January 31, 2014

Mr. David McNeal
USEPA, Region 4
Sam Nunn Federal Center
61 Forsyth Street, SW
Atlanta, Georgia USA 30303-3104

Subject: NOx Analyzer Re-certification – Turkey Point Plant Unit 1 (ORIS code 000621)

Dear Mr. McNeal:

In compliance with the Acid Rain Continuous Emission Monitoring Program (40 CFR Part 75.63), Florida Power & Light Company (FPL) is submitting the Continuous Emissions Monitoring System Re-certification Application for the NOx analyzer replacement on Turkey Point Unit 1. In order to continue to ensure CEMS data integrity and analyzer availability, FPL is currently replacing CEMS NOx and O2 analyzers on thirty-eight units throughout the State.

Turkey Point Unit 1 NOx analyzer, serial number 42C 74775-385 was removed from service on November 12, 2013 and replaced by serial number 1315157764. Re-certification test period requirements and data validation, which includes a probationary calibration error test, in accordance with 40 CFR Part 75.20(b)(3)(ii) were performed to initiate a conditional valid data period.

The re-certification of the NOx System was performed in accordance with 40 CFR Part 75, Appendix A during the period of November 13 – December 18, 2013. Enclosed are the quality assurance audits which include a RATA Report, 7 Day Calibration Error Test, Linearity, and updated Monitoring Plan.

If you have any questions with the attached, please feel free to contact me at (561) 691-2781 or Elisa Ostertag at (561) 691-2341.

I am authorized to make this submission of behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Sincerely,

Christian Kiernan

Florida Power & Light Company

700 Universe Blvd., Juno Beach, FL 33408

Designated Representative

Attachment

cc: Jeff Koerner –Division of Air Resource Management, FDEP Tallahassee
Patricia Tampas - FDEP Southeast District
Ray Gordon – Dade County Department of Environmental Resources
Rudy Sanchez - Plant General Manager
Gary Andersen - Environmental Specialist

ECMPS Client Tool

Version 1.0 2013 Q3

Monitoring Plan Printout Report

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Facility Name: Turkey Point

Facility Details

Facility ID (ORISPL):	621
Monitoring Plan Location IDs:	PTP1
State:	FL
County:	Miami-Dade
Latitude:	25.4356
Longitude:	-80.3308

Reporting Frequency

Monitoring Plan Location IDs	Reporting Frequency	Begin Quarter	End Quarter
PTP1	Q - Quarterly	1995 QTR 1	

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
PTP1		19	397	257				01/01/1995	

Unit Operation Information

Unit Identifier	Non-Load Based Ind	Commence Commercial Operation Date	Commence Operation Date	Boiler/Turbine Type			Max Heat Input		
				Code	Begin Date	End Date	Value (mmBtu)	Begin Date	End Date
PTP1		04/22/1967	04/22/1967	DB	04/22/1967		4150.0	04/22/1967	

Unit Type Codes: DB - Dry bottom wall-fired boiler

Unit Program Information

Unit Identifier	Program Code	Unit Class	Unit Monitor Certification Begin Date	Unit Monitor Certification Deadline
PTP1	ARP	P2	01/01/1995	01/01/1995
	CAIRNOX	A	01/01/2008	01/01/2008
	CAIROS	A	05/01/2008	05/01/2008
	CAIRSO2	A	01/01/2009	01/01/2009
	TRNOXOS	A	05/01/2012	05/01/2012

Unit Fuel

Unit Identifier	Fuel Type	Fuel Indicator	Demonstration Method for GCV	Demonstration Method for Daily Sulfur	Ozone Season Indicator	Begin Date	End Date
PTP1	OIL	S				01/01/1995	
	PNG	P				01/01/1995	

Fuel Type Codes: PNG - Pipeline Natural Gas
OIL - Residual 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
PTP1	PART	C	Y				
	NOX	LNB			05/31/1995		

Control Equipment Descriptions: LNB - Low NOx Burner Technology (Dry Bottom only)
C - Cyclone

Facility Name: **Turkey Point**

Facility ID (ORISPL): **621**

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Monitoring Method

Unit/Stack/Pipe Identifier	Parameter	Methodology	Substitute Data Approach	Bypass Approach Code	Begin Date/Hour	End Date/Hour
PTP1	CO2M	FSA	SPTS		01/01/2000 00	
	HI	AD	SPTS		01/01/2000 00	
	NOX	NOXR			01/01/2008 00	
	NOXR	CEM	SPTS		01/01/1995 00	
	OP	COM			01/01/1995 00	
	SO2	AD	SPTS		01/01/2000 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)
CO2M - CO2 Mass (ton)

Methodology Codes:
NOXR - NOx Mass Calculated from NOx Emission Rate
FSA - Fueling Sample and Analysis
COM - Continuous Opacity or Particulate Matter Monitor
CEM - Continuous Emission Monitor
AD - Appendix D

Substitute Data Codes:
SPTS - Standard Part 75 for Missing Data

Monitoring System / Analytical Components

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

Monitoring Plan Printout Report

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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
PTP1	101	SO2	P	01/01/1995 00	12/31/1999 23	001	SO2	DIN	W	TECO	43B	43B-47150-278	01/01/1995 00	12/31/1999 23
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/1995 00	12/31/1999 23
	102	NOX	P	01/01/1995 00		002	NOX	DIN	W	TEI	42	42-47130-277	01/01/1995 00	01/13/2003 14
						003	CO2	DIN	W	CALIFORNIA ANALYTICAL	3300	N3K4184T	01/01/1995 00	01/03/2008 11
						777	PRB	DIN		EPM	PTF1PRB01	PTF1PRB01	01/01/1995 00	09/02/2009 11
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/1995 00	
						A02	NOX	DOU	W	TEI	42C	42C-74775-385	01/13/2003 15	11/12/2013 12
						A03	CO2	DOU	W	CALIFORNIA ANALYTICAL	600D	U10041	01/03/2008 12	
						A77	PRB	DOU		MC PRODUCTS	SP2006	16504/2001083	09/02/2009 12	
						B02	NOX	DOU	W	THERMO	42I	1315157764	11/12/2013 13	
	103	CO2	P	01/01/1995 00	12/31/1999 23	003	CO2	DIN	W	CALIFORNIA ANALYTICAL	3300	N3K4184T	01/01/1995 00	12/31/1999 23
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/1995 00	12/31/1999 23
	104	FLOW	P	01/01/1995 00	12/31/1999 23	004	FLOW	DP	W	AIR MONITOR	MASSTRON	6081D	01/01/1995 00	12/31/1999 23
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/1995 00	12/31/1999 23
	105	OP	P	01/01/1995 00		005	OP	ISC		PHOENIX INSTRUMENTS, INC.	OPAC20/20	OPAC-1065	01/01/1995 00	
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/1995 00	
	108	GAS	P	01/01/2000 00		008	GFFM	ORF		DANIEL INDUSTRIES INC.	2522	385316	01/01/2000 00	06/30/2010 11
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/2000 00	
						A08	GFFM	ORF		DANIEL INDUSTRIES INC.	2522	385187	06/30/2010 12	02/11/2011 11
						B08	GFFM	ORF		DANIEL INDUSTRIES INC.	2522	385315	02/11/2011 12	
	109	OILM	P	01/01/2000 00		009	OFFM	COR		MICROMOTION	CMF300	300147	01/01/2000 00	
						999	DAHS			BABCOCK & WILCOX	9.0.003	NTDAHS-PTP12	01/01/2000 00	

System Types Descriptions:
SO2 - SO2 Concentration
NOX - NOx Emission Rate
CO2 - CO2 Concentration
FLOW - Stack Flow
OP - Opacity
GAS - Gas Fuel Flow
OILM - Mass of Oil Fuel Flow

System Designations Descriptions:
P - Primary

Sample Acquisition Method (SAM):
ORF - Orifice
ISC - Cross Stack In Situ
DP - Differential Pressure
DOU - Dilution Out-of-Stack
DIN - Dilution In-Stack
COR - Coriolis

Component Types Descriptions:
SO2 - SO2 Concentration
DAHS - Data Acquisition and Handling System
NOX - NOx Concentration
CO2 - CO2 Concentration
PRB - Probe
FLOW - Stack Flow Analyzer
OP - Opacity Monitor
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
PTP1	108	PNG	42810.0	HSCF	URV	01/01/2000 00	
	109	OIL	228000.0	LBHR	URV	01/01/2000 00	

System Fuel Codes Descriptions:
PNG - Pipeline Natural Gas
OIL - Residual Oil

Units of Measure Descriptions:
LBHR - Pounds / Hour
HSCF - Hundred Standard Cubic Feet / Hour

Source Codes Descriptions:
URV - Upper Range Value

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

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Analyzer Range Data

Unit/Stack/Pipe Identifier	Component Type	Component ID	Range Code	Dual Range Indicator	Begin Date/Hour	End Date/Hour
PTP1	CO2	003	High Range		01/01/1995 00	01/03/2008 11
	CO2	A03	High Range		01/03/2008 12	
	NOX	002	High Range		01/01/1995 00	12/31/2003 23
	NOX	A02	High Range		01/13/2003 15	11/12/2013 12
	NOX	B02	High Range		11/12/2013 13	
	SO2	001	High Range		01/01/1995 00	12/31/1999 23

Component Types Descriptions:

CO2 - CO2 Concentration

NOX - NOx Concentration

SO2 - SO2 Concentration

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

Monitoring Plan Printout Report

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Emissions Formulas

Unit/Stack/Pipe Identifier	Parameter	Formula ID	Formula Code	Formula	Begin Date/Hour	End Date/Hour
PTP1	SO2	002	D-2	2.0 * S#(009-109) * %SULFUR_OIL / 100	01/01/1995 00	
	NOXR	004	19-7	1.194 * 10**-7 * S#(B02-102) * F#(010) * (100/S#(A03-102))	01/01/1995 00	
	CO2M	006	G-1	(44 * CARBON BURNED_GAS) / 24000	01/01/1995 00	
	HI	008	F-19	S#(009-109) * GCV_OIL / 10**+6	01/01/1995 00	
	SO2	009	D-5	0.0006 * F#(011)	01/01/1995 00	
	FC	010	F-8	X_OIL * 1420 + X_GAS * 1040	01/01/1995 00	
	HI	011	F-20	S#(B08-108) * GCV_GAS / 10**+6	01/01/1995 00	
	CO2M	012	G-1	(44 * CARBON BURNED_OIL) / 24000	01/01/1995 00	
	HI	013	D-15A	(F#(008) * COMBUSTION TIME_OIL + F#(011) * COMBUSTION TIME_GAS) / T_PTP1	01/01/1995 00	
	NOX	014	F-24A	NOX_MASS = F#(004) * F#(013) * T_UNIT	01/01/2008 00	
	SO2	025	D-12	SO2_TOTAL = ((F#(002) * T_OIL) + (F#(009) * T_GAS))	01/01/1995 00	

Parameter Codes Descriptions:

SO2 - SO2 Hourly Mass Rate (lb/hr)
NOXR - NOx Emission Rate (lb/mmBtu)
CO2M - CO2 Mass (ton)
HI - Heat Input Rate (mmBtu/hr)
FC - F-Factor Carbon-based
NOX - NOx Hourly Mass Rate (lb/hr)

Formula Codes Descriptions:

G-1 - CO2M (from fuel composition)
F-8 - FD/FC/FW (from multiple fuels)
F-24A - NOX (from NOX rate, HI)
F-20 - HI (same as D-6)
F-19 - HI (same as D-8)
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)
19-7 - NOXR/SO2R (same as F-6)

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

Monitoring Plan Printout Report

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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
PTP1	CO2	H	HD	13.0		20.000	20.000	PCT					01/01/1995 00	
	FLOW		TR	56361600		1174.200	1174.200	KSCFM					01/01/1995 00	12/31/1999 23
	NOX	H	TR	790.0		1000.000	1000.000	PPM					01/01/1995 00	09/13/2000 19
	NOX	H	TR	634.0		800.000	800.000	PPM					09/13/2000 19	04/29/2009 09
	NOX	H	HD	481.0		600.000	600.000	PPM					04/29/2009 10	
	SO2	H	F	560.4		800.000	800.000	PPM					01/01/1995 00	12/31/1999 23

Component Types Descriptions:
CO2 - CO2 Concentration
FLOW - Stack Flow Analyzer
NOX - NOx Concentration
SO2 - SO2 Concentration

Span Method Codes Descriptions:
TR - Test Results
HD - Historical Data
F - Formula

Units of Measure Descriptions:
PPM - Parts per Million
PCT - Percentage
KSCFM - Thousand Standard Cubic Feet of Stack Flow / Minute

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
PTP1	440	MW	440	44	High	Low	Yes	03/31/2000	03/31/2000 00	07/12/2011 12
	440	MW	440	44	Low	Mid	Yes	07/12/2011	07/12/2011 13	

Units of Measure Descriptions: MW - Megawatt

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

Monitoring Plan Printout Report

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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
PTP1	CO2N	5.0000	PCT	DC	NFS	A	DEF	01/01/1995 00	
	NORX	1.0300	LBMMBTU	MD	NFS	A	TEST	01/01/1995 00	09/13/2000 19
	NORX	0.8270	LBMMBTU	MD	NFS	A	TEST	09/13/2000 19	

Parameter Codes Descriptions: NORX - Maximum NOx Emission Rate (lb/mmBtu)
CO2N - CO2 Minimum Concentration (pct)

Units of Measure Descriptions: PCT - Percentage
LBMMBTU - Pounds / mmBtu

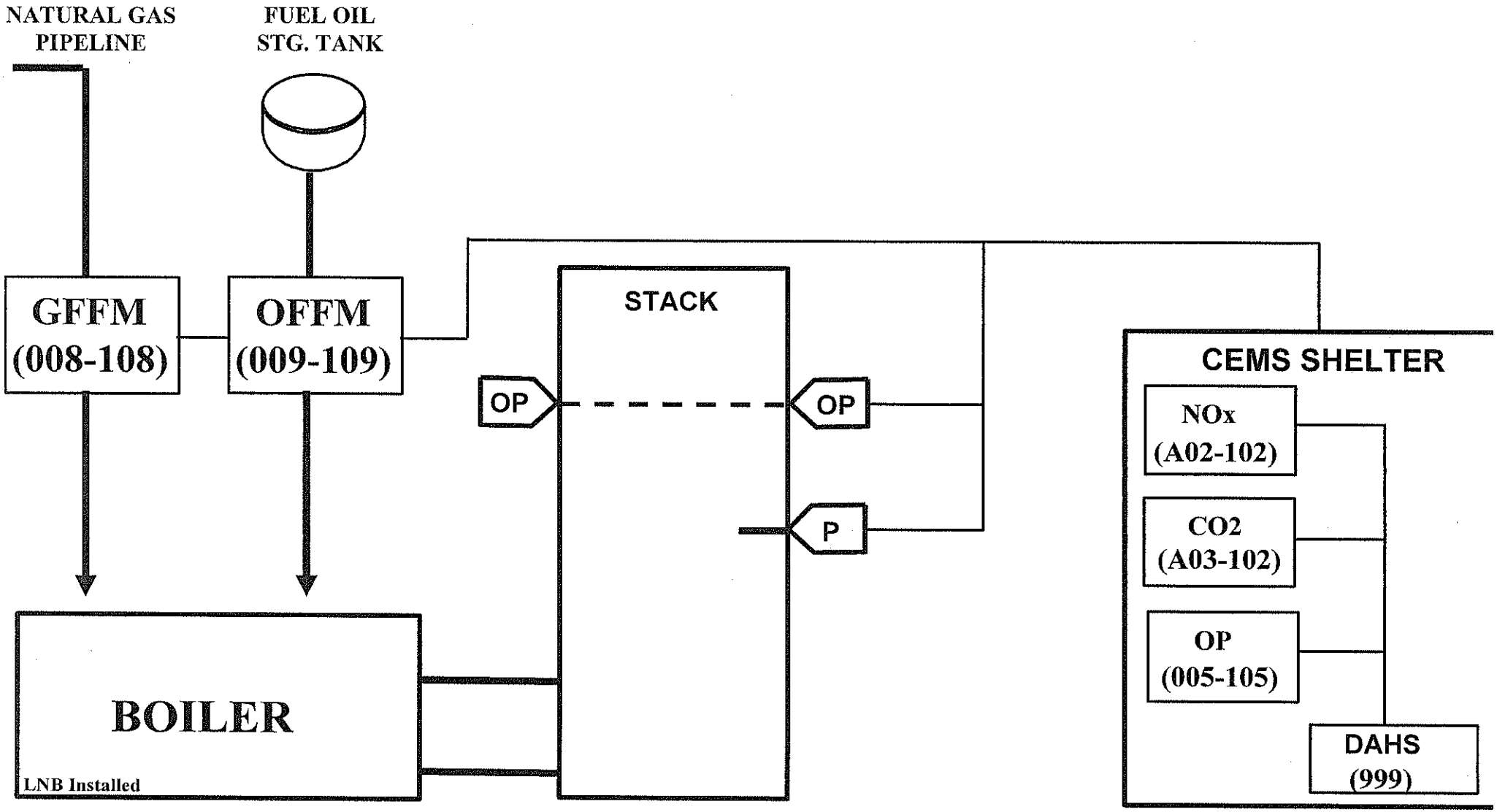
Purpose Codes Descriptions: MD - Missing Data (or Unmonitored Bypass Stack or Emergency Fuel) Default
DC - Diluent Cap

Fuel Type Codes Descriptions: NFS - Non-Fuel Specific

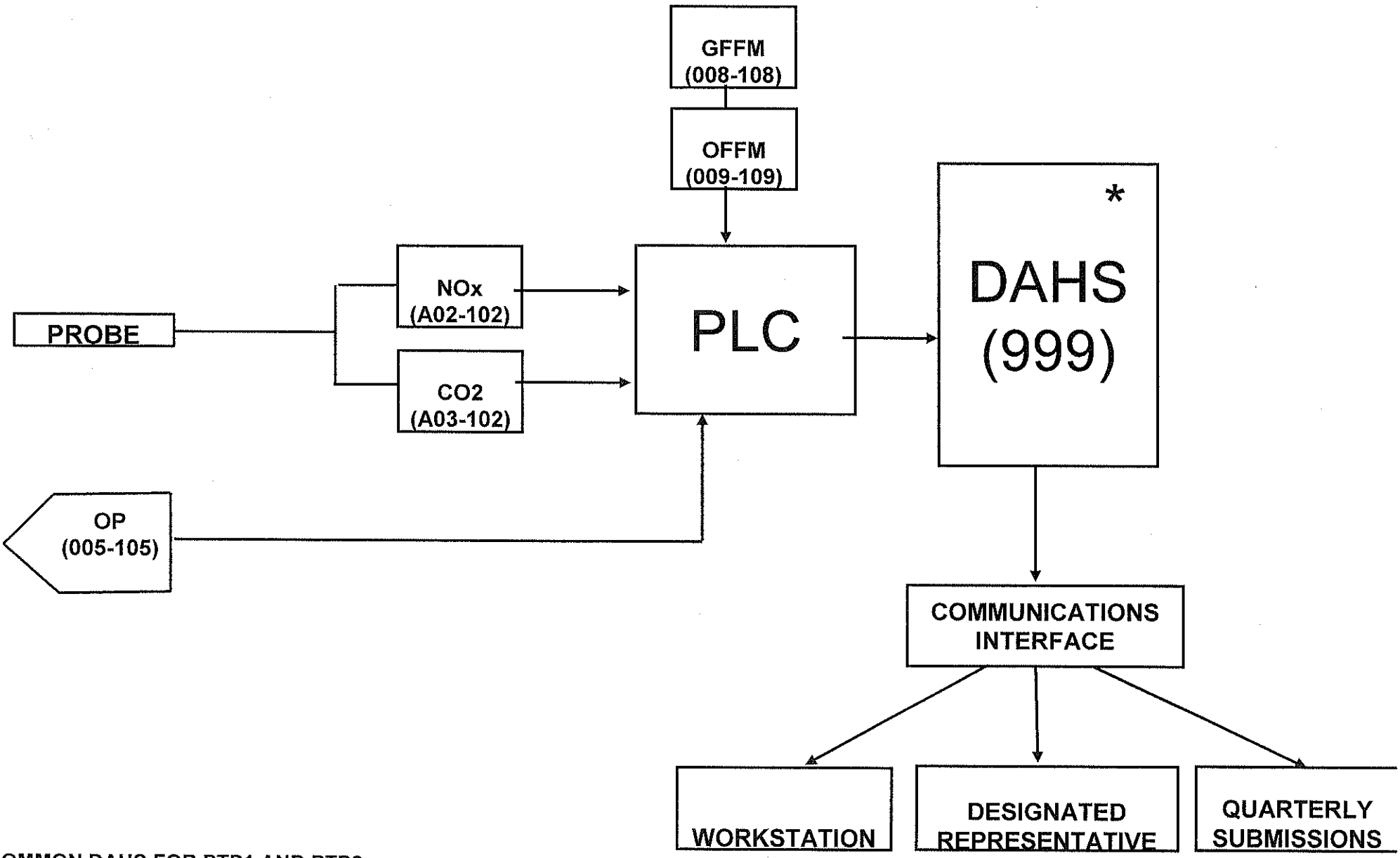
Operating Conditions Descriptions: A - Any Hour

Source Codes Descriptions: TEST - Unit or Stack Testing
DEF - Default Value from Part 75

ATTACHMENT #1 - SCHEMATIC DIAGRAM
TURKEY POINT PLANT - UNIT 1
ORIS CODE: 000621
NADB BOILER ID: PTP1



ATTACHMENT #3 - DAT. .NFORMATION FLOW DIAGRAM
TURKEY POINT PLANT - UNIT 1
ORIS CODE: 000621
NADB BOILER I.D. - PTP1



*COMMON DAHS FOR PTP1 AND PTP2

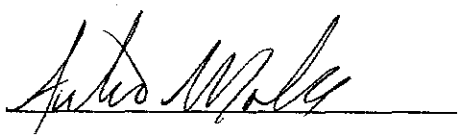
CONTINUOUS EMISSION MONITORING SYSTEM
RELATIVE ACCURACY TEST AUDIT
FLORIDA POWER & LIGHT COMPANY
TURKEY POINT POWER PLANT
UNIT No. 1
December 18, 2013

TEST PERFORMED BY:
FLORIDA POWER & LIGHT
EMISSION TEST GROUP
700 UNIVERSE BLVD.
JUNO BEACH, FLORIDA 33408

CERTIFICATION OF VALIDITY

Relative Accuracy Test Audit
Plant: Turkey Point
Unit: 1
Test Date(s): December 18, 2013

I hereby certify the information and data provided in this emission test report for tests conducted at the above facility on the above date are true and correct, to the best of my knowledge.



A. J. Mocha

Emission Test Coordinator

PERSONNEL AND PROCEDURES

Turkey Point - 12/18/2013

SCOPE OF WORK

The Emission Test Group of Florida Power & Light conducted a relative accuracy test on the Nitrogen Oxides (NOx) and Carbon Dioxide (CO2) continuous emission monitoring system (CEM) which is installed at the Turkey Point Plant Unit No. 1. Said tests were performed on December 18, 2013 to evaluate the relative accuracy of these analyzers in accordance with EPA 40 CFR 75, Appendix A.

TEST CREW:

A. J. Mocha (Test Coordinator)

A. J. De La Vega

S. C. Webb

REPORT COMPILATION:

A. J. Mocha

ANALYZERS

PARAMETER	INSTRUMENT	TYPE	RANGE
Nox	Thermo S/N 0335103532	CHEMILUMINESCENCE	0 - 250
O2	SERVOMEX 1400B S/N 1420B701/932	PARAMAGNETIC	0 - 10
CO2	SERVOMEX 1400B S/N 1410D3453	INFRARED (NDIR)	0 - 20

SUMMARY OF RESULTS

	PERFORMANCE REQUIRED	PERFORMANCE DEMONSTRATED
NOx (lb/MMBTU)	< or = 7.5 %	4.19 %

FIELD PROCEDURES

1. The analyzers are set-up and given a two hour warm-up Period before any calibration procedures are initiated. An interference response test was conducted on each Analyzer prior to initial field use in accordance with 40 CFR, pt. 60, app. A, meth. 20, sec. 5.4.

2. After the completion of the warm-up, calibrations are Performed using EPA Protocol One span gases.

3. Just prior to actual sampling, a system bias check and Response time test is run by injecting an upscale span Gas and a zero gas at the outlet of the sampling probe For each analyzer.

4. Pollutants and diluent were determined using EPA Methods 3A, 6C and 7E.

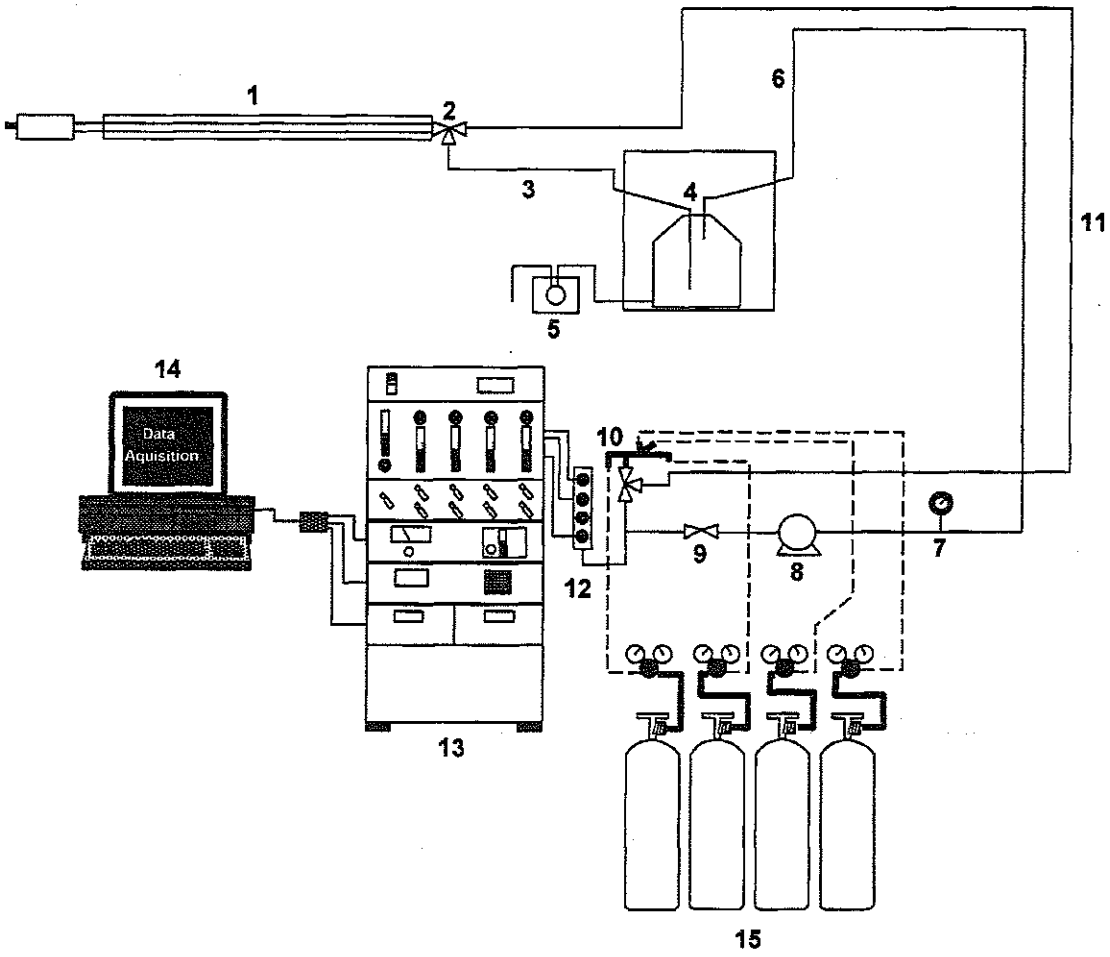
5. Moisture is continuously drained to minimize contact Between the condensate and sample gas.

6. After each run a system bias check is performed to Calculate system drift on each analyzer.

7. The analog output of the analyzers are data logged onto A computer during sampling.

8. The moisture of the flue gas was determined using the condensed water collected in a separate sampling train along with dry gas meter volumes according to EPA Method 4.

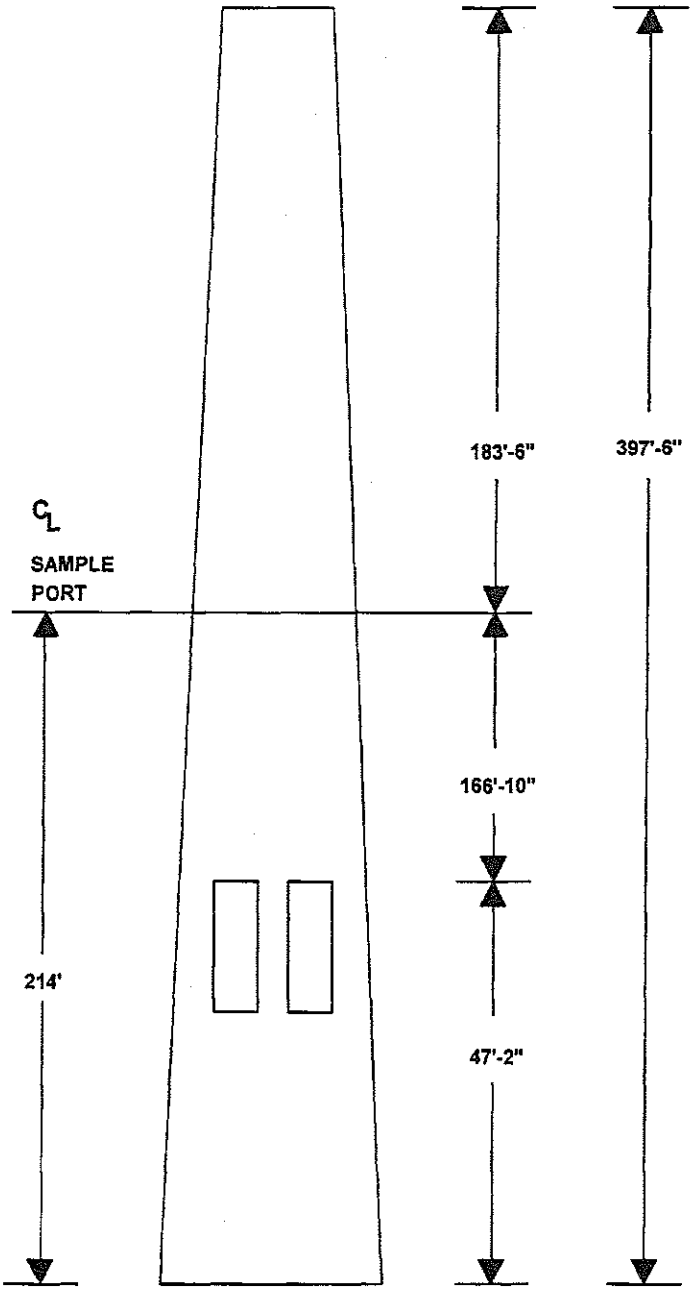
EPA Method 3A,7E & 10 Sampling Train



1. HEATED STAINLESS STEEL PROBE WITH FILTER
2. THREE WAY VALVE
3. HEATED SAMPLE LINE
4. MOISTURE REMOVAL SAMPLING CHILLER
5. MOISTURE REMOVAL PUMP
6. 3/8" O.D. SAMPLE LINE
7. VACUUM GAUGE
8. VACUUM PUMP
9. SAMPLE VALVE
10. CALIBRATION MANIFOLD
11. CALIBRATION GAS LINE
12. GAS MANIFOLD
13. O2/CO2, NOX & CO ANALYZERS
14. DATA ACQUISITION SYSTEM
15. EPA PROTOCOL 1 CALIBRATION GASES

FLORIDA POWER & LIGHT CO.
Stack Diagram and Sampling Points
Turkey Point Unit 1

Pollutant, diluent and moisture sampling is conducted at three points 0.4, 1.2, and 2.0 meters from the inner stack wall as per 40 CFR Part 75 App. A, Sec 6.5.6 (b) (2).



FILE: CEMSPTF1

SAMPLE CALCULATIONS

CORRECTED CONCENTRATIONS, DRY BASIS:

$$\bar{C} = \frac{(C - Co)}{(Cm - Co)} * Cma$$

$\bar{C}$ = Average gas concentration indicated by analyzer, dry basis.

Co = Average of initial and final system calibration bias check responses for the zero gas.

Cm = Average of initial and final system calibration bias check responses for the upscale gas.

Cma = Actual concentration of the upscale gas.

Pollutant Concentration, LB/DSCF:

$$C\ (lb/dscf) = C\ (ppm) * (2.59 * 10^{-9}) * (molecular\ wt.)$$

C (ppm) = Corrected concentration dry basis, ppm.

Molecular weight = 46.01 for NOx, 64.06 for SO2.

EMISSION RATE, LB/MM BTU:

$$E = C\ (lb/dscf) * Fc * \frac{100}{CO2}$$

C (lb/dscf) = pollutant concentration, lb / dscf.

Fc = 1420 dscf/mmbtu oil.

CO2 = Percent carbon dioxide by volume, dry basis.

APPENDIX A

RELATIVE ACCURACY SHEETS

FLORIDA POWER AND LIGHT COMPANY
EMISSION TEST GROUP
700 UNIVERSE BLVD.
JUNO BEACH, FLORIDA 33408

NOx LB/MMBTU RELATIVE ACCURACY

PLANT: TURKEY POINT
UNIT: 1
LOAD: MID 200 MW
DATE: 12/18/2013

ANALYZER: TECO 42
SERIAL # 42I-1315157764

RUN	TIME START	TIME END	REFERENCE METHOD (lb/mmBTU)	CEM RESPONSE (lb/mmBTU)	ARITHMETIC DIFFERENCE	DIFFERENCE SQUARED
1	941	1002	0.222	0.233	-0.011	0.000121
2	1016	1037	0.236	0.239	-0.003	0.000009
3	1045	1106	0.242	0.245	-0.003	0.000009
4	1118	1139	0.237	0.246	-0.009	0.000081
5	1147	1208	0.234	0.243	-0.009	0.000081
6	1218	1239	0.226	0.235	-0.009	0.000081
7	1248	1309	0.228	0.236	-0.008	0.000064 *
8	1319	1340	0.227	0.235	-0.008	0.000064
9	1350	1411	0.222	0.230	-0.008	0.000064

AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
0.230	0.238	-0.068	0.0006

**MEAN DIFFERENCE, $\bar{d}$ (Eq. A-7)	-0.008
**STANDARD DEVIATION, Sd (Eq. A-8)	0.0027
**CONFIDENCE COEFFICIENT, |CC| (Eq. A-9)	0.0021
**PERCENT (%) RELATIVE ACCURACY, RA (Eq. A-10)	4.19
**BIAS ADJUSTMENT FACTOR, BAF (Eq. A-12)	1.000

** 40 CFR 75, Apendix A

* CEMS NUMBER ROUNDED TO MATCH EDR

APPENDIX B

MOISTURE AND POLLUTANT FIELD DATA SHEETS

FLORIDA POWER AND LIGHT CO.

12/18/13

TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.0	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 1 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.00	0.0	-0.02	0.0	0.0
ppm NOx	127.5	127.5	0.0	126.8	-0.3	-0.3
% O2	0.05	0.04	-0.1	0.03	-0.2	-0.1
% O2	5.53	5.53	0.0	5.50	-0.3	-0.3
% CO2	0.03	0.03	0.0	0.00	-0.2	-0.2
% CO2	10.00	10.00	0.0	10.01	0.1	0.1

RUN 1 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 9:41	146.63	6.49	8.26
12/18/2013 9:42	148.63	6.55	8.22
12/18/2013 9:43	147.25	6.47	8.27
12/18/2013 9:44	146.69	6.48	8.26
12/18/2013 9:45	147.75	6.58	8.20
12/18/2013 9:46	147.88	6.56	8.21
12/18/2013 9:47	144.69	6.37	8.32
12/18/2013 9:48	144.81	6.46	8.27
12/18/2013 9:49	147.31	6.50	8.25
12/18/2013 9:50	149.06	6.50	8.25
12/18/2013 9:51	144.81	6.46	8.27
12/18/2013 9:52	146.63	6.45	8.27
12/18/2013 9:53	148.19	6.61	8.16
12/18/2013 9:54	146.06	6.48	8.23
12/18/2013 9:55	146.44	6.43	8.26
12/18/2013 9:56	145.56	6.42	8.25
12/18/2013 9:57	147.19	6.38	8.26
12/18/2013 9:58	148.25	6.47	8.19
12/18/2013 9:59	144.88	6.37	8.26
12/18/2013 10:00	146.13	6.30	8.30
12/18/2013 10:01	146.88	6.44	8.22
12/18/2013 10:02	146.19	6.32	8.29
AVERAGES	**146.72**	**6.46**	**8.25**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	147.15
% O2	6.45
% CO2	8.24
LB/MMBTU NOx	0.222

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 2 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	-0.02	0.0	-0.03	0.0	0.0
ppm NOx	127.5	126.8	-0.3	126.5	-0.4	-0.1
% O2	0.05	0.03	-0.2	0.02	-0.3	-0.1
% O2	5.53	5.50	-0.3	5.47	-0.6	-0.3
% CO2	0.03	0.00	-0.2	0.02	-0.1	0.1
% CO2	10.00	10.01	0.1	10.02	0.1	0.1

RUN 2 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 10:16	150.38	6.53	8.09
12/18/2013 10:17	150.69	6.49	8.13
12/18/2013 10:18	153.13	6.66	8.04
12/18/2013 10:19	149.63	6.44	8.18
12/18/2013 10:20	150.25	6.54	8.12
12/18/2013 10:21	149.44	6.56	8.11
12/18/2013 10:22	149.44	6.47	8.17
12/18/2013 10:23	149.94	6.53	8.13
12/18/2013 10:24	152.63	6.47	8.16
12/18/2013 10:25	153.81	6.49	8.14
12/18/2013 10:26	153.06	6.56	8.08
12/18/2013 10:27	150.69	6.49	8.11
12/18/2013 10:28	152.81	6.52	8.09
12/18/2013 10:29	152.44	6.40	8.15
12/18/2013 10:30	153.69	6.56	8.05
12/18/2013 10:31	153.63	6.37	8.16
12/18/2013 10:32	155.75	6.44	8.11
12/18/2013 10:33	155.81	6.38	8.13
12/18/2013 10:34	154.69	6.36	8.15
12/18/2013 10:35	158.25	6.56	8.01
12/18/2013 10:36	154.19	6.32	8.16
12/18/2013 10:37	154.81	6.42	8.10
AVERAGES	**152.69**	**6.48**	**8.12**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	153.74
% O2	6.50
% CO2	8.10
LB/MMBTU NOx	0.236

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 3 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	-0.03	0.0	0.20	0.1	0.1
ppm NOx	127.5	126.5	-0.4	128.5	0.4	0.8
% O2	0.05	0.02	-0.3	0.03	-0.2	0.1
% O2	5.53	5.47	-0.6	5.52	-0.1	0.5
% CO2	0.03	0.02	-0.1	0.02	-0.1	0.0
% CO2	10.00	10.02	0.1	9.88	-0.6	-0.7

RUN 3 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 10:45	157.06	6.38	8.11
12/18/2013 10:46	156.06	6.25	8.18
12/18/2013 10:47	158.19	6.47	8.05
12/18/2013 10:48	159.69	6.35	8.12
12/18/2013 10:49	160.31	6.39	8.10
12/18/2013 10:50	157.00	6.29	8.15
12/18/2013 10:51	158.56	6.45	8.05
12/18/2013 10:52	157.81	6.31	8.14
12/18/2013 10:53	157.13	6.50	8.02
12/18/2013 10:54	160.00	6.38	8.10
12/18/2013 10:55	158.06	6.31	8.14
12/18/2013 10:56	161.19	6.46	8.04
12/18/2013 10:57	158.06	6.35	8.11
12/18/2013 10:58	158.88	6.43	8.06
12/18/2013 10:59	158.44	6.34	8.12
12/18/2013 11:00	153.81	6.34	8.12
12/18/2013 11:01	158.63	6.40	8.08
12/18/2013 11:02	159.31	6.43	8.06
12/18/2013 11:03	157.00	6.24	8.18
12/18/2013 11:04	158.00	6.34	8.12
12/18/2013 11:05	158.38	6.28	8.16
12/18/2013 11:06	159.75	6.54	7.99
AVERAGES	**158.24**	**6.37**	**8.10**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	158.26
% O2	6.38
% CO2	8.14
LB/MMBTU NOx	0.242

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 4 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.20	0.1	0.23	0.1	0.0
ppm NOx	127.5	128.5	0.4	128.7	0.5	0.1
% O2	0.05	0.03	-0.2	0.03	-0.2	0.0
% O2	5.53	5.52	-0.1	5.53	0.0	0.1
% CO2	0.03	0.02	-0.1	0.03	0.0	0.1
% CO2	10.00	9.88	-0.6	9.87	-0.7	-0.1

RUN 4 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 11:18	157.63	6.51	8.08
12/18/2013 11:19	153.38	6.44	8.13
12/18/2013 11:20	157.00	6.62	8.02
12/18/2013 11:21	158.19	6.58	8.04
12/18/2013 11:22	158.00	6.54	8.07
12/18/2013 11:23	157.00	6.46	8.12
12/18/2013 11:24	158.94	6.61	8.03
12/18/2013 11:25	156.56	6.49	8.11
12/18/2013 11:26	155.81	6.45	8.13
12/18/2013 11:27	159.00	6.64	8.02
12/18/2013 11:28	157.44	6.47	8.12
12/18/2013 11:29	158.63	6.46	8.13
12/18/2013 11:30	157.44	6.47	8.12
12/18/2013 11:31	159.44	6.58	8.05
12/18/2013 11:32	156.88	6.46	8.12
12/18/2013 11:33	158.56	6.52	8.09
12/18/2013 11:34	157.44	6.53	8.08
12/18/2013 11:35	157.63	6.44	8.14
12/18/2013 11:36	155.19	6.52	8.08
12/18/2013 11:37	156.63	6.56	8.06
12/18/2013 11:38	156.13	6.47	8.11
12/18/2013 11:39	158.06	6.48	8.10
AVERAGES	**157.32**	**6.51**	**8.09**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	156.02
% O2	6.49
% CO2	8.19
LB/MMBTU NOx	0.237

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 5 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.23	0.1	0.25	0.1	0.0
ppm NOx	127.5	128.7	0.5	129.0	0.6	0.1
% O2	0.05	0.03	-0.2	0.05	0.0	0.2
% O2	5.53	5.53	0.0	5.49	-0.4	-0.4
% CO2	0.03	0.03	0.0	0.02	-0.1	-0.1
% CO2	10.00	9.87	-0.7	9.87	-0.7	0.0

RUN 5 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 11:47	153.25	6.42	8.14
12/18/2013 11:48	155.63	6.45	8.12
12/18/2013 11:49	158.69	6.56	8.05
12/18/2013 11:50	157.25	6.45	8.12
12/18/2013 11:51	156.19	6.56	8.05
12/18/2013 11:52	155.94	6.50	8.09
12/18/2013 11:53	153.63	6.39	8.16
12/18/2013 11:54	148.94	6.36	8.18
12/18/2013 11:55	158.81	6.59	8.03
12/18/2013 11:56	158.31	6.45	8.12
12/18/2013 11:57	154.94	6.35	8.18
12/18/2013 11:58	157.81	6.53	8.07
12/18/2013 11:59	159.56	6.53	8.07
12/18/2013 12:00	158.13	6.51	8.08
12/18/2013 12:01	156.44	6.52	8.08
12/18/2013 12:02	154.44	6.36	8.17
12/18/2013 12:03	156.13	6.51	8.08
12/18/2013 12:04	156.13	6.30	8.21
12/18/2013 12:05	158.50	6.58	8.03
12/18/2013 12:06	155.25	6.38	8.16
12/18/2013 12:07	156.69	6.46	8.11
12/18/2013 12:08	155.00	6.43	8.13
AVERAGES	**156.17**	**6.46**	**8.11**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	154.58
% O2	6.46
% CO2	8.21
LB/MMBTU NOx	0.234

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 6 — SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.25	0.1	0.26	0.1	0.0
ppm NOx	127.5	129.0	0.6	129.0	0.6	0.0
% O2	0.05	0.05	0.0	0.04	-0.1	-0.1
% O2	5.53	5.49	-0.4	5.44	-0.9	-0.5
% CO2	0.03	0.02	-0.1	0.03	0.0	0.1
% CO2	10.00	9.87	-0.7	9.88	-0.6	0.1

RUN 6 — UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 12:18	147.38	6.47	8.08
12/18/2013 12:19	152.50	6.41	8.12
12/18/2013 12:20	150.63	6.41	8.12
12/18/2013 12:21	152.00	6.34	8.17
12/18/2013 12:22	151.75	6.40	8.13
12/18/2013 12:23	147.63	6.37	8.16
12/18/2013 12:24	149.13	6.35	8.17
12/18/2013 12:25	152.31	6.38	8.15
12/18/2013 12:26	153.19	6.41	8.13
12/18/2013 12:27	153.25	6.48	8.09
12/18/2013 12:28	152.94	6.35	8.17
12/18/2013 12:29	151.69	6.44	8.11
12/18/2013 12:30	149.19	6.31	8.19
12/18/2013 12:31	151.38	6.48	8.09
12/18/2013 12:32	151.63	6.47	8.09
12/18/2013 12:33	152.56	6.40	8.13
12/18/2013 12:34	150.94	6.39	8.14
12/18/2013 12:35	150.56	6.26	8.22
12/18/2013 12:36	152.63	6.46	8.09
12/18/2013 12:37	152.56	6.39	8.14
12/18/2013 12:38	153.50	6.39	8.13
12/18/2013 12:39	151.31	6.34	8.17
AVERAGES	**151.39**	**6.40**	**8.14**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	149.68
% O2	6.44
% CO2	8.23
LB/MMBTU NOx	0.226

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 7 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.26	0.1	0.25	0.1	0.0
ppm NOx	127.5	129.0	0.6	129.0	0.6	0.0
% O2	0.05	0.04	-0.1	0.04	-0.1	0.0
% O2	5.53	5.44	-0.9	5.45	-0.8	0.1
% CO2	0.03	0.03	0.0	0.04	0.1	0.1
% CO2	10.00	9.88	-0.6	9.88	-0.6	0.0

RUN 7 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 12:48	151.94	6.34	8.15
12/18/2013 12:49	152.19	6.37	8.13
12/18/2013 12:50	153.44	6.37	8.14
12/18/2013 12:51	151.94	6.32	8.17
12/18/2013 12:52	153.50	6.45	8.09
12/18/2013 12:53	150.50	6.34	8.16
12/18/2013 12:54	154.00	6.53	8.04
12/18/2013 12:55	151.81	6.28	8.19
12/18/2013 12:56	151.25	6.41	8.11
12/18/2013 12:57	154.25	6.36	8.14
12/18/2013 12:58	151.88	6.32	8.17
12/18/2013 12:59	152.75	6.38	8.13
12/18/2013 13:00	157.06	6.54	8.03
12/18/2013 13:01	155.25	6.50	8.06
12/18/2013 13:02	150.38	6.24	8.22
12/18/2013 13:03	153.13	6.49	8.07
12/18/2013 13:04	151.88	6.40	8.11
12/18/2013 13:05	153.06	6.44	8.09
12/18/2013 13:06	150.75	6.28	8.19
12/18/2013 13:07	155.00	6.57	8.01
12/18/2013 13:08	152.44	6.28	8.19
12/18/2013 13:09	152.63	6.48	8.06
AVERAGES	**152.77**	**6.40**	**8.12**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	151.04
% O2	6.47
% CO2	8.21
LB/MMBTU NOx	0.228

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TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 8 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.25	0.1	0.27	0.1	0.0
ppm NOx	127.5	129.0	0.6	129.1	0.7	0.0
% O2	0.05	0.04	-0.1	0.03	-0.2	-0.1
% O2	5.53	5.45	-0.8	5.46	-0.7	0.1
% CO2	0.03	0.04	0.1	0.04	0.1	0.0
% CO2	10.00	9.88	-0.6	9.88	-0.6	0.0

RUN 8 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 13:19	149.81	6.37	8.13
12/18/2013 13:20	150.63	6.47	8.07
12/18/2013 13:21	149.56	6.42	8.10
12/18/2013 13:22	153.00	6.35	8.15
12/18/2013 13:23	152.00	6.47	8.07
12/18/2013 13:24	154.31	6.43	8.09
12/18/2013 13:25	151.31	6.33	8.15
12/18/2013 13:26	148.75	6.35	8.14
12/18/2013 13:27	153.25	6.44	8.09
12/18/2013 13:28	151.56	6.29	8.17
12/18/2013 13:29	153.25	6.40	8.10
12/18/2013 13:30	152.69	6.40	8.11
12/18/2013 13:31	148.75	6.34	8.15
12/18/2013 13:32	152.50	6.43	8.09
12/18/2013 13:33	151.31	6.29	8.18
12/18/2013 13:34	152.19	6.37	8.12
12/18/2013 13:35	153.00	6.36	8.13
12/18/2013 13:36	151.75	6.37	8.13
12/18/2013 13:37	153.06	6.30	8.17
12/18/2013 13:38	152.50	6.36	8.13
12/18/2013 13:39	149.44	6.37	8.13
12/18/2013 13:40	152.44	6.34	8.15
AVERAGES	**151.68**	**6.38**	**8.13**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	149.91
% O2	6.43
% CO2	8.22
LB/MMBTU NOx	0.227

FLORIDA POWER AND LIGHT CO.

12/18/13

TURKEY POINT 1

ANALYZER CALIBRATION ERROR

RANGE SETTING	GAS UNITS	CERTIFIED GAS VALUE	ANALYZER VALUE	DIFF PPM	% SPAN	ANALYZER SERIAL #
	ppm NOx	0.00	-0.01	0.0	0.0	
250	ppm NOx	127.5	127.5	0.0	0.0	0335103532
	ppm NOx	242.0	244.5	2.5	1.0	
	% O2	0.00	0.05	0.1	0.5	
10	% O2	5.50	5.53	0.0	0.3	1420/B701/932
	% O2	9.74	9.78	0.0	0.4	
	% CO2	0.00	0.03	0.0	0.2	
20	% CO2	10.00	10.00	0.0	0.0	01415D3453
	% CO2	19.40	19.39	0.0	-0.1	

RUN 9 --- SYSTEM BIAS AND SYSTEM DRIFT DATA

GAS UNITS	ANALYZER VALUE	PRETEST CHECK	% SPAN	POSTTEST CHECK	% SPAN	% DRIFT
ppm NOx	-0.01	0.27	0.1	0.25	0.1	0.0
ppm NOx	127.5	129.1	0.7	128.9	0.6	-0.1
% O2	0.05	0.03	-0.2	0.03	-0.2	0.0
% O2	5.53	5.46	-0.7	5.45	-0.8	-0.1
% CO2	0.03	0.04	0.1	0.03	0.0	-0.1
% CO2	10.00	9.88	-0.6	9.87	-0.7	-0.1

RUN 9 --- UNCORRECTED ANALYZER DATA

Date & Time	NOx PPM	% O2	% CO2
12/18/2013 13:50	146.19	6.37	8.13
12/18/2013 13:51	152.31	6.48	8.07
12/18/2013 13:52	151.13	6.31	8.17
12/18/2013 13:53	152.69	6.52	8.04
12/18/2013 13:54	151.69	6.42	8.10
12/18/2013 13:55	150.69	6.29	8.18
12/18/2013 13:56	149.25	6.40	8.11
12/18/2013 13:57	147.94	6.31	8.17
12/18/2013 13:58	148.00	6.35	8.16
12/18/2013 13:59	148.88	6.37	8.13
12/18/2013 14:00	150.06	6.29	8.18
12/18/2013 14:01	150.44	6.42	8.10
12/18/2013 14:02	150.25	6.41	8.10
12/18/2013 14:03	148.13	6.35	8.14
12/18/2013 14:04	146.63	6.31	8.17
12/18/2013 14:05	151.06	6.48	8.06
12/18/2013 14:06	143.63	6.27	8.19
12/18/2013 14:07	146.31	6.25	8.20
12/18/2013 14:08	148.63	6.33	8.15
12/18/2013 14:09	148.81	6.28	8.18
12/18/2013 14:10	147.75	6.34	8.14
12/18/2013 14:11	146.94	6.47	8.07
AVERAGES	**148.97**	**6.36**	**8.13**

FUEL FACTOR	1040

CORRECTED RESULTS	
NOx PPM	147.28
% O2	6.42
% CO2	8.23
LB/MMBTU NOx	0.222

APPENDIX C

PROTOCOL GAS CERTIFICATIONS

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 - PGVP Vendor ID: A12013

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

P.O. No.: CEM6035
Document # : 49987543-003

Customer
FLORIDA POWER & LIGHT - EMISSIONS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : NO,SO2,BALN

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

Cylinder Number: ALM028914 **Certification Date:** 29Mar2013 **Exp. Date:** 30Mar2021
Cylinder Pressure*:** 1939 PSIG **Batch No:** PLU0176655

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
SULFUR DIOXIDE *	251	PPM	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	127.5	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	127.5	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 0260	05Jan2018	KAL003815	255.5 PPM	SULFUR DIOXIDE
NTRM 1684	22Jul2017	KAL003769	97.60 PPM	NITRIC OXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	28Mar2013	FTIR
FTIR//000928781	15Mar2013	FTIR

ANALYZER READINGS

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

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

SULFUR DIOXIDE *

First Triad Analysis:
Date: 22Mar2013 Response Unit:PPM
Z1=-0.01011 R1=255.1858 T1=250.8078
R2=255.2113 Z2=0.03562 T2=250.9901
Z3=0.18876 T3=251.0411 R3=255.5482
Avg. Concentration: 251.1 PPM

Second Triad Analysis:
Date: 29Mar2013 Response Unit: PPM
Z1=-0.01430 R1=254.6857 T1=249.7746
R2=254.8242 Z2=0.02138 T2=249.8522
Z3=0.19240 T3=250.1729 R3=255.2560
Avg. Concentration: 250.5 PPM

Calibration Curve:
Concentration=A+Bx+Cx2+Dx3+Ex4
r=9.99999E-1
Constants: A=0.00000E+0
B=9.99088E-1 C=1.20000E-5
D=0.00000E+0 E=0.00000E+0

NITRIC OXIDE

First Triad Analysis:
Date: 22Mar2013 Response Unit:PPM
Z1=-0.10186 R1=97.44502 T1=128.6184
R2=97.65139 Z2=0.26252 T2=128.8044
Z3=0.37472 T3=128.9765 R3=97.66701
Avg. Concentration: 126.6 PPM

Second Triad Analysis:
Date: 29Mar2013 Response Unit: PPM
Z1=-0.04195 R1=97.00639 T1=127.1225
R2=97.07786 Z2=-0.00408 T2=127.5245
Z3=0.08192 T3=127.5292 R3=97.23310
Avg. Concentration: 128.0 PPM

Calibration Curve:
Concentration=A+Bx+Cx2+Dx3+Ex4
r=9.99996E-1
Constants: A=0.00000E+0
B=9.09194E-1 C=1.59000E-4
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: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A12012

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

P.O. No.: CEM6035
Document # : 48178486-006

Customer
FLORIDA POWER & LIGHT - EMISSIONS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : SN

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

Cylinder Number: ALM001969 **Certification Date:** 01Nov2012 **Exp. Date:** 02Nov2020
Cylinder Pressure*:** 1931 PSIG **Batch No:** PLU0140075

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	242	PPM	+/- 1%	Direct NIST and VSL
SULFUR DIOXIDE *	480	PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	242.	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 1885	04Jan2018	KAL004337	242.0 PPM	NITRIC OXIDE
NTRM 1681	07Feb2018	KAL004420	501.3 PPM	SULFUR DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	28Oct2012	FTIR
FTIR//000928781	12Oct2012	FTIR

ANALYZER READINGS

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

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

NITRIC OXIDE

Date: 23Oct2012 Response Unit:PPM
Z1=0.05513 R1=241.8580 T1=242.0341
R2=241.9930 Z2=0.10308 T2=242.4282
Z3=0.19554 T3=242.8875 R3=242.2102
Avg. Concentration: 242.4 PPM

Date: 01Nov2012 Response Unit: PPM
Z1=-0.07918 R1=241.7314 T1=241.8032
R2=241.9333 Z2=-0.05929 T2=242.2890
Z3=0.14887 T3=242.5074 R3=242.0391
Avg. Concentration: 242.3 PPM

Concentration=A+Bx+Cx2+Dx3+Ex4
r=9.99999E-1
Constants: A=0.00000E+0
B=9.89818E-1 C=4.40000E-5
D=0.00000E+0 E=0.00000E+0

SULFUR DIOXIDE *

Date: 23Oct2012 Response Unit:PPM
Z1=-0.31551 R1=500.2749 T1=478.9885
R2=500.3813 Z2=0.07883 T2=479.2470
Z3=0.11184 T3=480.2228 R3=500.4024
Avg. Concentration: 480.4 PPM

Date: 01Nov2012 Response Unit: PPM
Z1=0.09345 R1=500.4293 T1=478.6162
R2=500.4344 Z2=0.44479 T2=479.3505
Z3=0.46881 T3=479.8089 R3=500.8243
Avg. Concentration: 479.9 PPM

Concentration=A+Bx+Cx2+Dx3+Ex4
r=9.99984E-1
Constants: A=0.00000E+0
B=9.96631E-1 C=4.00000E-8
D=0.00000E+0 E=0.00000E+0

APPROVED BY: 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 - PGVP Vendor ID: A12013

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

P.O. No.: CEM6035
Document # : 48971265-002

Customer
FLORIDA PDWER & LIGHT - EMISSIDNS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : CO2,O2,BALN

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

Cylinder Number: ALM047324 **Certification Date:** 07Jan2013 **Exp. Date:** 08Jan2021
Cylinder Pressure*:** 2000 PSIG **Batch No:** PLU0157505

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
OXYGEN	5.50	%	+/- 1%	Direct NIST and VSL
CARBON DIOXIDE	10.0	%	+/- 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	15May2018	ALM065268	9.930 %	OXYGEN
NTRM 1675	05Jan2018	K014984	13.94 %	CARBON DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
MTI/M200/170927	03Jan2013	GC-TCD
MTI/M200/170927	21Dec2012	GC-TCD

ANALYZER READINGS

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

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

OXYGEN

Date: 07Jan2013 Response Unit:AREA
Z1=0.00000 R1=158224.0 T1=87570.00
R2=158221.0 Z2=0.00000 T2=87539.00
Z3=0.00000 T3=87442.00 R3=158136.0
Avg. Concentration: 5.500 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=.999998275 2350
Constants: A=0.0034238
B=6.2709E-05 C=
D= E=

CARBON DIOXIDE

Date: 07Jan2013 Response Unit:AREA
Z1=0.00000 R1=426073.0 T1=305878.0
R2=426210.0 Z2=0.00000 T2=305913.0
Z3=0.00000 T3=305810.0 R3=425955.0
Avg. Concentration: 10.00 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=.999999488 1800
Constants: A=0.00478417
B=3.28108E-05 C=
D= E=

APPROVED BY: JOHN C. FITZ

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 - PGVP Vendor ID: A12013

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

P.O. No.: CEM6035
Document # : 49987543-005

Customer
FLORIDA POWER & LIGHT - EMISSIONS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : CO2,O2,BALN

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

Cylinder Number: CC203126 **Certification Date:** 02Apr2013 **Exp. Date:** 03Apr2021
Cylinder Pressure*:** 2000 PSIG **Batch No:** PLU0178700

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
OXYGEN	9.74	%	+/- 1%	Direct NIST and VSL
CARBON DIOXIDE	19.4	%	+/- 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 2659 02	14May2018	K019475	20.85 %	OXYGEN
NTRM 1675	05Jan2018	K014984	13.94 %	CARBON DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
MTI/M200/170927	26Mar2013	GC-TCD
MTI/M200/170927	01Apr2013	GC-TCD

ANALYZER READINGS

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

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

OXYGEN
Date: 02Apr2013 Response Unit:AREA
Z1=0.00000 R1=160108.0 T1=156906.0
R2=160006.0 Z2=0.00000 T2=156832.0
Z3=0.00000 T3=156815.0 R3=159877.0
Avg. Concentration: 9.740 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=.999999185 2658
Constants: A=-0.00317034
B=6.11784E-05 C=
D= E=

CARBON DIOXIDE
Date: 02Apr2013 Response Unit:AREA
Z1=0.00000 R1=426939.0 T1=594961.0
R2=427122.0 Z2=0.00000 T2=595081.0
Z3=0.00000 T3=595249.0 R3=426853.0
Avg. Concentration: 19.40 %

Concentration=A+Bx+Cx2+Dx3+Ex4
r=.999999304 2659
Constants: A=0.003722546
B=3.2603E-05 C=
D= E=

APPROVED BY: JOHN C. FITZ

AIR LIQUIDE Air Liquide America Specialty Gases LLC Scott

6141 EASTON ROAD, BLDG 1 PO BOX 310
Shipped From: PLUMSTEADVILLE PA 18949-0310
Phone: 800-331-4953 Fax: 215-766-7226

C E R T I F I C A T E O F A N A L Y S I S

FLORIDA POWER & LIGHT - EMISSIONS T
14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

DOCUMENT#:48971265 -001
PO#: CEM6035
ITEM #: P841-30AL
DATE: 08Jan2013

CYLINDER #: ALM9852
FILL PRESSURE: 02000 PSIG PRODUCT EXPIRATION: 08Jan2016

PURE MATERIAL: NITROGEN CAS# 7727-37-9

GRADE: ACID RAIN CEM 0

PURITY: 99.9995%

IMPURITY	MAXIMUM CONCENTRATIONS	ACTUAL CONCENTRATIONS
SOX	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

QC# 26023

LOT # : PLU0158593

ANALYST: JOHN C. FITZ

APPENDIX D

CALIBRATION SHEETS

FLORIDA POWER & LIGHT

Unit PTF1 Date 12/18/13

SYSTEM RESPONSE TIME

Analyzer Type: NOx	Span Gas value: 127.5
Serial Number: 0335103532	Analyzer Range: 0 - 250
Method: 7E	Sampling Train Length: 225

Upscale Response Time: 121 seconds
(high or mid level gas)

Low-Level Response Time: 119 seconds
(zero gas)

System Response Time: 121 seconds
(longer time interval)

Method 6C, 7E, 10 & 20 system response procedure:
Introduce the upscale calibration gas until stable reading is achieved, record value.
Next introduce low level zero gas until stable reading is achieved, record value.
The longer interval is the response time.

file system response

FLORIDA POWER & LIGHT

Unit:	PTF 1	Test Date:	12/18/2013
Technician:	Arturo Mocha	Check Date:	12/18/2013

NO_2 to NO Converter Efficiency Check

Analyzer : Thermo 42CLS

Serial Number: 335103532

Method: 7E

Analyzer Range: 0 - 250

NO_2 Audit Gas Value (C_v): 51.6
Serial # ALM039021

NO Calibration Gas Value: 127.5
Serial # ALM028914

Date & Time	NOx ppm
12/18/2013 9:06	0.00
12/18/2013 9:10	127.44
	NO2 ppm
12/18/2013 9:14	53.00
12/18/2013 9:15	53.06
12/18/2013 9:16	52.98
12/18/2013 9:17	53.00
AVERAGE	53.01 (C_{Dir})

NO_2 to NO Conversion Efficiency Test using Equation 7E-7

$$Eff_{NO_2} = \frac{C_{Dir}}{C_v} \times 100$$

Eff_{NO_2} = **102.7**

Method 7E NO_2 to NO Conversion Efficiency Test

8.2.4.1. Introduce NO_2 converter efficiency gas to the analyzer in direct calibration mode and record the NOx concentration displayed by the analyzer. Calculate the converter efficiency using Equation 7E–7 in Section 12.7. The specification for converter efficiency in Section 13.5 must be met. The NO_2 to NO conversion efficiency, calculated according to Equation 7E-7, must be greater than or equal to 90 percent.

Eff_{NO_2} = NO_2 to NO converter efficiency, percent.
CDir = Measured concentration of a calibration gas when introduced in direct calibration mode, ppmv.
C_v = Manufacturer certified concentration of a calibration gas, ppmv.

APPENDIX E

CEM DATA SHEETS

Average Values Report
Generated: 12/18/2013 10:20

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 1

Period Start: 12/18/2013 09:41
Period End: 12/18/2013 10:02
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 09:41	7.39	138.3	0.232	200.3	1040
12/18/2013 09:42	7.45	139.2	0.232	199.8	1040
12/18/2013 09:43	7.43	140.5	0.235	199.6	1040
12/18/2013 09:44	7.34	139.8	0.237	199.3	1040
12/18/2013 09:45	7.43	140.3	0.234	200.0	1040
12/18/2013 09:46	7.41	139.7	0.234	199.4	1040
12/18/2013 09:47	7.38	140.4	0.236	200.4	1040
12/18/2013 09:48	7.36	139.9	0.236	200.8	1040
12/18/2013 09:49	7.48	137.0	0.227	199.9	1040
12/18/2013 09:50	7.44	138.2	0.231	198.7	1040
12/18/2013 09:51	7.43	140.1	0.234	199.6	1040
12/18/2013 09:52	7.41	141.4	0.237	199.7	1040
12/18/2013 09:53	7.41	136.1	0.228	199.5	1040
12/18/2013 09:54	7.43	139.9	0.234	200.7	1040
12/18/2013 09:55	7.36	140.3	0.237	199.2	1040
12/18/2013 09:56	7.39	138.4	0.233	200.0	1040
12/18/2013 09:57	7.40	138.0	0.232	200.4	1040
12/18/2013 09:58	7.45	138.9	0.232	200.3	1040
12/18/2013 09:59	7.42	139.8	0.234	199.2	1040
12/18/2013 10:00	7.37	140.0	0.236	200.5	1040
12/18/2013 10:01	7.45	138.7	0.231	200.6	1040
12/18/2013 10:02	7.46	138.7	0.231	201.5	1040
Daily Average*	**7.41**	**139.3**	**0.233**	**200.0**	**1040**

Average Values Report
Generated: 12/18/2013 10:38

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 2

Period Start: 12/18/2013 10:16
Period End: 12/18/2013 10:37
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 10:16	7.46	141.0	0.235	200.6	1040
12/18/2013 10:17	7.43	138.4	0.231	201.7	1040
12/18/2013 10:18	7.36	141.9	0.239	200.8	1040
12/18/2013 10:19	7.48	143.6	0.238	200.8	1040
12/18/2013 10:20	7.34	145.1	0.245	201.3	1040
12/18/2013 10:21	7.43	140.6	0.235	201.7	1040
12/18/2013 10:22	7.43	142.6	0.238	200.4	1040
12/18/2013 10:23	7.40	141.6	0.238	201.0	1040
12/18/2013 10:24	7.41	139.2	0.233	201.1	1040
12/18/2013 10:25	7.46	143.9	0.240	201.5	1040
12/18/2013 10:26	7.45	143.3	0.239	200.3	1040
12/18/2013 10:27	7.43	145.5	0.243	201.5	1040
12/18/2013 10:28	7.41	144.0	0.241	200.5	1040
12/18/2013 10:29	7.39	142.5	0.239	201.4	1040
12/18/2013 10:30	7.38	143.9	0.242	200.5	1040
12/18/2013 10:31	7.46	143.1	0.238	200.9	1040
12/18/2013 10:32	7.36	143.6	0.242	200.8	1040
12/18/2013 10:33	7.43	141.2	0.236	200.6	1040
12/18/2013 10:34	7.45	144.6	0.241	200.9	1040
12/18/2013 10:35	7.41	142.5	0.239	200.9	1040
12/18/2013 10:36	7.40	141.9	0.238	200.8	1040
12/18/2013 10:37	7.39	147.2	0.247	201.6	1040
Daily Average*	**7.42**	**142.8**	**0.239**	**201.0**	**1040**

Average Values Report
Generated: 12/18/2013 11:20

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 3

Period Start: 12/18/2013 10:45
Period End: 12/18/2013 11:06
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 10:45	7.32	144.9	0.246	200.5	1040
12/18/2013 10:46	7.47	144.9	0.241	201.8	1040
12/18/2013 10:47	7.43	145.1	0.243	201.2	1040
12/18/2013 10:48	7.43	143.5	0.240	201.4	1040
12/18/2013 10:49	7.44	147.5	0.246	201.4	1040
12/18/2013 10:50	7.44	147.7	0.247	201.0	1040
12/18/2013 10:51	7.40	147.0	0.247	200.7	1040
12/18/2013 10:52	7.48	145.3	0.241	201.2	1040
12/18/2013 10:53	7.37	146.8	0.247	200.4	1040
12/18/2013 10:54	7.37	143.5	0.242	200.5	1040
12/18/2013 10:55	7.38	146.5	0.247	201.1	1040
12/18/2013 10:56	7.41	147.8	0.248	200.7	1040
12/18/2013 10:57	7.41	146.1	0.245	200.5	1040
12/18/2013 10:58	7.40	148.7	0.250	200.6	1040
12/18/2013 10:59	7.42	145.9	0.244	200.9	1040
12/18/2013 11:00	7.41	147.7	0.248	201.5	1040
12/18/2013 11:01	7.47	144.9	0.241	200.5	1040
12/18/2013 11:02	7.46	144.8	0.241	200.7	1040
12/18/2013 11:03	7.39	146.3	0.246	201.6	1040
12/18/2013 11:04	7.44	147.1	0.246	201.1	1040
12/18/2013 11:05	7.49	146.0	0.242	201.1	1040
12/18/2013 11:06	7.42	146.1	0.245	201.0	1040
Daily Average*	**7.42**	**146.1**	**0.245**	**201.0**	**1040**

Average Values Report
Generated: 12/18/2013 12:21

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 4

Period Start: 12/18/2013 11:18
Period End: 12/18/2013 11:39
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 11:18	7.38	146.4	0.246	201.3	1040
12/18/2013 11:19	7.37	149.1	0.251	200.9	1040
12/18/2013 11:20	7.46	147.8	0.246	200.6	1040
12/18/2013 11:21	7.43	143.0	0.239	200.2	1040
12/18/2013 11:22	7.40	147.4	0.247	200.6	1040
12/18/2013 11:23	7.41	147.7	0.248	201.2	1040
12/18/2013 11:24	7.40	146.9	0.247	200.3	1040
12/18/2013 11:25	7.47	146.6	0.244	201.1	1040
12/18/2013 11:26	7.40	148.3	0.249	202.0	1040
12/18/2013 11:27	7.43	145.3	0.243	200.8	1040
12/18/2013 11:28	7.46	145.6	0.242	200.5	1040
12/18/2013 11:29	7.40	149.5	0.251	200.4	1040
12/18/2013 11:30	7.40	145.9	0.245	201.2	1040
12/18/2013 11:31	7.45	148.1	0.247	200.6	1040
12/18/2013 11:32	7.48	147.3	0.245	201.8	1040
12/18/2013 11:33	7.37	147.8	0.249	201.3	1040
12/18/2013 11:34	7.46	147.0	0.245	201.8	1040
12/18/2013 11:35	7.45	147.8	0.246	201.0	1040
12/18/2013 11:36	7.42	147.3	0.247	201.7	1040
12/18/2013 11:37	7.46	146.2	0.243	200.2	1040
12/18/2013 11:38	7.46	145.9	0.243	200.1	1040
12/18/2013 11:39	7.38	144.4	0.243	201.0	1040
Daily Average*	**7.42**	**146.9**	**0.246**	**200.9**	**1040**

Average Values Report
Generated: 12/18/2013 12:21

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 5

Period Start: 12/18/2013 11:47
Period End: 12/18/2013 12:08
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 11:47	7.51	146.0	0.241	200.7	1040
12/18/2013 11:48	7.39	147.5	0.248	201.6	1040
12/18/2013 11:49	7.47	141.4	0.235	200.9	1040
12/18/2013 11:50	7.48	146.7	0.244	200.9	1040
12/18/2013 11:51	7.37	147.0	0.248	200.3	1040
12/18/2013 11:52	7.44	146.3	0.244	201.1	1040
12/18/2013 11:53	7.42	146.2	0.245	200.9	1040
12/18/2013 11:54	7.40	145.1	0.243	201.4	1040
12/18/2013 11:55	7.43	139.6	0.233	201.4	1040
12/18/2013 11:56	7.51	141.7	0.234	200.5	1040
12/18/2013 11:57	7.37	148.8	0.251	201.0	1040
12/18/2013 11:58	7.46	146.6	0.244	201.1	1040
12/18/2013 11:59	7.52	145.2	0.240	200.8	1040
12/18/2013 12:00	7.41	147.4	0.247	201.8	1040
12/18/2013 12:01	7.40	148.7	0.250	200.2	1040
12/18/2013 12:02	7.44	147.1	0.246	200.9	1040
12/18/2013 12:03	7.40	145.6	0.244	200.8	1040
12/18/2013 12:04	7.44	142.5	0.238	201.0	1040
12/18/2013 12:05	7.41	145.9	0.244	201.6	1040
12/18/2013 12:06	7.46	144.2	0.240	200.8	1040
12/18/2013 12:07	7.32	146.5	0.249	201.6	1040
12/18/2013 12:08	7.46	144.6	0.241	201.3	1040
Daily Average*	**7.43**	**145.5**	**0.243**	**201.0**	**1040**

Average Values Report
Generated: 12/18/2013 12:51

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 6

Period Start: 12/18/2013 12:18
Period End: 12/18/2013 12:39
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 12:18	7.39	141.5	0.238	201.4	1040
12/18/2013 12:19	7.39	141.4	0.238	200.3	1040
12/18/2013 12:20	7.43	143.6	0.240	200.2	1040
12/18/2013 12:21	7.42	140.4	0.235	200.6	1040
12/18/2013 12:22	7.44	140.2	0.234	201.7	1040
12/18/2013 12:23	7.49	141.6	0.235	200.6	1040
12/18/2013 12:24	7.41	139.8	0.234	201.0	1040
12/18/2013 12:25	7.44	137.1	0.229	201.3	1040
12/18/2013 12:26	7.46	139.0	0.231	200.3	1040
12/18/2013 12:27	7.42	141.6	0.237	201.6	1040
12/18/2013 12:28	7.41	141.2	0.237	200.9	1040
12/18/2013 12:29	7.42	143.7	0.240	200.3	1040
12/18/2013 12:30	7.44	141.8	0.237	201.2	1040
12/18/2013 12:31	7.42	139.4	0.233	200.3	1040
12/18/2013 12:32	7.51	141.3	0.234	201.3	1040
12/18/2013 12:33	7.41	139.9	0.234	201.4	1040
12/18/2013 12:34	7.42	141.8	0.237	201.2	1040
12/18/2013 12:35	7.50	142.0	0.235	201.3	1040
12/18/2013 12:36	7.44	140.0	0.234	201.2	1040
12/18/2013 12:37	7.52	140.1	0.231	200.3	1040
12/18/2013 12:38	7.47	143.1	0.238	200.7	1040
12/18/2013 12:39	7.45	142.0	0.237	201.4	1040
Daily Average*	**7.44**	**141.0**	**0.235**	**200.9**	**1040**

Average Values Report
Generated: 12/18/2013 13:43

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 7

Period Start: 12/18/2013 12:48
Period End: 12/18/2013 13:09
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 12:48	7.52	141.3	0.233	200.5	1040
12/18/2013 12:49	7.42	143.6	0.240	201.8	1040
12/18/2013 12:50	7.52	143.8	0.237	200.5	1040
12/18/2013 12:51	7.47	141.9	0.236	201.5	1040
12/18/2013 12:52	7.45	142.0	0.237	200.7	1040
12/18/2013 12:53	7.56	142.4	0.234	201.4	1040
12/18/2013 12:54	7.43	142.4	0.238	201.6	1040
12/18/2013 12:55	7.49	140.7	0.233	201.0	1040
12/18/2013 12:56	7.45	143.8	0.240	200.9	1040
12/18/2013 12:57	7.47	139.8	0.232	200.5	1040
12/18/2013 12:58	7.45	141.4	0.236	200.3	1040
12/18/2013 12:59	7.50	143.3	0.237	201.4	1040
12/18/2013 13:00	7.47	140.1	0.233	201.6	1040
12/18/2013 13:01	7.45	142.6	0.238	200.3	1040
12/18/2013 13:02	7.40	146.8	0.246	200.6	1040
12/18/2013 13:03	7.41	143.9	0.241	200.4	1040
12/18/2013 13:04	7.52	138.9	0.229	201.6	1040
12/18/2013 13:05	7.45	143.7	0.240	201.3	1040
12/18/2013 13:06	7.47	141.7	0.236	201.1	1040
12/18/2013 13:07	7.39	141.0	0.237	200.8	1040
12/18/2013 13:08	7.53	141.0	0.233	201.0	1040
12/18/2013 13:09	7.37	145.2	0.245	201.2	1040
Daily Average*	**7.46**	**142.3**	**0.237**	**201.0**	**1040**

Average Values Report
Generated: 12/18/2013 13:43

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 8

Period Start: 12/18/2013 13:19
Period End: 12/18/2013 13:40
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 13:19	7.38	143.5	0.241	201.6	1040
12/18/2013 13:20	7.43	141.4	0.236	200.7	1040
12/18/2013 13:21	7.47	139.5	0.232	200.7	1040
12/18/2013 13:22	7.37	140.0	0.236	200.9	1040
12/18/2013 13:23	7.44	140.5	0.235	201.4	1040
12/18/2013 13:24	7.47	141.9	0.236	201.1	1040
12/18/2013 13:25	7.40	142.3	0.239	200.3	1040
12/18/2013 13:26	7.45	143.3	0.239	201.7	1040
12/18/2013 13:27	7.49	140.4	0.233	200.9	1040
12/18/2013 13:28	7.47	139.5	0.232	201.0	1040
12/18/2013 13:29	7.42	142.6	0.239	201.3	1040
12/18/2013 13:30	7.50	140.8	0.233	201.6	1040
12/18/2013 13:31	7.42	142.2	0.238	200.8	1040
12/18/2013 13:32	7.44	141.2	0.236	200.6	1040
12/18/2013 13:33	7.48	137.0	0.227	200.2	1040
12/18/2013 13:34	7.44	142.1	0.237	200.6	1040
12/18/2013 13:35	7.49	139.7	0.232	200.1	1040
12/18/2013 13:36	7.51	141.6	0.234	201.3	1040
12/18/2013 13:37	7.44	141.1	0.236	201.5	1040
12/18/2013 13:38	7.47	141.2	0.235	201.6	1040
12/18/2013 13:39	7.50	141.3	0.234	201.6	1040
12/18/2013 13:40	7.44	140.4	0.234	200.7	1040
Daily Average*	**7.45**	**141.1**	**0.235**	**201.0**	**1040**

Average Values Report
Generated: 12/18/2013 14:22

Company: Florida Power & Light PTF
Plant:
City/St: Florida City, FL
Source: stack1
RUN 9

Period Start: 12/18/2013 13:50
Period End: 12/18/2013 14:11
Validation Type: 1/1 min
Averaging Period: 1 min
Type: Block Avg

Period Start:	Average 1CO2 %	Average 1NOx ppm	Average 1NOx#M #/M	Average 1MW MW	Average 1FcFactor scf/M
12/18/2013 13:50	7.43	139.4	0.233	201.5	1040
12/18/2013 13:51	7.55	136.6	0.225	200.2	1040
12/18/2013 13:52	7.45	136.6	0.228	201.6	1040
12/18/2013 13:53	7.40	141.3	0.237	201.1	1040
12/18/2013 13:54	7.51	140.3	0.232	200.1	1040
12/18/2013 13:55	7.39	142.2	0.239	201.3	1040
12/18/2013 13:56	7.43	140.7	0.235	201.0	1040
12/18/2013 13:57	7.53	139.6	0.230	200.3	1040
12/18/2013 13:58	7.44	138.4	0.231	200.5	1040
12/18/2013 13:59	7.48	136.4	0.226	201.1	1040
12/18/2013 14:00	7.47	140.5	0.234	201.1	1040
12/18/2013 14:01	7.45	137.8	0.230	201.0	1040
12/18/2013 14:02	7.47	138.3	0.230	200.8	1040
12/18/2013 14:03	7.46	140.3	0.234	200.6	1040
12/18/2013 14:04	7.44	139.0	0.232	201.0	1040
12/18/2013 14:05	7.41	136.1	0.228	200.9	1040
12/18/2013 14:06	7.51	136.1	0.225	200.5	1040
12/18/2013 14:07	7.41	139.6	0.234	200.6	1040
12/18/2013 14:08	7.48	132.1	0.219	200.6	1040
12/18/2013 14:09	7.55	135.8	0.223	201.5	1040
12/18/2013 14:10	7.45	137.4	0.229	201.9	1040
12/18/2013 14:11	7.48	137.2	0.228	200.5	1040
Daily Average*	**7.46**	**138.3**	**0.230**	**200.9**	**1040**

FLORIDA POWER & LIGHT COMPANY, P.O. BOX 14000, JUNO BEACH, FL 33408-0420

FPL

To: **Gary Andersen** Date: **November 25, 2013**

From: **Arturo Mocha** Department: **Emissions Test Group**

Subject: **NOx/SO2/CO2 Linearity Check**
4th Quarter 2013
Turkey Point Unit No. 1

A NOx/SO2/CO2 Linearity Check was conducted at Turkey Point Unit No. 1 CEM system on November 25, 2013 by the Emission Test Group. EPA Methods according to 40 CFR 75 Appendix A were used for accuracy determination.

A summary of the pertinent data and condition assessment of the CEM shelter is attached.

If you have any questions regarding this test, please contact me at the Emissions Office, 228-5089.

Arturo J. Mocha
Florida Power & Light
Emission Technician

Plant PTF Unit 1 Date 11/25/13

CEMS Condition Assessment Worksheet

	YES	NO
1. Was the control room notified prior to performing audit?	☑	☐
Comments		
2. SO2 analyzer operating properly and Span factor between 0.9 and 1.2?	☑	☐
Comments		
3. NOx analyzer operating properly and Span factor between 0.9 and 1.2?	☑	☐
Comments		
4. CO2 analyzer operating properly?	☑	☐
Comments		
5. Is dilution air set at 40 psi and vacuum set at 20 in. Hg?	☑	☐
Comments		
6. Is shelter clear of dirt, debris and trash?	☑	☐
Comments		
7. Are Span gas cylinders data entered correctly in the Netdahs?	☑	☐
Comments		
8. Are Span gas cylinders properly secured and pressures > 250 psi?	☑	☐
Comments		
9. Calibration Span gas values (CO2, NOx, and SO2) within analyzer range (85 to 90%)?	☑	☐
Comments		
10. Is the Zero/Span gas certification of analysis available?	☑	☐
Comments		
11. Is plant calibration Zero/Span gas expired?	☐	☑
Comments		
12. Does the Zero calibration gas meet Part 72 requirements? (CO<0.5ppm, CO2<1ppm, NOx<0.1ppm, SO2<0.1ppm, THC<0.1ppm)	☑	☐
Comments		
13. Are any alarm or out-of-control conditions shown on the DAHS summary screen?	☐	☑
Comments		

14. Overall, is the outside of shed in good condition (i.e. door operates, water leaks, regulators)? ☑ ☐

Comments_____

15. Is shed free of ozone odor? ☑ ☐

Comments_____

16. On completion of Linearity Audit, is regulator output (calibration gas) set to 20-30 psi? ☑ ☐

Comments_____

FLORIDA POWER & LIGHT
CONTINIOUS EMISSION MONITORS
LINEARITY CHECK WORKSHEET

Plant	**Turkey Point**	**Date**	**11/25/2013**	**Quarter**	**4th 2013**
Unit	**1**	**Technician**	**A. Mocha**		

SO2 ANALYZER	
Manufacturer	TECO
Serial #	43I-0734726456
Span Setting	0 - 800 ppm
Component ID	A01
Monitoring Sys. ID	A01
Unit/Stack ID	PTP 1

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass/ Fail
Low	1315	199.4	204.7	-5.30	5%		
	1326	199.4	205.6	-6.20		ALM038004	
	1345	199.4	209.2	-9.80	3.6		PASS
Mid	1320	439.0	448.8	-9.80			
	1333	439.0	446.1	-7.10		CC279379	
	1351	439.0	447.9	-8.90	2.0		PASS
High	1303	701.0	676.0	25.00			
	1340	701.0	712.7	-11.70		ALM001219	
	1358	701.0	714.3	-13.30	0.0		PASS

NOx ANALYZER	
Manufacturer	TECO
Serial #	42I-1315157764
Span Setting	0 - 600 ppm
Component ID	A02
Monitoring Sys. ID	102
Unit/Stack ID	PTP 1

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass/ Fail
Low	1315	153.3	157.9	-4.60	5%		
	1326	153.3	157.6	-4.30		ALM038004	
	1345	153.3	155.1	-1.80	2.3		PASS
Mid	1320	332.0	335.2	-3.20			
	1333	332.0	330.9	1.10		CC279379	
	1351	332.0	335.7	-3.70	0.6		PASS
High	1303	525.0	546.9	-21.90			
	1340	525.0	517.2	7.80		ALM001219	
	1358	525.0	519.4	5.60	0.5		PASS

CO2 ANALYZER	
Manufacturer	Cal Inst.
Serial #	600D/U10041
Span Setting	0 - 20 %
Component ID	A03
Monitoring Sys. ID	A03
Unit/Stack ID	PTP 1

	Time (EST)	Reference Value	Monitor Value	PPM Difference	Linearity Error	PROTOCOL 1 TANK SERIAL #	Pass/ Fail
Low	1315	5.00	5.03	-0.03	5%		
	1326	5.00	5.11	-0.11		ALM038004	
	1345	5.00	5.09	-0.09	1.5		PASS
Mid	1320	11.03	11.24	-0.21			
	1333	11.03	11.10	-0.07		CC279379	
	1351	11.03	11.21	-0.18	1.4		PASS
High	1303	16.81	16.71	0.10			
	1340	16.81	16.94	-0.13		ALM001219	
	1358	16.81	17.01	-0.20	0.5		PASS

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 - PGVP Vendor ID: A12012

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

P.O. No.: CEM6035
Document # : 48178486-003

Customer
FLORIDA POWER & LIGHT - EMISSIONS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : SNC2

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

Cylinder Number: ALM038004 **Certification Date:** 01Nov2012 **Exp. Date:** 02Nov2020
Cylinder Pressure*:** 1888 PSIG **Batch No:** PLU0140319

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	153.3	PPM	+/- 1%	Direct NIST and VSL
SULFUR DIOXIDE *	199.4	PPM	+/- 1%	Direct NIST and VSL
CARBON DIOXIDE	5.00	%	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	153.3	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 1885	04Jan2018	KAL004337	242.0 PPM	NITRIC OXIDE
NTRM 0280	06Jan2018	KAL003815	255.5 PPM	SULFUR DIOXIDE
NTRM 2000	01Jun2013	K026813	5.008 %	CARBON DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	26Oct2012	FTIR
FTIR//000928781	11Oct2012	FTIR
FTIR//000928781	18Oct2012	FTIR

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: 24Oct2012 Response Unit:PPM	Date: 01Nov2012 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.28984 R1=241.3709 T1=153.2108	Z1=-0.33282 R1=241.3897 T1=152.5705	r=9.99999E-1
R2=241.8581 Z2=-0.23151 T2=153.2422	R2=241.4245 Z2=0.06256 T2=152.8284	Constants: A=0.00000E+0
Z3=0.39449 T3=153.3558 R3=241.9462	Z3=0.28882 T3=152.8308 R3=241.5992	B=9.89616E-1 C=4.40000E-5
Avg. Concentration: 153.5 PPM	Avg. Concentration: 153.1 PPM	D=0.00000E+0 E=0.00000E+0

SULFUR DIOXIDE *

Date: 24Oct2012 Response Unit:PPM	Date: 01Nov2012 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00252 R1=254.0586 T1=197.9875	Z1=-0.01164 R1=253.9498 T1=198.4452	r=9.99994E-1
R2=254.1038 Z2=0.01300 T2=198.2547	R2=254.1091 Z2=-0.00578 T2=198.4551	Constants: A=0.00000E+0
Z3=0.16538 T3=198.3984 R3=254.1843	Z3=0.03324 T3=198.4920 R3=254.3212	B=9.99090E-1 C=8.00000E-6
Avg. Concentration: 199.3 PPM	Avg. Concentration: 199.5 PPM	D=0.00000E+0 E=0.00000E+0

CARBON DIOXIDE

Date: 24Oct2012 Response Unit:%		Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00205 R1=4.99487 T1=4.98566		r=9.99995E-1
R2=4.99821 Z2=0.00253 T2=4.98909		Constants: A=0.00000E+0
Z3=0.00489 T3=4.99908 R3=5.00308		B=9.53870E-1 C=1.26100E-2
Avg. Concentration: 4.999 %		D=5.00000E-6 E=0.00000E+0

APPROVED BY: 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: Interference Free™ Multi-Component EPA Protocol Gas

Assay Laboratory - PGVP Vendor ID: A12012

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

P.O. No.: CEM6035
Document # : 48178486-004

Customer
FLORIDA POWER & LIGHT - EMISSIONS T

14925 SW 67TH AVENUE
ATTN: ARTURO MOCHA
MIAMI FL 33158
US

ANALYTICAL INFORMATION Gas Type : SNC2

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

Cylinder Number: CC279379 **Certification Date:** 01Nov2012 **Exp. Date:** 02Nov2020
Cylinder Pressure*:** 1887 PSIG **Batch No:** PLU0140370

COMPONENT	CERTIFIED CONCENTRATION (Moles)		ACCURACY**	TRACEABILITY
NITRIC OXIDE	332	PPM	+/- 1%	Direct NIST and VSL
SULFUR DIOXIDE *	439	PPM	+/- 1%	Direct NIST and VSL
CARBON DIOXIDE	11.03	%	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE		BALANCE		
TOTAL OXIDES OF NITROGEN	332.	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 1686	26Mar2016	KAL003504	490.0 PPM	NITRIC OXIDE
NTRM 1681	07Feb2018	KAL004420	501.3 PPM	SULFUR DIOXIDE
NTRM 1675 B	05Jan2018	K013384	13.94 %	CARBON DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	26Oct2012	FTIR
FTIR//000928781	12Oct2012	FTIR
FTIR//000928781	18Oct2012	FTIR

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: 24Oct2012 Response Unit:PPM	Date: 01Nov2012 Response Unit: PPM	Concentration = A+Bx+Cx2+Dx3+Ex4
Z1=0.08221 R1=490.7785 T1=332.5822	Z1=-0.02422 R1=490.3830 T1=332.7347	r=9.99999E-1
R2=491.1018 Z2=0.55710 T2=332.9115	R2=490.4407 Z2=0.16494 T2=332.9496	Constants: A=0.00000E+0
Z3=0.66223 T3=332.9509 R3=491.1976	Z3=0.62902 T3=333.3958 R3=490.7983	B=9.99616E-1 C=4.40000E-5
Avg. Concentration: 332.0 PPM	Avg. Concentration: 332.6 PPM	D=0.00000E+0 E=0.00000E+0

SULFUR DIOXIDE *

Date: 24Oct2012 Response Unit:PPM	Date: 01Nov2012 Response Unit: PPM	Concentration = A+Bx+Cx2+Dx3+Ex4
Z1=-0.05517 R1=500.2220 T1=438.1585	Z1=-0.10496 R1=500.6737 T1=438.5489	r=9.99984E-1
R2=500.8744 Z2=-0.00180 T2=438.3810	R2=501.0394 Z2=0.00187 T2=438.9007	Constants: A=0.00000E+0
Z3=0.20882 T3=438.4608 R3=500.9862	Z3=0.26722 T3=439.2344 R3=501.7502	B=9.96631E-1 C=4.00000E-6
Avg. Concentration: 438.9 PPM	Avg. Concentration: 439.0 PPM	D=0.00000E+0 E=0.00000E+0

CARBON DIOXIDE

Date: 24Oct2012 Response Unit:%		Concentration = A+Bx+Cx2+Dx3+Ex4
Z1=0.00557 R1=13.86091 T1=10.97269	Z1=0.00000 R1=0.00000 T1=0.00000	r=9.99995E-1
R2=13.86363 Z2=0.00743 T2=10.97487	R2=0.00000 Z2=0.00000 T2=0.00000	Constants: A=0.00000E+0
Z3=0.01189 T3=10.98853 R3=13.88852	Z3=0.00000 T3=0.00000 R3=0.00000	B=9.53870E-1 C=1.26100E-2
Avg. Concentration: 11.03 %	Avg. Concentration: 0.000	D=5.00000E-6 E=0.00000E+0

APPROVED BY: Michael A. Kuhns

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 - PGVP Vendor ID: A12013
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 49695961-004

Customer
FLORIDA POWER & LIGHT - TURKEY
9700 SW 344 ST

HOMESTEAD, FL 33035

ANALYTICAL INFORMATION Gas Type : CO2,NO,SO2,BALN

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

Cylinder Number: ALM001219
Cylinder Pressure***: 1965 PSIG

Certification Date: 18Mar2013

Exp. Date: 19Mar2021
Batch No: PLU0173311

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
CARBON DIOXIDE	16.81 %	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	525 PPM	+/- 1%	Direct NIST and VSL
SULFUR DIOXIDE *	701 PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE	BALANCE		
TOTAL OXIDES OF NITROGEN	525. 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 1675 B	05Jan2018	K013384	13.94 %	CARBON DIOXIDE
NTRM 1686	26Mar2016	KAL003523	490.0 PPM	NITRIC OXIDE
NTRM 1661	07Feb2018	KAL004420	501.3 PPM	SULFUR DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	08Mar2013	FTIR
FTIR//000928781	15Mar2013	FTIR
FTIR//000928781	01Mar2013	FTIR

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: 11Mar2013 Response Unit: %		Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00212 R1=13.84327 T1=16.68364	Z1=0.00000 R1=0.00000 T1=0.00000	r=9.99996E-1
R2=13.85260 Z2=0.00479 T2=16.69558	R2=0.00000 Z2=0.00000 T2=0.00000	Constants: A=0.00000E+0
Z3=0.01630 T3=16.72632 R3=13.85917	Z3=0.00000 T3=0.00000 R3=0.00000	B=9.14785E-1 C=1.17570E-2
Avg. Concentration: 16.81 %	Avg. Concentration: 0.000	D=1.00000E-6 E=0.00000E+0
NITRIC OXIDE		
Date: 11Mar2013 Response Unit: PPM	Date: 18Mar2013 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.09467 R1=489.5246 T1=523.9475	Z1=0.14236 R1=490.1644 T1=525.3974	r=9.99999E-1
R2=489.6883 Z2=0.04870 T2=524.6114	R2=490.1801 Z2=0.22803 T2=525.5099	Constants: A=0.00000E+0
Z3=0.20741 T3=525.1303 R3=490.3930	Z3=0.98641 T3=525.7501 R3=490.3845	B=9.90869E-1 C=4.60000E-5
Avg. Concentration: 524.7 PPM	Avg. Concentration: 525.3 PPM	D=0.00000E+0 E=0.00000E+0
SULFUR DIOXIDE *		
Date: 11Mar2013 Response Unit: PPM	Date: 18Mar2013 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4

TURKEY POINT PLANT UNIT 1
Seven Day Calibration Error Test

Plant	PTP	Parameter	NO_X
Unit	1	Instrument Span	600
Oris Code	621	Serial #	1315157764

Day	Level	Date	Calibration End Time	Reference/Cylinder Value (ppm)	Monitor Value (ppm)	Calibration Error (%)	Adjustment made ? up/down/none	New monitor value
0	zero	12/3/2013	3:19 PM	0.0	Calibrate monitors, begin test, collect and calculate drift in 24 hours. (see 40 CFR 75, App. A, sec. 6.3.1)			
0	span	12/3/2013	3:19 PM	525.0				
1	zero	12/4/2013	7:42 AM	0.0	0.1	0.0%	None	NA
1	span	12/4/2013	7:42 AM	525.0	538.2	2.2%	None	NA
2	zero	12/5/2013	7:42 AM	0.0	0.1	0.0%	None	NA
2	span	12/5/2013	7:42 AM	525.0	537.0	2.0%	None	NA
3	zero	12/6/2013	7:42 AM	0.0	0.1	0.0%	None	NA
3	span	12/6/2013	7:42 AM	525.0	538.6	2.3%	Down	525.8
4	zero	12/7/2013	7:42 AM	0.0	0.0	0.0%	None	NA
4	span	12/7/2013	7:42 AM	525.0	528.0	0.5%	None	NA
5	zero	12/8/2013	11:39 AM	0.0	0.0	0.0%	None	NA
5	span	12/8/2013	11:39 AM	525.0	534.4	1.6%	None	NA
6	zero	12/10/2013	3:17 AM	0.0	0.0	0.0%	None	NA
6	span	12/10/2013	3:17 AM	525.0	530.8	1.0%	None	NA
7	zero	12/11/2013	7:42 AM	0.0	0.1	0.0%	None	NA
7	span	12/11/2013	7:42 AM	525.0	525.2	0.0%	None	NA

Notes:

$$\text{Calibration Error} = \frac{|\text{Reference} - \text{Monitor}|}{\text{Instrument Span}} \times 100 \quad \text{Eq. A-5}$$

For NOx, the calibration error is acceptable if <=2.5%.

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 - PGVP Vendor ID: A12013
AIR LIQUIDE AMERICA SPECIALTY GASES LLC
6141 EASTON ROAD, BLDG 1
PLUMSTEADVILLE, PA 18949-0310

P.O. No.:
Document # : 49695961-004

Customer
FLORIDA POWER & LIGHT - TURKEY
9700 SW 344 ST

HOMESTEAD, FL 33035

ANALYTICAL INFORMATION Gas Type : CO2,NO,SO2,BALN

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

Cylinder Number: ALM001219
Cylinder Pressure***: 1965 PSIG

Certification Date: 18Mar2013

Exp. Date: 19Mar2021
Batch No: PLU0173311

COMPONENT	CERTIFIED CONCENTRATION (Moles)	ACCURACY**	TRACEABILITY
CARBON DIOXIDE	16.81 %	+/- 1%	Direct NIST and VSL
NITRIC OXIDE	525 PPM	+/- 1%	Direct NIST and VSL
SULFUR DIOXIDE *	701 PPM	+/- 1%	Direct NIST and VSL
NITROGEN - OXYGEN FREE	BALANCE		
TOTAL OXIDES OF NITROGEN	525. 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 1675 B	05Jan2018	K013384	13.94 %	CARBON DIOXIDE
NTRM 1686	26Mar2016	KAL003523	490.0 PPM	NITRIC OXIDE
NTRM 1661	07Feb2018	KAL004420	501.3 PPM	SULFUR DIOXIDE

INSTRUMENTATION

INSTRUMENT/MODEL/SERIAL#	DATE LAST CALIBRATED	ANALYTICAL PRINCIPLE
FTIR//000928781	08Mar2013	FTIR
FTIR//000928781	15Mar2013	FTIR
FTIR//000928781	01Mar2013	FTIR

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: 11Mar2013 Response Unit: %		Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=0.00212 R1=13.84327 T1=16.68364	Z1=0.00000 R1=0.00000 T1=0.00000	r=9.99996E-1
R2=13.85260 Z2=0.00479 T2=16.69558	R2=0.00000 Z2=0.00000 T2=0.00000	Constants: A=0.00000E+0
Z3=0.01630 T3=16.72632 R3=13.85917	Z3=0.00000 T3=0.00000 R3=0.00000	B=9.14785E-1 C=1.17570E-2
Avg. Concentration: 16.81 %	Avg. Concentration: 0.000	D=1.00000E-6 E=0.00000E+0
NITRIC OXIDE		
Date: 11Mar2013 Response Unit: PPM	Date: 18Mar2013 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4
Z1=-0.09467 R1=489.5246 T1=523.9475	Z1=0.14236 R1=490.1644 T1=525.3974	r=9.99999E-1
R2=489.6883 Z2=0.04870 T2=524.6114	R2=490.1801 Z2=0.22803 T2=525.5099	Constants: A=0.00000E+0
Z3=0.20741 T3=525.1303 R3=490.3930	Z3=0.98641 T3=525.7501 R3=490.3845	B=9.90869E-1 C=4.60000E-5
Avg. Concentration: 524.7 PPM	Avg. Concentration: 525.3 PPM	D=0.00000E+0 E=0.00000E+0
SULFUR DIOXIDE *		
Date: 11Mar2013 Response Unit: PPM	Date: 18Mar2013 Response Unit: PPM	Concentration=A+Bx+Cx2+Dx3+Ex4

ECMPS Client Tool
Version 1.0 2013 Q3

QA/Cert Test Detail Report
January 31, 2014 12:42 PM

Facility Name: Turkey Point

Facility Details

Facility ID (ORISPL): 621
State: FL
County: Miami-Dade

Unit/Stack/Pipe ID: PTP1

7-Day Calibration

Component ID: B02
Test Number: 7DAY-Q42013-B02-23
Span Scale Level: High
Component Type: NOX
Reason for Test: RECERT
Span Value: 600.000
Test Completion: 12/11/2013 07:51
Reported Test Results: PASSED
EPA Calculated Result: PASSED
Evaluation Status: No Errors
Submission Status: Data loaded on EPA Host System
Submission Date/Time: 01/23/2014 10:13:00 AM

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
12/04/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/04/2013 07	HIGH	525.000	87.5	538.200	2.20		2.20	
12/05/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/05/2013 07	HIGH	525.000	87.5	537.000	2.00		2.00	
12/06/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/06/2013 07	HIGH	525.000	87.5	538.600	2.30		2.30	
12/07/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/07/2013 07	HIGH	525.000	87.5	528.000	0.50		0.50	
12/08/2013 11	ZERO	0.000	0	0.000	0.00		0.00	
12/08/2013 11	HIGH	525.000	87.5	534.400	1.60		1.60	
12/10/2013 03	ZERO	0.000	0	0.000	0.00		0.00	
12/10/2013 03	HIGH	525.000	87.5	530.800	1.00		1.00	
12/11/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/11/2013 07	HIGH	525.000	87.5	525.200	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: **Turkey Point**
Facility ID (ORISPL): **621**

QA/Cert Test Detail Report

January 31, 2014 12:42 PM

Unit/Stack/Pipe ID: PTP1

7-Day Calibration

Component ID:	A03	**Component Type:**	CO2	**Test Completion:**	12/11/2013 07:51
Test Number:	7DAY-Q42013-A03-22	**Reason for Test:**	RECERT	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	20.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	Informational Message			**Submission Status:**	Data loaded on EPA Host System
				Submission Date/Time:	01/14/2014 1:50:00 PM

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
12/04/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/04/2013 07	HIGH	16.800	84	16.880	0.10		0.10	
12/05/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/05/2013 07	HIGH	16.800	84	16.770	0.00		0.00	
12/06/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/06/2013 07	HIGH	16.800	84	16.910	0.10		0.10	
12/07/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/07/2013 07	HIGH	16.800	84	16.950	0.20		0.20	
12/08/2013 11	ZERO	0.000	0	0.000	0.00		0.00	
12/08/2013 11	HIGH	16.800	84	17.000	0.20		0.20	
12/10/2013 03	ZERO	0.000	0	0.000	0.00		0.00	
12/10/2013 03	HIGH	16.800	84	16.900	0.10		0.10	
12/11/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/11/2013 07	HIGH	16.800	84	16.830	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: Turkey Point
Facility ID (ORISPL): 621

QA/Cert Test Detail Report

January 31, 2014 12:42 PM

Unit/Stack/Pipe ID: PTP1

7-Day Calibration

Component ID:	A02	**Component Type:**	NOX	**Test Completion:**	12/11/2013 07:51
Test Number:	7DAY-Q42013-A02-23	**Reason for Test:**	RECERT	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	600.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	No Errors			**Submission Status:**	Data loaded on EPA Host System
				Submission Date/Time:	01/14/2014 1:50:00 PM

Injection Date/Hour	Gas Level	Reference Value	Reference Value % of Span	Measured Value	Reported		Recalculated	
					Results	APS	Results	APS
12/04/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/04/2013 07	HIGH	525.000	87.5	538.200	2.20		2.20	
12/05/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/05/2013 07	HIGH	525.000	87.5	537.000	2.00		2.00	
12/06/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/06/2013 07	HIGH	525.000	87.5	538.600	2.30		2.30	
12/07/2013 07	ZERO	0.000	0	0.000	0.00		0.00	
12/07/2013 07	HIGH	525.000	87.5	528.000	0.50		0.50	
12/08/2013 11	ZERO	0.000	0	0.000	0.00		0.00	
12/08/2013 11	HIGH	525.000	87.5	534.400	1.60		1.60	
12/10/2013 03	ZERO	0.000	0	0.000	0.00		0.00	
12/10/2013 03	HIGH	525.000	87.5	530.800	1.00		1.00	
12/11/2013 07	ZERO	0.000	0	0.100	0.00		0.00	
12/11/2013 07	HIGH	525.000	87.5	525.200	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)

Unit/Stack/Pipe ID: PTP1

Fuel Flow-to-Load Test

System ID: 109 **System Type:** OILM
Test Number: GHRL-Q42013-009-1 **Reason for Test:** QA
Evaluation Status: No Errors

Calendar Quarter/Year: 2013 QTR 4
Reported Test Results: FEW168H
Submission Status: Data loaded on EPA Host System
Submission Date/Time: 01/15/2014 10:03:00 AM

Test Basis	Avg. Absolute Percent Difference	Hours Used In Analysis	Hours Excluded for Co-Firing	Hours Excluded for Ramping	Hours Excluded for Low Range
			0	0	0

Additional Information:
No comment.

Unit/Stack/Pipe ID: PTP1

Linearity Check

Component ID: A03 **Component Type:** CO2
Test Number: LINE-Q42013-A03-2 **Reason for Test:** QA
Span Scale Level: High **Span Value:** 20.000
Evaluation Status: Informational Message
Grace period Tested?

Test Completion: 11/25/2013 13:58
Reported Test Results: PASSED
EPA Calculated Result: PASSED
Submission Status: Data loaded on EPA Host System
Submission Date/Time: 01/14/2014 1:50:00 PM

Protocol Gas Data:

Gas Level Code	Gas Type Code	Vendor Identifier	Cylinder Identifier	Expiration Date
High	CO2,NO,SO2,BALN	A12013	ALM001219	03/19/2021
Mid	CO2,NO,SO2,BALN	A12012	CC279379	11/02/2020
Low	CO2,NO,SO2,BALN	A12012	ALM038004	11/02/2020

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	16.810	16.810	11.030	11.030	5.000	5.000
Mass CEM Value	16.887	16.887	11.183	11.183	5.077	5.077
Alt. Perf. Indicator						
Results	0.5	0.5	1.4	1.4	1.5	1.5

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
11/25/2013 13:12	MID	11.240	11.030	55.2%
11/25/2013 13:52	MID	11.210	11.030	55.2%
11/25/2013 13:34	MID	11.100	11.030	55.2%
11/25/2013 13:45	LOW	5.090	5.000	25.0%
11/25/2013 13:26	LOW	5.110	5.000	25.0%
11/25/2013 13:03	LOW	5.030	5.000	25.0%
11/25/2013 13:40	HIGH	16.940	16.810	84.1%
11/25/2013 13:58	HIGH	17.010	16.810	84.1%
11/25/2013 13:20	HIGH	16.710	16.810	84.1%

Additional Information:
No comment.

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

Unit/Stack/Pipe ID: PTP1

Linearity Check

Component ID:	B02	**Component Type:**	NOX	**Test Completion:**	11/25/2013 13:58
Test Number:	LINE-Q42013-B02-10	**Reason for Test:**	INITIAL	**Reported Test Results:**	PASSED
Span Scale Level:	High	**Span Value:**	600.000	**EPA Calculated Result:**	PASSED
Evaluation Status:	Informational Message			**Submission Status:**	Data loaded on EPA Host System
Grace period Tested?				**Submission Date/Time:**	01/14/2014 1:50:00 PM

Protocol Gas Data:

Gas Level Code	Gas Type Code	Vendor Identifier	Cylinder Identifier	Expiration Date
High	CO2,NO,SO2,BALN	A12013	ALM001219	03/19/2021
Mid	CO2,NO,SO2,BALN	A12012	CC279379	11/02/2020
Low	CO2,NO,SO2,BALN	A12012	ALM038004	11/02/2020

Summary Statistics:

	High		Mid		Low	
	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
Reference Value	525.000	525.000	332.000	332.000	153.300	153.300
Mass CEM Value	527.833	527.833	333.933	333.933	156.867	156.867
Alt. Perf. Indicator						
Results	0.5	0.5	0.6	0.6	2.3	2.3

Injection Statistics:

Date	Gas Level	Measured Value	Reference Value	Reference Value as % of Span
11/25/2013 13:26	LOW	157.600	153.300	25.6%
11/25/2013 13:03	LOW	157.900	153.300	25.6%
11/25/2013 13:45	LOW	155.100	153.300	25.6%
11/25/2013 13:40	HIGH	517.200	525.000	87.5%
11/25/2013 13:20	HIGH	546.900	525.000	87.5%
11/25/2013 13:58	HIGH	519.400	525.000	87.5%
11/25/2013 13:34	MID	330.900	332.000	55.3%
11/25/2013 13:52	MID	335.700	332.000	55.3%
11/25/2013 13:12	MID	335.200	332.000	55.3%

Additional Information:

No comment.

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

Unit/Stack/Pipe ID: **PTP1**

Relative Accuracy Test

System ID:	102	**System Parameter:**	NOX	**Test Completion:**	12/18/2013 14:10
Test Number:	RATA-Q42013-102-1	**Reason for Test:**	QA	**Reported Test Results:**	PASSED
# of Op. Levels:	1	**Grace Period Test?**		**EPA Calculated Result:**	PASSED
Evaluation Status:	Informational Message			**Reported BAF:**	1.000
Submission Status:	Data loaded on EPA Host System			**EPA Calculated BAF:**	1.000
Submission Date:	01/14/2014 1:50:00 PM			**RATA Frequency:**	4QTRS

Air Emissions Testing Data

QI Name:	Mocha, Arturo J	**AETB Name:**	FPL Emission Test Group
Exam Date:	10/06/2011	**AETB Phone Number:**	305-228-5089

Facility Name: **Turkey Point**

Facility ID (ORISPL): **621**

QA/Cert Test Detail Report

January 31, 2014 12:42 PM

Provider Name: Eastern Technicial Associates (ETA)

AETB Email: Arturo.Mocha@FPL.com

Provider Email: Sherri@smokeschool.com

Protocol Gas Data:

Gas Level Code	Gas Type Code	Vendor Identifier	Cylinder Identifier	Expiration Date
High	CO2,O2,BALN	A12013	CC203126	04/03/2021
Mid	CO2,O2,BALN	A12013	ALM047324	01/08/2021
High	NO,SO2,BALN	A12012	ALM001969	11/02/2020
Mid	NO,SO2,BALN	A12013	ALM028914	03/30/2021
Low	ZERO			

Operating Level: Mid

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

Summary Statistics:

	Reported	Recalculated		Reported	Recalculated
Mean of Monitoring System	0.238	0.238	**Relative Accuracy**	4.19	4.19
Mean of Reference Method Values	0.230	0.230	**Bias Adjustment Factor**	1.000	1.000
Mean of Difference	-0.008	-0.008	**APS Indicator**		
Standard Deviation of Difference	0.003	0.003	**T-Value**	2.306	2.306
Confidence Coefficient	0.002	0.002	**Gross Unit Load or Velocity**	200	201

Facility Name: **Turkey Point**

Facility ID (ORISPL): 621

QA/Cert Test Detail Report

January 31, 2014 12:42 PM

Run Data:

Run	Start Date	End Date	Run Status	Monitoring System Value	Reference Method Value	Gross Load or Velocity
1	12/18/2013 09:41	12/18/2013 10:01	RUNUSED	0.233	0.222	200
2	12/18/2013 10:16	12/18/2013 10:36	RUNUSED	0.239	0.236	201
3	12/18/2013 10:45	12/18/2013 11:05	RUNUSED	0.245	0.242	201
4	12/18/2013 11:18	12/18/2013 11:38	RUNUSED	0.246	0.237	201
5	12/18/2013 11:47	12/18/2013 12:07	RUNUSED	0.243	0.234	201
6	12/18/2013 12:18	12/18/2013 12:38	RUNUSED	0.235	0.226	201
7	12/18/2013 12:48	12/18/2013 13:08	RUNUSED	0.236	0.228	201
8	12/18/2013 13:19	12/18/2013 13:39	RUNUSED	0.235	0.227	201
9	12/18/2013 13:50	12/18/2013 14:10	RUNUSED	0.230	0.222	201

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)

ECMPS Client Tool

Version 1.0 2013 Q3

QA/Cert Events Printout Report

January 31, 2014 12:44 PM

Facility Name: Turkey Point

Facility Details

Facility ID (ORISPL):	621
State:	FL
County:	Miami-Dade

QA Certification Events Details

Unit/Stack Identifier	Event Code	Event Date/Hour	System ID / Type	Component ID / Type	Required Tests	Conditional Data Begin Date/Hour	Last Test Completed Date/Hour	Submitted?
PTP1	100	11/12/2013 12	102/NOX	B02/NOX	11	11/13/2013 15	12/18/2013 12	Already Submitted

Event Codes: 100 - Permanent Gas Analyzer Replacement (Like-kind Analyzer)

Required Test Codes: 11 - Normal Load RATA, 7-day Calibration Error Test, Linearity Check