using the assay procedures listed. Analytical Methodology does not require correction for analytical interferences. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 150 psig.i.e. 1 Mega Pascal

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty
NITRIC OXIDE	175.0 PPM	176.2 PPM	G1	+/- 1% NIST Traceable
CARBON MONOXIDE	1035 PPM	1048 PPM	G1	+/- 1% NIST Traceable
NITROGEN	Balance			
Total oxides of nitrogen		177.2 PPM		For Reference Only

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Expiration Date
NTRM	090603	CC288058	250.6PPM NITRIC OXIDE/NITROGEN	Feb 01, 2011
NTRM	020502	SG9142254BAL	1488PPM CARBON MONOXIDE/NITROGEN	May 15, 2012

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 #1 CO	FTIR	Oct 04, 2010
Nicolet 6700 #1 NO	FTIR	Oct 04, 2010

Triad Data Available Upon Request

Notes:

Signature on file

Approved for Release

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

Shipped From: 2330 HAMILTON BOULEVARD
SOUTH PLAINFIELD NJ 07080
Phone: 908-754-7700 Fax: 908-754-7303

CERTIFICATE OF ANALYSIS

AIR LIQUIDE AMERICA SPECIALTY GASES

3301 COUNTY RD 630 W

FORT MEADE FL 33841

PROJECT #: 07-97166-002
PO#: STOCK ORDER
ITEM #: 0701841 AL
DATE: 25Sep2009

CYLINDER #: ALM025794
FILL PRESSURE: 02000 PSIG

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SO2	0.1 PPM	<0.1 PPM
NOX	0.1 PPM	<0.1 PPM
CO	0.5 PPM	<0.5 PPM
CO2	1 PPM	<1 PPM
THC	0.1 PPM	<0.1 PPM
H2O	2 PPM	<2 PPM
O2	0.5 PPM	<0.5 PPM

ANALYST: [signature]

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

COMPLIANCE CLASS
Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-001

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Amended Procedure G-2, August 25, 1999.

Cylinder Number: ALM016434 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	2.53	PPM	+/- 2%	NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol procedures , September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

Special Notes: CO RANGE 2-3 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:

Document # : 40533107-002

Customer

FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM059441 **Certification Date:** 21Feb2011 **Exp. Date:** 22Aug2011
Cylinder Pressure*:** 2015 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	5.57	PPM	+/- 1%	Direct NIST and VSL
NITROGEN		BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1677	01Jun2012	KAL004042	9.855 PPM	CARBON MONOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/ULTRAMAT 6E/R8-236	10Feb2011	CO/CO2 ANALYZER

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis

CARBON MONOXIDE
Date: 14Feb2011 Response Unit:VOLTS

Z1=-0.03320	R1=4.84370	T1=2.69370
R2=4.85010	Z2=-0.05020	T2=2.68980
Z3=-0.03980	T3=2.69150	R3=4.84280

Avg. Concentration: 5.580 PPM

Second Triad Analysis

Date: 21Feb2011 Response Unit: VOLTS

Z1=0.02640	R1=4.86920	T1=2.72860
R2=4.87880	Z2=0.03380	T2=2.73790
Z3=0.03600	T3=2.73970	R3=4.88910

Avg. Concentration: 5.560 PPM

Calibration Curve

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999990739
Constants: A=0.0190246
B=2.077972083 C=-0.0120773
D= E=

Special Notes: CO RANGE 5-6 PPM

APPROVED BY: Joe Smith
JOE SMITH

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: CEM-6035
Project No.: 01-35874-002

Customer

FLORIDA P&L-MARTIN PLT-PO#-CEM ONLY

21900 SW WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM025866 Certification Date: 29Oct2010 Exp. Date: 28Oct2012
Cylinder Pressure***: 1962 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	301	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	51.1	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	51.4	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2636	02Oct2011	KAL003888	240.8 PPM	CARBON MONOXIDE
ITRM 1683	01Nov2013	KAL003284	46.90 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	11Oct2010	FTIR
FTIR//000928781	29Oct2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.01673 R1=239.9048 T1=299.7323	Z1=-0.03420 R1=240.0633 T1=299.7638	r=9.99998E-1
R2=239.9334 Z2=0.14015 T2=299.9462	R2=240.1269 Z2=0.03466 T2=299.9593	Constants: A=0.00000E+0
Z3=0.17124 T3=300.3045 R3=239.9374	Z3=0.08533 T3=300.2578 R3=240.1329	B=8.96123E-1 C=3.52000E-4
Avg. Concentration: 301.1 PPM	Avg. Concentration: 300.9 PPM	D=0.00000E+0 E=0.00000E+0

NITRIC OXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 22Oct2010 Response Unit:PPM	Date: 29Oct2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.12887 R1=46.84412 T1=51.05194	Z1=0.07736 R1=46.70219 T1=50.89229	r=9.99999E-1
R2=46.89432 Z2=-0.07937 T2=51.14584	R2=46.79544 Z2=0.12585 T2=50.91652	Constants: A=0.00000E+0
Z3=0.01313 T3=51.15833 R3=46.98010	Z3=0.14749 T3=51.04982 R3=46.83210	B=9.82452E-1 C=1.98000E-4
Avg. Concentration: 51.11 PPM	Avg. Concentration: 51.10 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: *[signature]*
Michael A. Kuhns

PMA NOx/CO High/mid

AIR LIQUIDE Air Liquide America Specialty Gases LLC SCOTT™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.: 4500250736
Project No.: 01-19426-012

Customer

FLORIDA POWER & LIGHT

MARTIN PLANT
21900 S.W. WARFIELD BLVD
INDIANTOWN FL 34956

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM063790 Certification Date: 12Jan2010 Exp. Date: 12Jan2012
Cylinder Pressure***: 2002 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
CARBON MONOXIDE	662	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	110.7	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	111.1	PPM		Reference Value Only

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 1681	02Oct2010	KAL003160	970.1 PPM	CARBON MONOXIDE
ITRM 1684	15Oct2012	KAL004453	95.84 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	31Dec2009	FTIR
FTIR//000928781	04Jan2010	FTIR

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

CARBON MONOXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 05Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00836 R1=967.7358 T1=659.8589	Z1=-0.06379 R1=967.9088 T1=660.3933	r=9.99999E-1
R2=967.9701 Z2=0.17759 T2=660.2537	R2=968.2288 Z2=0.29739 T2=660.7689	Constants: A=0.00000E+0
Z3=0.50273 T3=660.5182 R3=968.5788	Z3=0.40472 T3=660.9539 R3=968.3168	B=2.58580E-1 C=1.15000E-4
Avg. Concentration: 661.5 PPM	Avg. Concentration: 662.0 PPM	D=0.00000E+0 E=0.00000E+0

NITRIC OXIDE

First Triad Analysis	Second Triad Analysis	Calibration Curve
Date: 05Jan2010 Response Unit:PPM	Date: 12Jan2010 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.29121 R1=95.73315 T1=110.4266	Z1=-0.07261 R1=96.06142 T1=111.0910	r=9.99998E-1
R2=95.81615 Z2=-0.13602 T2=110.6344	R2=96.06672 Z2=-0.05270 T2=111.1651	Constants: A=0.00000E+0
Z3=-0.12519 T3=110.9319 R3=95.98806	Z3=-0.01136 T3=111.2319 R3=96.15300	B=9.94707E-1 C=6.00000E-5
Avg. Concentration: 110.6 PPM	Avg. Concentration: 110.9 PPM	D=0.00000E+0 E=0.00000E+0

APPROVED BY: Michael A Kuhns
Michael A. Kuhns

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-003

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM033049 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	6.24 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2658	01Feb2016	K001907	10.03 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:MV
Z1=-0.00190 R1=4.91170 T1=3.05330
R2=4.91300 Z2=0.00000 T2=3.05350
Z3=-0.00140 T3=3.05260 R3=4.91510
Avg. Concentration: 6.240 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999996776
Constants: A=0.015250224
B=2.040162442 C=
D= E=

Special Notes: O2 RANGE 5-7.5%

APPROVED BY: ______________________
JOHN OSHEA

AIR LIQUIDE | Air Liquide America Specialty Gases LLC | Scott™

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 40533107-004

Customer
FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM032282 **Certification Date:** 18Feb2011 **Exp. Date:** 17Feb2014
Cylinder Pressure*:** 2000 PSIG

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	13.8 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis | **Second Triad Analysis** | **Calibration Curve**

OXYGEN
Date: 18Feb2011 Response Unit:VOLTS
Z1=-0.00160 R1=4.58680 T1=2.72560
R2=4.58540 Z2=-0.00110 T2=2.72480
Z3=-0.00210 T3=2.72550 R3=4.58360
Avg. Concentration: 13.80 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053895951 C=
D= E=

APPROVED BY: David Ashnoff
DAVID ASHNOFF

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

RATA CLASS

Dual-Analyzed Calibration Standard

6141 EASTON ROAD, BLDG 1, PLUMSTEADVILLE, PA 18949-0310 Phone: 800-331-4953 Fax: 215-766-7226

CERTIFICATE OF ACCURACY: EPA Protocol Gas

Assay Laboratory

AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:

Document # : 40533107-005

Customer

FLORIDA POWER & LIGHT

WEST COUNTY ENERGY
20202 STATE ROAD 80
LOXAHATCHEE FL 33470
US

ANALYTICAL INFORMATION

This certification was performed according to EPA Traceability Protocol For Assay & Certification of Gaseous Calibration Standards; Procedure G-1; September, 1997.

Cylinder Number: ALM008490 **Certification Date:** 15Feb2011 **Exp. Date:** 14Feb2014
Cylinder Pressure*:** 2000 PSIG **Batch No:** PLUO026512

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
OXYGEN	22.6 %	+/- 1%	Direct NIST and VSL
NITROGEN	BALANCE		

*** Do not use when cylinder pressure is below 150 psig.
** Analytical accuracy is based on the requirements of EPA Protocol Procedure G1, September 1997.

REFERENCE STANDARD

TYPE/SRM NO.	EXPIRATION DATE	CYLINDER NUMBER	CONCENTRATION	COMPONENT
NTRM 2350	01Dec2011	K008902	23.20 %	OXYGEN

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
SIEMENS/OXYMAT 61/V1-0407	14Feb2011	PARAMAGNETIC

ANALYZER READINGS

(Z=Zero Gas R=Reference Gas T=Test Gas r=Correlation Coefficient)

First Triad Analysis **Second Triad Analysis** **Calibration Curve**

OXYGEN

Date: 15Feb2011 Response Unit:VOLTS

Z1=-0.00240	R1=4.58780	T1=4.46640
R2=4.58950	Z2=-0.00150	T2=4.46570
Z3=-0.00120	T3=4.46700	R3=4.58940

Avg. Concentration: 22.60 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=0.999999418 2350
Constants: A=0.01748296
B=5.053896951 C=
D= E=

Special Notes: CO < 0.5 PPM NO < 0.1 PPM

APPROVED BY: David Ashnoff
DAVID ASHNOFF

APPENDIX 7

DAHS VERIFICATION DOCUMENTATION

B&W PGG, KVB-Enertec, INC.
Formula Verification Report
UNIT 3C
Plant Name: WEST COUNTY ENERGY C
ORISPL #: 056407
Date: March 14, 2011

FORMULAS THAT PASSED VERIFICATION:

DateTime	Param	Code	ID	Conc	DilConc	Fc/F	Rate	HI	GCV	Optime	Computed	Reported
03/01/11 20:00	CO2	G-4	C01			1040		2551.2			151.6	151.6
03/01/11 06:00	NOX	F-5	C02	26.1	15	8892.1					0.098	0.098
03/01/11 06:00	NOXM	F-24A	C03				0.098	822.2			80.57	80.6
03/01/11 20:00	HI	D-6	C04				24792.9		102900		2551.2	2551.2
03/01/11 06:00	HI	D-8	C05				18.7		19500		0.4	0.4
03/14/11 10:00	HI	D-15A	C06					0.4			2560.7	2560.7
03/01/11 20:00	SO2	D-5	C07				0.0006	2551.2			1.53072	1.53072
03/01/11 08:00	SO2	D-2	C08	1			22.7				0.5	0.5
03/01/11 07:00	CO2	G-4	C10			1420		0.4			0	0
03/01/11 06:00	CO2	G-4A	C11			1040/1420				0.97	50.4	50.4

Certified for all Utilities reporting under 40 CFR Part 75 with B&W PGG KVB/Enertec Products NetDAHS 8.0.150 SP4 release installed

UTILITY NAME: ANY
PLANT NAME: Any
ORISPL: Any
DAHS SOFTWARE: B&W Power Generation Group - KVB/Enertec Products NetDAHS
DATE PERFORMED: 03/02/2011

I certify that the automated Data Acquisition and Handling system (DAHS) component of each CEM System identified in the attached results was tested and that proper computation of the missing data substitution procedures was verified. The results of the verification test for the missing data routine are included.

John F Downs

March 3, 2011

Signature Date

John F. Downs

Printed Name

Test Number 1

Availability >= 95% and MDP <=24 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 2

Availability = 95% and MDP <=24 hours. Boundary test.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 3

Availability >= 95% and MDP > 24 hours. HB/HA value is greater than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 4

Availability >= 95% and MDP > 24 hours and HB/HA value is less than the 90th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 5

Availability >= 90% and < 95% and MDP <= 8 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 6

Availability >= 90% and < 95% and MDP > 8 hours and HB/HA value is > 95th percentile.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 7

Availability >= 90% and < 95% and MDP > 8 hours and 95th percentile > HB/HA value.

SO2 - Passed
NOX - Passed

FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 8

Availability < 90% and MDP > 0 hours.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 9

Maximum potential Initial missing data period. Load Range or next higher Load Range not available.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 10

Initial missing data period. 720 LookBack Period.

SO2 - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Test Number 11

< 2160 QA hours available. Initial missing data period. Next higher Load Range available.

NOX - Passed
FLOW - Passed

Test Number 12

< 2160 QA hours available. Initial missing data period. Load Range available.

NOX - Passed
FLOW - Passed

Test Number 13

NOx, Flow availability > 80% and < 90% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
MOISTURE - Passed

Test Number 14

NOx, Flow availability < 80% and MDP > 0.

SO2 - Passed
NOX - Passed
FLOW - Passed
CO2 - Passed
O2 - Passed
MOISTURE - Passed

Summary

Number Of Tests Passed: 73
Number Of Tests Failed: 0

Start: 3/2/2011 2:31:56 PM
End: 3/2/2011 2:35:00 PM

APPENDIX 8

40 CFR 75 MONITORING PLAN

ECMPS Client Tool

Version 1.0 2011 Q1

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

Facility Name: West County Energy Center

Facility Details

Facility ID (ORISPL):	56407
Monitoring Plan Location IDs:	WCCT3C
State:	FL
County:	Palm Beach
Latitude:	26.6986
Longitude:	-80.3747

Reporting Frequency

Monitoring Plan Location IDs	Reporting Frequency	Begin Quarter	End Quarter
WCCT3C	Q - Quarterly	2010 QTR 4	

Monitoring Location Attributes

Unit/Stack/Pipe Identifier	Duct Indicator	Ground Elevation	Stack Height	Cross Area Exit	Cross Area Flow	Material Code	Shape Code	Begin Date	End Date
WCCT3C		25	150	359		OTHER	ROUND	12/16/2010	

Unit Operation Information

Unit Identifier	Commence Commercial Operation Date	Commence Operation Date	Boiler/Turbine Type			Max Heat Input		
			Code	Begin Date	End Date	Value (mmBtu)	Begin Date	End Date
WCCT3C	12/18/2010	12/16/2010	CC	12/16/2010		2761.0	12/16/2010	

Unit Type Codes: CC - Combined cycle

Unit Program Information

Unit Identifier	Program Code	Unit Class	Unit Monitor Certification Begin Date	Unit Monitor Certification Deadline
WCCT3C	ARP	P2	12/18/2010	
	CAIRNOX	A	12/18/2010	
	CAIROS	A	12/18/2010	
	CAIRSO2	A	12/18/2010	

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

Unit Fuel

Unit Identifier	Fuel Type	Fuel Indicator	Demonstration Method for GCV	Demonstration Method for Daily Sulfur	Ozone Season Indicator	Begin Date	End Date
WCCT3C	DSL	S				12/16/2010	
	PNG	P				12/16/2010	

Fuel Type Codes:
PNG - Pipeline Natural Gas
DSL - Diesel Oil

Fuel Indicator Codes:
S - Secondary
P - Primary

Unit Controls

Unit Identifier	Parameter	Control Equipment	Original Ind	Seasonal Ind	Installation Date	Optimization Date	Retirement Date
WCCT3C	NOX	DLNB	Y				
	NOX	H2O	Y				
	NOX	O	Y				
	NOX	SCR	Y				

Control Equipment Descriptions:
SCR - Selective Catalytic Reduction
O - Other
H2O - Water Injection
DLNB - Dry Low NOx Burners

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

Monitoring Method

Unit/Stack/Pipe Identifier	Parameter	Methodology	Substitute Data Approach	Bypass Approach Code	Begin Date/Hour	End Date/Hour
WCCT3C	CO2	AD	SPTS		12/16/2010 00	
	HI	AD	SPTS		12/16/2010 00	
	NOX	NOXR			12/16/2010 00	
	NOXR	CEM	SPTS		12/16/2010 00	
	OP	EXP			12/16/2010 00	
	SO2	AD	SPTS		12/16/2010 00	

Parameter Codes:
SO2 - SO2 Hourly Mass Rate (lb/hr)
OP - Opacity
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
CO2 - CO2 Hourly Mass Rate (ton/hr)

Methodology Codes:
NOXR - NOx Mass Calculated from NOx Emission Rate
EXP - Exempt
CEM - Continuous Emission Monitor
AD - Appendix D

Substitute Data Codes:
SPTS - Standard Part 75 for Missing Data

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

Monitoring System / Analytical Components

Unit/Stack /Pipe Identifier	System					Component								
	ID	Type	Des	Begin Date/Hour	End Date/Hour	ID	Type	SAM	BAS	Manufacturer	Model or Version	Serial Number	Begin Date/Hour	End Date/Hour
WCCT3C	C01	NOX	P	12/16/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3C	12/16/2010 00	
						C01	NOX	EXT	D	TECO	42I-LS	0934939234	12/16/2010 00	
						C02	O2	EXT	D	SERVOMEX	1440D	01440D1V 02/4249	12/16/2010 00	
						C03	PRB	EXT		CISCO	EP750	10008100-9	12/16/2010 00	
	C02	GAS	P	12/16/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3C	12/16/2010 00	
						C04	GFFM	TUR		THERMO	6500	6000297822-101	12/16/2010 00	
						C05	GFFM	ORF		ROSEMONT	305AC9	1000512	12/16/2010 00	
	C03	OILM	P	12/16/2010 00		900	DAHS			BABCOCK & WILCOX PGG	8.0.150_SP4	WC3C	12/16/2010 00	
						C06	OFFM	COR		MICRO MOTION	CMF300M	14146723	12/16/2010 00	

System Types Descriptions:
NOX - NOx Emission Rate
GAS - Gas Fuel Flow
OILM - Mass of Oil Fuel Flow

System Designations Descriptions:
P - Primary

Sample Acquisition Method (SAM):
TUR - Turbine
ORF - Orifice
EXT - Dry Extractive
COR - Coriolis

Component Types Descriptions:
DAHS - Data Acquisition and Handling System
NOX - NOx Concentration
O2 - O2 Concentration
PRB - Probe
GFFM - Gas Fuel Flowmeter
OFFM - Oil Fuel Flowmeter

Monitoring System Fuel Flow

Unit/Stack/Pipe Identifier	System ID	Fuel Code	Max Fuel Flow Rate	Units of Measure	Source Code	Begin Date/Hour	End Date/Hour
WCCT3C	C02	PNG	30667.0	HSCF	URV	12/16/2010 00	
	C03	DSL	126880.0	LBHR	UMX	12/16/2010 00	

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

System Fuel Codes Descriptions: PNG - Pipeline Natural Gas
DSL - Diesel Oil

Units of Measure Descriptions: LBHR - Pounds / Hour
HSCF - Hundred Standard Cubic Feet / Hour

Source Codes Descriptions: URV - Upper Range Value
UMX - Unit Maximum Rate

Analyzer Range Data

Unit/Stack/Pipe Identifier	Component Type	Component ID	Range Code	Dual Range Indicator	Begin Date/Hour	End Date/Hour
WCCT3C	NOX	C01	Auto Ranging	Y	12/16/2010 00	
	O2	C02	High Range		12/16/2010 00	

Component Types Descriptions: *NOX - NOx Concentration*
O2 - O2 Concentration

Facility Name: West County Energy Center

Facility ID (ORISPL): 56407

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

Emissions Formulas

Unit/Stack/Pipe Identifier	Parameter	Formula ID	Formula Code	Formula	Begin Date/Hour	End Date/Hour
WCCT3C	CO2	C01	G-4	CO2-gas = (1040 * F#(C04) * (1 / 385) * 44.0) / 2000	12/16/2010 00	
	NOXR	C02	F-5	E = 1.194 * 10 ** - 7 * S#(C01-C01) * F#(C12) * (20.9/(20.9- S#(C02-C01)))	12/16/2010 00	
	NOX	C03	F-24A	NOX_mass = F#(C02)*F#(C06)	12/16/2010 00	
	HI	C04	D-6	HI_gas = (S#(C05-C02) * GCV_gas) / 10 ** 6	12/16/2010 00	
	HI	C05	D-8	HI_oil = S#(C06-C03) * GCV_oil / 10 ** 6	12/16/2010 00	
	HI	C06	D-15A	HI_hr = (F#(C04) * T_gas + F#(C05) * T_oil)/ T_unit	12/16/2010 00	
	SO2	C07	D-5	SO2_glb/hr = 0.0006*F#(C04)	12/16/2010 00	
	SO2	C08	D-2	SO2_rate-oil = 2.0 * S#(C06-C03) * %S_oil / 100.0	12/16/2010 00	
	SO2	C09	D-12	SO2_TOTAL= ((F#(C08) * T_OIL) + (F#(C07) * T_GAS))	12/16/2010 00	
	CO2	C10	G-4	W_CO2 = 1420 * F#(C05) * 1 / 385 * 44.0 / 2000	12/16/2010 00	
	CO2	C11	G-4A	CO2_unit =((F#(C01) * T_gas) + (F#(C10) * T_oil)) / T_unit	12/16/2010 00	
	FD	C12	F-8	F_c = X_oil * 1420 + X_gas * 1040	12/16/2010 00	
	FGAS	C13	N-GAS	GAS_TOTAL = S#(C04-C02) + S#(C05-C02)	12/16/2010 00	

Parameter Codes Descriptions:

CO2 - CO2 Hourly Mass Rate (ton/hr)
NOXR - NOx Emission Rate (lb/mmBtu)
NOX - NOx Hourly Mass Rate (lb/hr)
HI - Heat Input Rate (mmBtu/hr)
SO2 - SO2 Hourly Mass Rate (lb/hr)
FD - F-Factor Dry-basis
FGAS - Gas Hourly Flow Rate (hscf)

Formula Codes Descriptions:

N-GAS - FGAS (net gas flow rate)
G-4A - CO2 (from CO2 rate for multiple fuels)
G-4 - CO2 (from HI, Fc)
F-8 - FD/FC/FW (from multiple fuels)
F-5 - NOXR/SO2R (from NOX or SO2 dry, O2 dry, Fd)
F-24A - NOX (from NOX rate, HI)
D-8 - HI (from oil flow rate, GCV)
D-6 - HI (from gas flow rate, GCV)
D-5 - SO2 (from gas SO2 emission rate, HI)
D-2 - SO2 (from OILM, oil sulfur content)
D-15A - HI (from HI rate for multiple fuels)
D-12 - SO2 (from SO2 rate for multiple fuels)

Facility Name: **West County Energy Center**

Facility ID (ORISPL): **56407**

Monitoring Plan Printout Report

March 28, 2011 07:11 PM

Span Values

Unit/Stack /Pipe Identifier	Comp Type	Scale	Method	MPC/ MPF	MEC	Span Value	Full-Scale Range	Units of Measure	Scale Transition Point	Def. High Range Value	Flow Full Range (SCFH)	Flow Span Value (SCFH)	Begin Date/Hour	End Date/Hour
WCCT3C	NOX	H	TB	200.0	10.0	200.000	200.000	PPM	9.0				12/16/2010 00	
	NOX	L	F		10.0	10.000	10.000	PPM	9.0				12/16/2010 00	
	O2	H				25.000	25.000	PCT					12/16/2010 00	

Component Types Descriptions: NOX - NOx Concentration
O2 - O2 Concentration

Span Method Codes Descriptions: TB - Table Defaults from Part 75
F - Formula

Units of Measure Descriptions: PPM - Parts per Million
PCT - Percentage

Unit/Stack/Pipe Load or Operating Level Information

Unit/Stack/Pipe Identifier	Maximum Hourly Load	Units of Measure	Upper Bound of Range of Operation	Lower Bound of Range of Operation	Designated Normal Op. Level	Second Most Frequently Used Op. Level	Second Normal Indicator	Load Analysis Date	Begin Date/Hour	End Date/Hour
WCCT3C	417	MW	417	55	High	Mid	Yes	12/16/2010	12/16/2010 00	

Units of Measure Descriptions: MW - Megawatt

Monitoring Defaults

Unit/Stack/Pipe Identifier	Parameter	Value	Units of Measure	Purpose Code	Fuel Type	Operating Condition	Source of Value	Begin Date/Hour	End Date/Hour
WCCT3C	NORX	2.2880	LBMMBTU	MD	NFS	A	TEST	12/16/2010 00	
	O2X	19.0000	PCT	DC	NFS	A	DEF	12/16/2010 00	

Parameter Codes Descriptions: O2X - Maximum O2 Concentration (pct)
NORX - Maximum NOx Emission Rate (lb/mmBtu)

Units of Measure Descriptions: PCT - Percentage
LBMMBTU - Pounds / mmBtu

Purpose Codes Descriptions: MD - Missing Data (or Unmonitored Bypass Stack or Emergency Fuel) Default
DC - Diluent Cap

Fuel Type Codes Descriptions: NFS - Non-Fuel Specific

Operating Conditions Descriptions: A - Any Hour

Source Codes Descriptions: TEST - Unit or Stack Testing
DEF - Default Value from Part 75

APPENDIX 9

GAS AND OIL FUEL METER CERTIFICATION DOCUMENTATION

FLOW ELEMENT INSPECTION / CLOSURE REPORT

WEST COUNTY POWER PARTNERS, LLC.
WEST COUNTY ENERGY CENTER - UNIT 3

FLORIDA POWER & LIGHT

Startup Package 3FGA-04

Project Number 161354

Date 2/19/11

Tag Number 3FGA- FE-3001 SN 100512 Checked By Bruce Gordon

Service Description H-C DUCT BNR FG INL FLOW ELEMENT/CALIBRATED SECTION

P&ID 3FGA-M2381 Purchase Spec. 64.0602 Installation Spec. 70.0000

AREA BLDG STRUC COL RD ROW R304 ELEV

	Accept	Reject (*see footnote*)
All shipping, storage materials, removed from FLOW ELEMENT. (ie; braces, packing material, plugs, caps, dessicant, etc.)	BG	
All Mechanical internals installed per installation instructions, and fastened correctly. (If Applicable)	BG	
All internal surfaces coated as per specifications. (If Applicable)	N/A	
All FLOW ELEMENT penetrations clear and free of obstructions.	BG	
FLOW ELEMENT is free of any debris or foreign mater. (ie; welding rods, trash, loose nuts, bolts, washers, dirt, rags, ect.)	BG	
FLOW ELEMENT gasket seating surfaces are clean and free of visible defects.	BG	

Remarks

***NOTE**: If any item is rejected, it must be corrected and reinspected prior to closing the vessel.*

Certificate of Calibration

PO Number	FPLWC 64.0602
Tag Number	3FGA-FE-3001

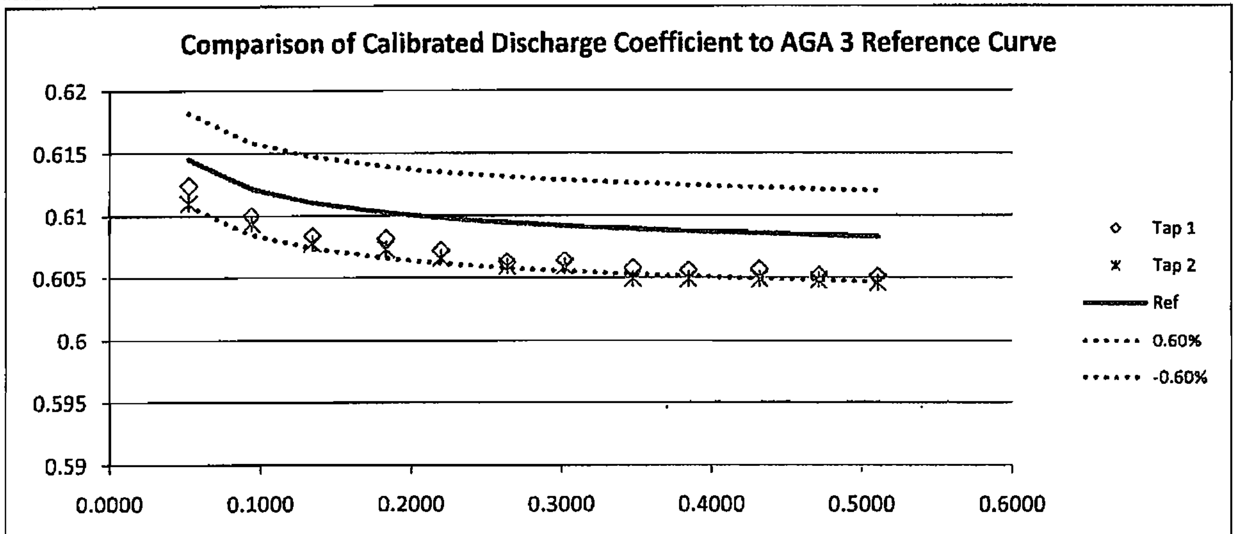
T R I A D

The flow meters for the above referenced purchase order were calibrated at a reputable flow calibration laboratory using the standard procedures of the lab. These procedures have been evaluated by the quality assurance department of Triad Measurement & Equipment, Inc. (Triad). The calibration data has been reviewed by Triad and has been presented in tabular and graphical format for review.

To intitate the test, the flow meters were installed in the laboratory flow line. Careful attention was given to align the flow element with the test line piping, and to assure no gaskets between flanged sections protruded into the flow. Vents were provided at critical locations of the test line to purge the system of air. The test technician verified proper installation of the flow element in the test line prior to introducing water into the system to equalize test line piping and primary element temperature to water temperature. Prior to the test run, the control valve was set to produce the desired flow, while the flow was directed to waste. Sufficient time was allowed to stabilze both the flow and the instrument readings, after which the weigh tank discharge valve was closed and the weigh tank scale indicator and the electric timer were both zeroed. To begin the test run, flow was diverted into the weigh tank, which automatically started the timer. At the start of water collection a computer based data acquisition system was activated to read the meter output, such that the meter output was averaged while the weigh tank was filling. At the end of the run, flow was diverted away from the weigh tank and the timer and data acquisition system were stopped to terminate the test run. The weight of water in the tank, elapsed time, water temperature, and average meter output were recorded on a data sheet. The data were entered into the computer to determine the flow and the results were plotted so that each test run was evaluated before the next run began. The control valve was then adjusted to the next flow and the procedure repeated.

The laboratory has reported that the flow measure uncertainty is within .3% of the true value for each test run. Calibrations of the test instrumentation (tempurature, time, weight and length measurements) are traceable to the National Institute of Standards and Technology (formerly the National Bureau of Standards). Triad certifies that the data included in this report is accurate and has been obtained from original laboratory documents. Based on the periodic review of lab procedures and review of the applicable lab data, the calibration for the meters listsed in the attachements has been accepted.

Michael Bibb - President



Tap 1	
Avg Coef	0.6072
Regression Calc Slope	-0.0134
Regression Calc Intercept	0.6110
Design Rn	861,800

Tap 2	
Avg Coef	0.6065
Regression Calc Slope	-0.0125
Regression Calc Intercept	0.6100
Design Rn	861,800

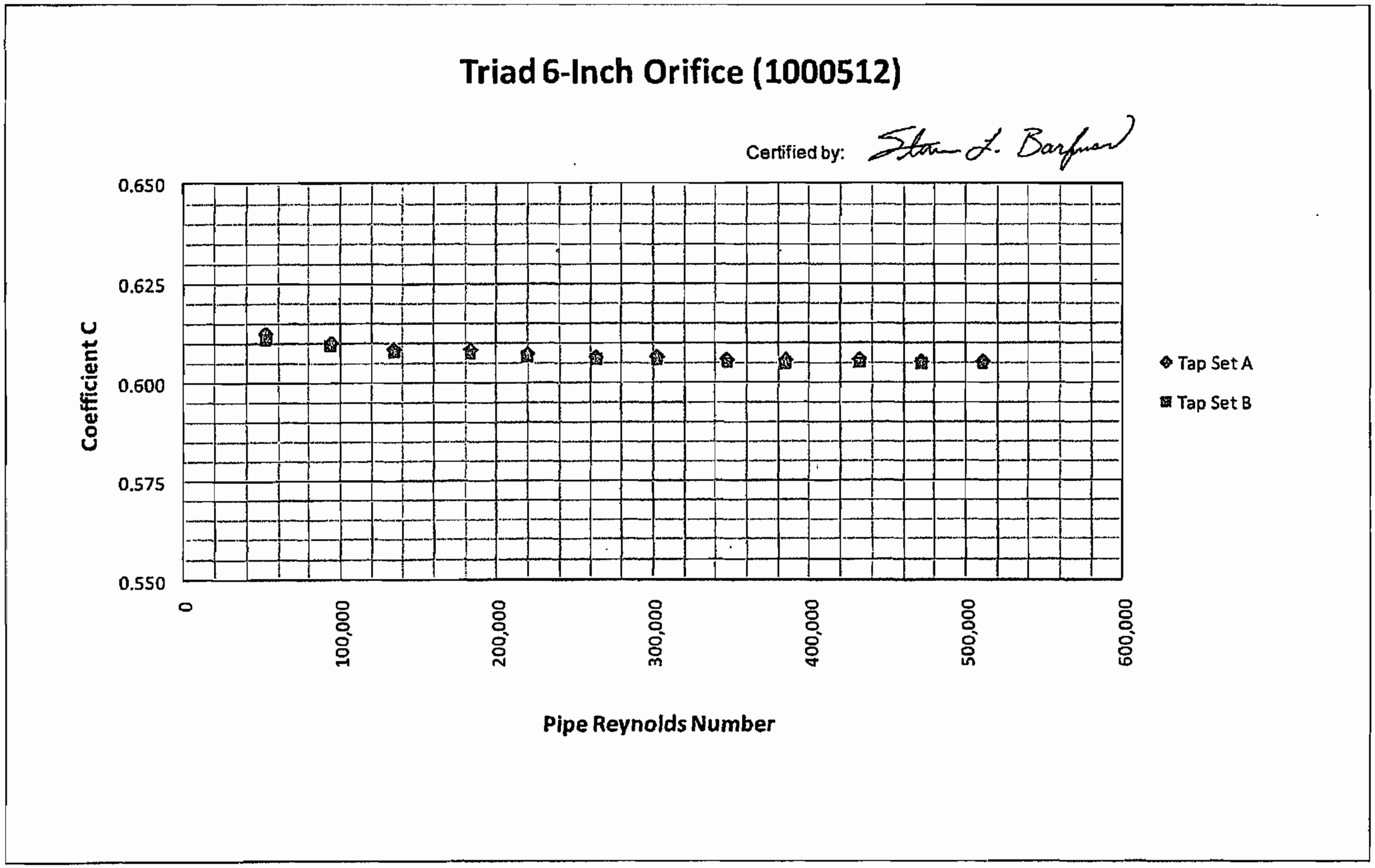


Figure 3. Discharge coefficient versus pipe Reynolds Number for 6-inch meter SN# 1000512

Table 5. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5847
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.068
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000512	Pipe Diameter (in.) =	6.065
Meter / Tag Number:	3FGA-FE-3001 / 3FGA-FE-2001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.3
	Tap Set A	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.59E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	146.6	9.94	52,046	0.6124	0.86%	0.27%
2	264.6	32.63	93,924	0.6100	0.46%	0.28%
3	377.8	66.88	134,122	0.6084	0.20%	0.26%
4	516.1	124.88	183,214	0.6082	0.16%	0.27%
5	618.6	180.00	219,609	0.6072	0.00%	0.26%
6	742.5	260.06	263,588	0.6063	-0.14%	0.25%
7	851.4	341.88	302,264	0.6064	-0.13%	0.27%
8	978.4	452.50	347,367	0.6058	-0.24%	0.26%
9	1083.3	555.00	384,581	0.6056	-0.27%	0.26%
10	1216.3	699.38	431,828	0.6057	-0.24%	0.26%
11	1327.4	834.38	471,271	0.6052	-0.33%	0.25%
12	1438.4	980.00	510,672	0.6051	-0.34%	0.25%

Average coefficient for all data : 0.6072

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

Table 6. Utah Water Research Laboratory Flow Meter Calibration Data

Manufacturer:	Triad Measurement & Equipment	Throat Diameter (in.) =	3.5480
Calibration Date:	3/3/2010	Beta Ratio (d/D) =	0.5847
Calibration Location:	12-inch south supply line	Inlet Diameter (in.) =	6.0680
End User:	WCPP LLC	Nominal Pipe dia. =	6-inch
Serial Number:	1000512	Pipe Diameter (in.) =	6.0650
Meter / Tag Number:	3FGA-FE-3001 / 3FGA-FE-2001		
Meter Description:	6-Inch Orifice Flange Meter Tube	Water Temp. (F) =	43.3
	Tap Set B	Unit Weight(pcf) =	62.42
		Kin. Visc. (ft^2/s) =	1.59E-05

Calibration Performed by: Z. Sharp
Calibration Witnessed by: NA

Run No.	Flow (gpm)	ΔH (in. H_2O)	Inlet Reynolds Number	C	Dev from mean (%)	Uncertainty in C (%)
1	2	3	4	5	6	7
1	146.6	9.98	52,046	0.6110	0.74%	0.27%
2	264.6	32.69	93,924	0.6094	0.48%	0.28%
3	377.8	67.00	134,122	0.6078	0.22%	0.26%
4	516.1	125.25	183,214	0.6073	0.13%	0.27%
5	618.6	180.38	219,609	0.6066	0.01%	0.26%
6	742.5	260.44	263,588	0.6059	-0.10%	0.25%
7	851.4	342.50	302,264	0.6059	-0.10%	0.27%
8	978.4	453.75	347,367	0.6049	-0.26%	0.26%
9	1083.3	556.25	384,581	0.6049	-0.26%	0.26%
10	1216.3	701.25	431,828	0.6049	-0.26%	0.26%
11	1327.4	835.63	471,271	0.6048	-0.28%	0.25%
12	1438.4	981.88	510,672	0.6046	-0.32%	0.25%

Average coefficient for all data : 0.6065

Certified by:

Steven L. Barfuss

Steven L. Barfuss P.E.
Research Assistant Professor

Micro Motion, Inc. **Mass Flowmeter Calibration Certificate** **14146723**

System Under Test

Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
CMF300H999NAFUEZZX	14146723	SSCB/CSSC	81249039	1	1	3C31MBN11CF121
2700R11BCUEZZZ	3129607	SSCB/CSSC	81249039	1	1	3C31MBN11CF121

Core Processor S/N 16118259

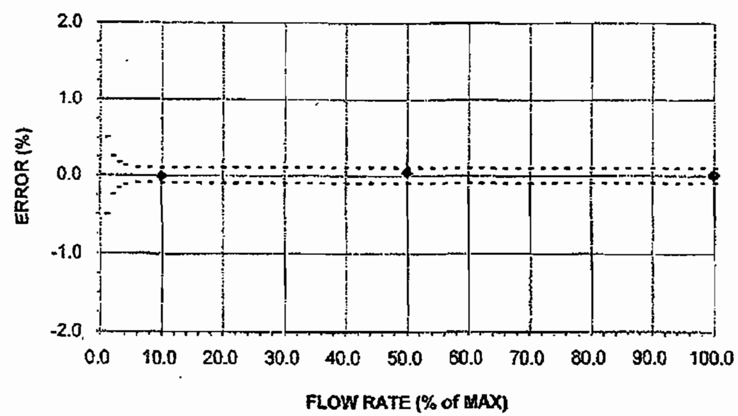
Setup

Calibration : 1.25080479
Calibration Time : 28-Aug-09
Test Stand : TSM3-A/AUTO @ SSCB
Uncertainty : ±0.03 %
Fluid : WATER
100%Rate : 2268.00 kg/min
Pickoff : MMI
100% P/T: 165.61 kPa /22.6 ℃

Results

Status : PASSED
D1 : 0
D2 : 1
K1 : 10587.34
K2 : 12347.97
DT : 2.79
DensCal : 10587123482.79
FD : 231.32
DTG : -
DFQ1 : -
DFQ2 : -
FCF : 757.02
FT : 2.79
FlowCal : 757.022.79
FFQ : -
FTG : -

Detail



Flow (%)	Nominal Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	2268.00	1698.467	1698.173	0.017	0.100
10.0	226.80	170.5536	170.5697	-0.009	0.100
50.0	1134.00	1132.318	1131.886	0.038	0.100
100.0	2268.00	1698.241	1698.237	0.000	0.100

MHI POWER SYSTEMS HQ TAKASAGO
☐ Witnessed
☑ Reviewed
By: H. Saitoh
On: 22 Sep. '09

Technician	Witness	
M. BASNET	H. KOMATSU	H. Komatsu

Traceable to International Standards. Details at www.micromotion.com.

EMERSON PROCESS MANAGEMENT

2009/9/17 11:17 [CSSC]

Micro Motion, Inc.		**Transmitter Configuration Report**					**3129607**
Process Role	Product Code	Serial #	SSC	Order #	Order Line	Line Item	Customer Tag
Sensor	CMF300H999NAFUEZZX	14146723	JPN/CSSC	81249039	1	1	3C31MBN11CF121
Transmitter	2700R11BCUEZZZ	3129607	JPN/CSSC	81249039	1	1	3C31MBN11CF121

Core Processor S/N 16118259

Flow Variable Setup

Direction : FORWARD ONLY
Damping : 0.8 SEC
Mass Flow Unit : lb/h
Volume Flow Unit : ft3/h
Mass Flow Cutoff : 600.01 lb/h
Volume Flow Cutoff : 9.61 ft3/h

Density Variable Setup

Damping : 1.6 SEC
Unit : lb/ft3
Low Limit : 0 g/cm3
High Limit : 5 g/cm3

Temperature Variable Setup

Unit : DEGF
Damping : 4.8 SEC

Channel A Output Setup: (Milliamp Output 1)

LRV : 0 lb/h
URV : 150000 lb/h
Cutoff : 600.01 lb/h
Damping : 0 SEC
Variable : Mass Flow

Channel B Output Setup: (Milliamp Output 2)

LRV : 30 lb/ft3
URV : 60 lb/ft3
Cutoff : - lb/ft3
Damping : 0 SEC
Variable : Density

Channel C Output Setup: (Frequency Output)

Hz : 1 Hz
Flow Rate : 72000 lb/h
Unit Per Pulse : 20 lb/Pulse
Variable : Mass Flow

Bracket Tightened : Good

General Transmitter Setup

Fault Setting(Milliamp) : DOWN SCALE (2mA)
Fault Setting(Freq) : DOWN SCALE (0Hz)
Control Setting : -
Processing Time : 20Hz
Channel A Setting : INTERNAL
Channel B Setting : INTERNAL
Channel C Setting : EXTERNAL

Sensor Setup

D1 : 0
D2 : 1
K1 : 10587.34
K2 : 12347.97
DT : 2.79
FD : 231.32
FlowCal : 757.022.79

Special Units 1 Setup

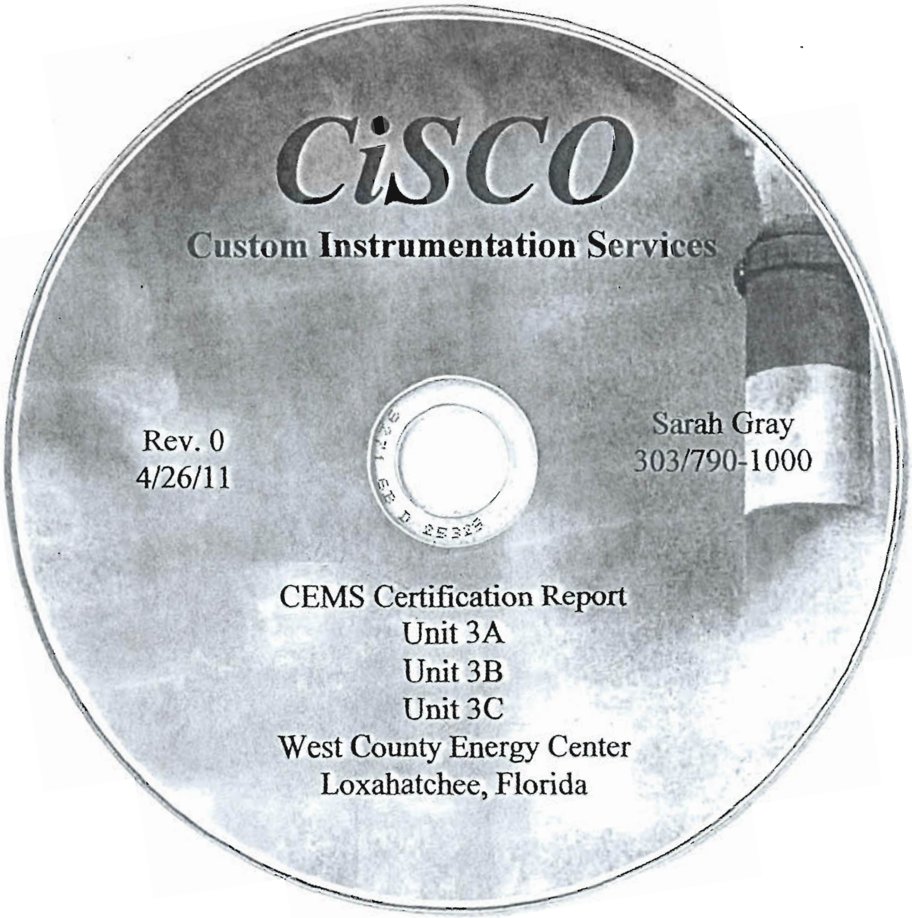
Special Flow Unit : -
Special Total Unit : -
Base Total Unit : -
Base Time Unit : -
Conversion : -

Special Units 2 Setup

Special Flow Unit : -
Special Total Unit : -
Base Total Unit : -
Base Time Unit : -
Conversion : -

Off-Line Configuration Password (code) : 1234

Witness
H. KOMATSU H. Komatsu


CiSCO
Custom Instrumentation Services
Rev. 0
4/26/11
Sarah Gray
303/790-1000
CEMS Certification Report
Unit 3A
Unit 3B
Unit 3C
West County Energy Center
Loxahatchee, Florida


Air Hygiene International, Inc.
Emission
Compliance
Test
Mitsubishi
Model 501G
Units 3A, 3B, and 3C
Florida Power and Light
West County Energy Center
Loxahatchee, Florida
March 12-20, 2011