

January 30, 2017

Via Electronic Mail

Marc A. Lovallo **Environmental Specialist** Compliance Assurance, Northeast District Florida Dept of Environmental Protection 7777 Baymeadows Way W, Suite 100 Jacksonville, FL 32256

Re:

Gainesville Renewable Energy Center, LLC (GREC)

Air Permit No. 0010131-006-AV (PSD-FL-411)

ORIS: 57241

Q4 2016 Excess Emission Reports, Semi-Annual Data Assessment & Title V Deviation

Monitoring Reports, Q3 Revised Reports

Dear Mr. Lovallo:

Below please find a summary of our 4th Quarter 2016 excess emission reports:

Report	Duration/Comment
NOx lb/mmBtu 30-day Summary	Compliant
CO lb/mmBtu 30-day Summary	Compliant
NOX & CO lb/mmBtu Excess Emissions	26 hours
SO2 lb/mmBtu 24-hr Summary	Compliant
Opacity 6 minute Summary	Compliant -
NOX, SO2 TPY 12-Month Rolling	Compliant
NOX lb/MWhr 30 day Summary	Compliant
SO2 lb/MWhr 30 day Summary	Compliant
Steam Flow Production Summary	Compliant

The detailed reports are attached for your review. If you have any questions or require additional information, please contact the Plant Engineer, Ali Leaphart, at (386) 315-8019 or me at (617) 904-3100, ext. 122.

I certify, based on information and belief formed after reasonable inquiry, the statements and information in this report are true, accurate, and complete.

Sincerely,

Vice President of Engineering

GREC Asset Manager

Leonard J. Fagar

LJF/cw enclosures

NOx lb/MMBtu 30 Day EPA Report Pollutant:

Emission Limitation: 0.070

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Y08012

Reporting Period Dates: From 10/01/2016 to 12/31/2016 23:59:59

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 434 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	1	0.23 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	1	0.23 % 2

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1, Startup/Shutdown	0	0,00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0,00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:11:58

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Pollutant: CO lb/MMBtu 30 Day EPA Report

Emission Limitation: 0.080

Analyzer Make/Model:

CAI 601

Analyzer Serial Number: Z01007

Reporting Period Dates: From 10/01/2016 to 12/31/2016 23:59:59

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 434 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 1
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	1	0.23 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	1	0.23 % 2

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:11:50

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

NOx & CO lb/MMBtu Excess Emissions – 4th Quarter, 2016

Startup/Shutdown Exclusions:

		CO Hourly	NOX Hourly	Description	Corrective Action
	1	+			
11/12	18			Cold Startup	Permit Condition:
		1900 - 1.615			B.13.a
		2000 - 1.41			
		2100 – 1.289			
		2200 – 1.206			
		2300 - 1.057	0.088 11 Common Hours		
		0000 - 0.929	0.079		
		0100 - 0.877			
		0200 - 0.661			
		0300 - 0.434	0.086		
		0400 -0.265	0.094		
		0500 - 0.227	0.101		
		0600 - 0.168	0.26		
		0700 - 0.458	0.283		
11/13		0800 - 0.467	0.293		
		0900 - 0.461	0.299		
		1000 - 0.408	0.301		
		1100 - 0.19	0.287		
		1200 -	0.269		
		1300 -	0.232		
		1400 -	0.154		
		1500 -	0.088		
		9	г.		
11/17	7	1300 - 0.234	0.131 6 Common Hours	Warm Startup	Permit Condition:
		1400 - 0.143			B.13.b
		1500 - 0.149	0.153		
		1600 - 0.16	0.147		
		1700 - 0.211	0.134		
		1800 - 0.184	0.128		
		1900 -	0.092		
		9	7		

NOx & CO lb/MMBtu Excess Emissions – 4th Quarter, 2016

11/20	Н	2100 - 0.826	Shutdown	Permit Condition:
				B.13.c
Total	5 6			

Malfunction:

	CO Hourly	NOX Hourly	Description	Corrective Action
Total				

Total Quarterly Excluded Hours = 26

Total 12-month Rolling Excluded Hours, Ending $4^{\rm th}$ Quarter = 100

Pollutant: SO2 lb/MMBtu 24 Hour EPA Report

Emission Limitation: 0.029

Analyzer Make/Model:

CAI 600

Analyzer Serial Number: Z01006

Reporting Period Dates: From 10/01/2016 to 12/31/2016 23:59:59

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 434 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	1	0.23 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	1	0.23 % 2

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
1, Startup/Shutdown	0	0.00 %
2, Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5, Unknown Causes	0	0.00 %
6. Unit Offline	0	- 0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:12:14

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Pollutant: Opacity 6 Minute >10/20 EPA Report

Emission Limitation: 10.00

Analyzer Make/Model: DURAG D-R 290

Analyzer Serial Number: 1220055

Reporting Period Dates: From 10/01/2016 to 12/31/2016 23:59:59

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Boiler Opacity

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Periods:

4356 Periods

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	12	0.28 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	12	0.28 % 2

[%] Unavailable = CEMS Downtime during Source Operating Periods/Source Operating Periods x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Excess Emission Periods/Source Operating Periods x 100

Report Printed on: 01/30/2017 13:12:05

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating periods or the total CMS downtime is 5 percent or greater of the total operating periods, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Pollutant: Opacity 6 Minute >20/27 EPA Report

Emission Limitation: 20.00

Analyzer Make/Model:

DURAG D-R 290

Analyzer Serial Number: 1220055

Reporting Period Dates: From 10/01/2016 to 12/31/2016 23:59:59

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Boiler Opacity

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Periods:

4356 Periods

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	0	0.00 %
4. Other Known Causes	12	0.28 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	12	0.28 % 2

[%] Unavailable = CEMS Downtime during Source Operating Periods/Source Operating Periods x 100

Emission Data Summary

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
1, Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Excess Emission Periods/Source Operating Periods x 100

Report Printed on: 01/30/2017 13:12:09

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating periods or the total CMS downtime is 5 percent or greater of the total operating periods, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Boiler Opacity 6 Minute Downtime Report

Location: Gainesville, FL

Page 1 of 1

Facility Name: Gainesville

Opac Source:

OPACITY Parameter: Data in the Reporting Period: 10/01/2016 00:00 to 12/31/2016 23:59

Incid. No.	Start Date	End Date	Duration Periods	Reason	EPA Downtime Category	Corrective Action
-	10/21/2016 06:36	10/21/2016 06:41	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
2	10/21/2016 06:48	10/21/2016 06:53	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
က	11/08/2016 13:24	11/08/2016 13:29	-	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
4	11/08/2016 13:54	11/08/2016 13:59	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
5	11/08/2016 14:06	11/08/2016 14:11	_	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
ဖ	11/12/2016 18:12	11/12/2016 18:17	-	Other Known Causes	Other Known Causes	Incomplete Period - Startup
7	11/17/2016 12:18	11/17/2016 12:29	2	Other Known Causes	Other Known Causes	Incomplete Period - Shutdown/Startup
∞	11/20/2016 21:36	11/20/2016 21:41	1	Other Known Causes	Other Known Causes	Incomplete Period - Shutdown
თ	12/05/2016 13:18	12/05/2016 13:23	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
10	12/05/2016 13:30	12/05/2016 13:35	1	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing
11	12/19/2016 13:54	12/19/2016 13:59	_	Other Known Causes	Other Known Causes	Incomplete Period - Equipment Testing

Total Downtime in the Reporting Period = 12 Periods

Data Availability for this Reporting Period = 99.72 %

Total Operating Time in the Reporting Period = 4356 Periods

Monthly & 12-Month Rolling Report

Gainesville Renewable Energy Center, LLC Company:

11201 NW 13th Street

Gainesville, FL 32653

EU-002 Data Group:

Source:

All Data Groups Report Name:

Summary: Monthly and 12-Month Rolling Totals

1/1/2016 00:00 12/31/2016 23:59

Start of Report: End of Report:

								4.				
SO2 12-Month Rolling	0.14	0.14	0.14	0.14	0.14	00.00	00.00	00.00	00.00	00.00	00.00	00.00
NOx 12-Month Rolling	148.56	125.43	101.95	88.29	69.95	44.74	17.45	11.23	10.91	20.25	20.19	20.19
S02 Tons/month	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nox Tons/month Tc	0.00	0.00	1.49	0.00	1.11	0.00	0.00	0.00	1.22	0.34	7.00	0.00
	1/01/2016 00:00	2/01/2016 00:00	3/01/2016 00:00	04/01/2016 00:00	05/01/2016 00:00	06/01/2016 00:00	07/01/2016 00:00	08/01/2016 00:00	09/01/2016 00:00	10/01/2016 00:00	11/01/2016 00:00	12/01/2016 00:00

Pollutant: NOx lb/MWhr 30 Day EPA Report

Emission Limitation: 1.00

Analyzer Make/Model: CAI 600
Analyzer Serial Number: Y08012

Reporting Period Dates: From 10/1/2016 to 12/31/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 434 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable 1
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	6	1.38 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	6	1.38 % ²

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions	1
1. Startup/Shutdown	0	0.00 %	
2. Control Equipment Problems	0	0.00 %	
3. Process Problems	0	0.00 %	
4. Other Known Causes	0	0.00 %	
5. Unknown Causes	0	0.00 %	
6, Unit Offline	0	0.00 %	
2. Total duration of excess emissions	0	0.00 % 2	

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 14:50:08

¹ For opacity, record all times in minutes. For gases, record all times in hours.

For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Pollutant: SO2 lb/MWhr 30 Day EPA Report

Emission Limitation: 1.40

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Z01006

Reporting Period Dates: From 10/1/2016 to 12/31/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 434 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	6	1.38 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	6	1.38 % ²

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

Duration of excess emissions in reporting period due to:	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 14:50:07

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Steam Flow 4-HR Rolling Exceedance Report

Page 1 of 1

Facility Name: Gainesville

BFB1 Source:

STEAM Parameter:

930 Limit:

Location: Gainesville, FL

Data in the Reporting Period: 10/01/2016 00:00 to 12/31/2016 23:59

10.0	
Corrective Action	
Reason for Incident	
EPA Category	
Average	
Duration	
End Date	
Start Date	
No.	

No Incidents in the Reporting Period

Total Duration in the Reporting Period = 0 Hours

Total Operating Time in the Reporting Period = 434 Hours

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	NOx lb/MMBtu
Gainesville, FL 32653	Reporting Period:	4th Quarter 2016

CEMS Information

Manufacturer: California Analytical Instruments (CAI)

Model No. 600

Serial No. Y08012

Type: Dry extractive
Sampling Location: Stack
Span Value: 120 ppm

Part I: Accuracy Assessment Results

A. Relative accuracy test audit for NOx in lb/MMBtu

* To be completed by the Agency.

11/6/2014
USEPA Method 7E
0.06
0.058
0.002
0.0006
4.51%

B. Linearity Check for NOx in ppm

		Audit Point 1	Audit Point 2	Audit Point 3
1.	Date of audit	10/10/2016	10/10/2016	11/6/2015
2.	Cylinder ID number	AAL072617	AAL17536	CC152717
3.	Date of certification	10/14/2013	10/11/2013	5/22/2015
4.	Type of certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
5.	Certified audit value	30.3	66	108.9
6.	CEMS response value	30.367	65.633	108.633
7.	Accuracy	0.22%	0.56%	0.25%

C. Relative Accuracy Audit (RAA)

The facility does not perform relative accuracy audits.

D. Corrective action for excessive inaccuracy

There were no audit failures during the reporting period.

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	NOx lb/MMBtu
Gainesville, FL 32653	Reporting Period:	4th Quarter 2016

Part II: Calibration Drift Assessment

A & B. Summary of out-of-control periods caused by excessive calibration drift

	Beginning	Ending	Duration	Corrective
#	Date & Hour	Date & Hour	(hours)	Action
1,				
2,				
3,				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	SO2 lb/MMBtu
Gainesville, FL 32653	Reporting Period:	4th Quarter 2016

CEMS Information

Manufacturer: California Analytical Instruments (CAI)

Model No. 600

Serial No. Z01006

Type: Dry extractive Sampling Location: Stack Span Value: 40 ppm

Part I: Accuracy Assessment Results

A. Relative accuracy test audit for SO2 in lb/MMBtu

1. Date of audit	11/6/2014
2. Reference method(s)	USEPA Method 6C
3. Average reference method value	0.0000
4. Average CEMS Value	0.0000
5. Absolute value of mean difference [d]	0.0000
6. Confidence coefficient [CC]	0.0000
7. Percent relative accuracy (RA)	0.00%
8. EPA performance audit results	÷
a) Audit lot number	
b) Audit sample number	
c) Results (mg/dsm³)	5
d) Actual value (mg/dsm³)*	
e) Relative error*	
* To be completed by the Agency.	S

B. Linearity Check for SO2 in ppm

		Audit Point 1	Audit Point 2	Audit Point 3
1.	Date of audit	10/10/2016	10/10/2016	10/10/2016
2.	Cylinder ID number	CC202153	ALM020336	CC335211
3.	Date of certification	10/11/2013	10/11/2013	11/24/2015
4.	Type of certification	EPA Protocol 1	EPA Protocol 1	EPA Protocol 1
5.	Certified audit value	10.18	22.5	37.79
6.	CEMS response value	10.2	21.233	37.267
7.	Accuracy	0.20%	1.267ppm	1.38%

C. Relative Accuracy Audit (RAA)

The facility does not perform relative accuracy audits.

D. Corrective action for excessive inaccuracy

There were no audit failures during the reporting period.

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	SO2 lb/MMBtu
Gainesville, FL 32653	Reporting Period:	4th Quarter 2016

Part II: Calibration Drift Assessment

A & B. Summary of out-of-control periods caused by excessive calibration drift

	Beginning	Ending	Duration	Corrective
#	Date & Hour	Date & Hour	(hours)	Action
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	CO lb/MMBtu
Gainesville, FL 32653	Reporting Period:	3rd Quarter 2016

CEMS Information

Manufacturer: California Analytical Instruments (CAI)

Model No. 601

Serial No. Z01007

Type: Dry extractive Sampling Location: Stack Span Value: 200 ppm

Part I: Accuracy Assessment Results

A. Relative accuracy test audit for CO in lb/MMBtu

1. Date of audit	11/6/2014
2. Reference method(s)	USEPA Method 10
3. Average reference method value	0.011
4. Average CEMS Value	0.011
5. Absolute value of mean difference [d]	-0.001
6. Confidence coefficient [CC]	0.0003
7. Percent relative accuracy (RA)	1.40%
8. EPA performance audit results	÷
a) Audit lot number	
b) Audit sample number	
c) Results (mg/dsm³)	
d) Actual value (mg/dsm³)*	
e) Relative error*	
* To be completed by the Agency.	

B. Cylinder gas audit for CO in ppm

		Audit Point 1	Audit Point 2	
1.	Date of audit	9/8/2016	9/8/2016	(mm/dd/yyyy)
2.	Cylinder ID number	AAL072617	AAL17536	
3.	Date of certification	10/14/2013	10/11/2013	(mm/dd/yyyy)
4.	Type of certification	EPA Protocol 1	EPA Protocol 1	(e.g., Protocol 1)
5.	Certified audit value	49.3	109.7	(e.g., ppm or percent)
6.	CEMS response value	49.467	110.3	(e.g., ppm or percent)
7.	Accuracy	0.34%	0.55%	(percent)

C. Relative Accuracy Audit (RAA)

The facility does not perform relative accuracy audits.

D. Corrective action for excessive inaccuracy

There were no audit failures during the reporting period.

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	CO lb/MMBtu
Gainesville, FL 32653	Reporting Period:	3rd Quarter 2016

Part II: Calibration Drift Assessment

A & B. Summary of out-of-control periods caused by excessive calibration drift

	Beginning	Ending	Duration	Corrective
#	Date & Hour	Date & Hour	(hours)	Action
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Gainesville Renewable Energy Center LLC	Source Unit No.:	EU-002
11201 NW 13th Street	Pollutant:	CO lb/MMBtu
Gainesville, FL 32653	Reporting Period:	4th Quarter 2016

CEMS Information

Manufacturer: California Analytical Instruments (CAI)

Model No. 601

Serial No. Z01007

Type: Dry extractive Sampling Location: Stack Span Value: 200 ppm

Part I: Accuracy Assessment Results

A. Relative accuracy test audit for CO in lb/MMBtu

1. Date of audit	11/6/2014
2. Reference method(s)	USEPA Method 10
3. Average reference method value	0.011
4. Average CEMS Value	0.011
5. Absolute value of mean difference [d]	-0.001
6. Confidence coefficient [CC]	0.0003
7. Percent relative accuracy (RA)	1.40%
8. EPA performance audit results	
a) Audit lot number	,
b) Audit sample number	
c) Results (mg/dsm³)	
d) Actual value (mg/dsm³)*	
e) Relative error*	
* To be completed by the Agency.	

B. Cylinder gas audit for CO in ppm

		Audit Point 1	Audit Point 2	
1.	Date of audit	12/28/2016	12/28/2016	(mm/dd/yyyy)
2.	Cylinder ID number	CC342400	AAL17536	
3.	Date of certification	8/11/2014	10/11/2013	(mm/dd/yyyy)
4.	Type of certification	EPA Protocol 1	EPA Protocol 1	(e.g., Protocol 1)
5.	Certified audit value	45.99	109.7	(e.g., ppm or percent)
6.	CEMS response value	44	108.133	(e.g., ppm or percent)
7.	Accuracy	4.33%	1.43%	(percent)

C. Relative Accuracy Audit (RAA)

The facility does not perform relative accuracy audits.

D. Corrective action for excessive inaccuracy

There were no audit failures during the reporting period.

Part II: Calibration Drift Assessment

A & B. Summary of out-of-control periods caused by excessive calibration drift

	Beginning	Ending	Duration	Corrective
#	Date & Hour	Date & Hour	(hours)	Action
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				



Department of Environmental Protection

Division of Air Resource Management

DEVIATION MONITORING REPORT TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☐ Permanent Facility Shutdown

DEP Form No. 62-213.900(2)

Effective: August 1, 2011

X Semi-Annual Requirement ☐ Transfer of Permit

	REPORTING PERIOD*	REPORT DEADLINE**
	July 1st through December 31st of 2016 (year)	January 30 th
per	ne statement of compliance must cover all conditions that were in riod, including any conditions that were added, deleted, or changed the	
**Se	ee Rule 62-213.440(3)(a)2., F.A.C.	
Facil	ity Owner/Company Name: Energy Management Inc.	
Site 1	Name: <u>Gainesville Renewable Energy Center</u> Facility ID No. <u>572</u> 4	41 / 0010131-006-AV County: Alachua
сом	PLIANCE STATEMENT (Check only one of the following three	options)
X	A. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part, and there were no reportable requirements associated with any malfunction or breakdown of equipment, or monitoring systems during the reporting period identically.	e incidents of deviations from applicable process, fuel burning or emission control
	B. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part; however, there were one or more applicable requirements associated with malfunctions or breakd control equipment, or monitoring systems during the reporting per the Department. For each incident of deviation, the following information of the control of	ore reportable incidents of deviations from owns of process, fuel burning or emission iod identified above, which were reported to
	 Date of report previously submitted identifying the incident Description of the incident. 	of deviation.
*	C. This facility was in compliance with all terms and conditions applicable, the Acid Rain Part, EXCEPT those identified in the particular of deviations from applicable requirements associated we fuel burning or emission control equipment, or monitoring systabove, which were reported to the Department. For each item of is included:	ges attached to this report and any reportable with malfunctions or breakdowns of process, tems during the reporting period identified
	 Emissions unit identification number. Specific permit condition number (note whether the permit changed during certification period). 	condition has been added, deleted, or
	3. Description of the requirement of the permit condition.	
	4. Basis for the determination of noncompliance (for monitore was continuous, i.e., recorded at least every 15 minutes, or i	
	5. Beginning and ending dates of periods of noncompliance.	

Identification of the probable cause of noncompliance and description of corrective action or

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

Dates of any reports previously submitted identifying this incident of noncompliance.

1. Date of report previously submitted identifying the incident of deviation.

2. Description of the incident.

preventative measures implemented.

DEVIATION MONITORING REPORT - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

(Signature of Title V Source Responsible Official)	1/30/17 (Date)
Name: Leonard J. Fagan	Title: <u>VP Engineering</u> , Asset Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain 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.

Jed Ja	1/30/17
(Signature of Acid Rain Source Designated Representative)	(Date)
Name: Leonard J. Fagan	Title: VP Engineering, Asset Manager

(Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency (EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

DEP Form No. 62-213.900(2)

Effective: August 1, 2011

PINOT

Pollutant: NOx lb/MMBtu 30 Day EPA Report

Emission Limitation: 0.070

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Y08012

Reporting Period Dates: From 7/1/2016 to 9/30/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	1	2.56 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	1	2.56 % ²

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:05:30

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Pollutant: SO2 lb/MMBtu 24 Hour EPA Report

Emission Limitation: 0.029

Analyzer Make/Model: CAI 600
Analyzer Serial Number: Z01006

Reporting Period Dates: From 7/1/2016 to 9/30/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1. Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	4	10.26 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	4	10.26 % ²

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:05:34

¹ For opacity, record all times in minutes. For gases, record all times in hours.

For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Boiler SO2 lb/MMBtu 1 Hour Downtime Report

Facility Name: Gainesville

Location: Gainesville, FL

Source: BFB1

i

Parameter: SO2_RATE_P60

Data in the Reporting Period: 07/01/2016 00:00 to 09/30/2016 23:59

Incid.			Duration				
	Start Date	End Date	Hours	Keason	EPA Downtime Category	Corrective Action	
	09/29/2016 13:00	09/29/2016 13:59	1	Calibration/QA	Calibration/QA	Quarterly Gas Audit	
	09/30/2016 12:00	09/30/2016 14:59	8	Calibration Drift	Calibration/QA	Performed Another Calibration	

Total Downtime in the Reporting Period = 4 Hours

Total Operating Time in the Reporting Period = 39 Hours

Data Availability for this Reporting Period = 89.74 %

NOx lb/MWhr 30 Day EPA Report Pollutant:

Emission Limitation: 1.00

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Y08012

Reporting Period Dates: From 7/1/2016 to 9/30/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1, Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	39	100.00 %
4. Other Known Causes	0	0.00 %
5, Unknown Causes	0	0.00 %
2. Total CEMS Downtime	39	100.00 % 2

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1. Startup/Shutdown	0	0.00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5, Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:04:03

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Boiler NOx lb/MWhr 1 Hour Downtime Report

Location: Gainesville, FL

Facility Name: Gainesville

BFB1

Source:

NOx_LB/MWHR Parameter: Data in the Reporting Period: 07/01/2016 00:00 to 09/30/2016 23:59

Incid. No.	Start Date	End Date	Duration Hours	Reason	EPA Downtime Category	Corrective Action
-	09/29/2016 09:00	09/30/2016 23:59	39	Calibration/QA	Calibration/QA	Recertification

Total Downtime in the Reporting Period = 39 Hours

Data Availability for this Reporting Period ≠ 0.00 %

Total Operating Time in the Reporting Period = 39 Hours

Pollutant: SO2 lb/MWhr 30 Day EPA Report

Emission Limitation: 1.40

Analyzer Make/Model: **CAI 600** Analyzer Serial Number: Z01006

Reporting Period Dates: From 7/1/2016 to 9/30/2016 11:59:59 PM

Company Name:

Gainesville

Address:

11201 NW 13th Street

Gainesville, FL 32653

Process Unit Description:

Biomass Boiler

Date of Last CEMS Certification or Audit: 11/6/2014

Total Source Operating Time in Reporting Period: 39 Hours

CMS Performance Summary

1. CEMS downtime in reporting period due to:	Duration	% Unavailable
1, Monitor Equipment Malfunctions	0	0.00 %
2. Non-Monitor CEMS Equipment Malfunctions	0	0.00 %
3. Calibration/QA	39	100.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
2. Total CEMS Downtime	39	100.00 % 2

[%] Unavailable = CEMS Downtime during Source Operating Time/Source Operating Time x 100

Emission Data Summary

 Duration of excess emissions in reporting period due to: 	Duration	% Excess Emissions
1. Startup/Shutdown	0	0,00 %
2. Control Equipment Problems	0	0.00 %
3. Process Problems	0	0.00 %
4. Other Known Causes	0	0.00 %
5. Unknown Causes	0	0.00 %
6. Unit Offline	0	0.00 %
2. Total duration of excess emissions	0	0.00 % 2

[%] Excess Emissions = Total Duration of Excess Emissions/Source Operating Time x 100

Report Printed on: 01/30/2017 13:04:04

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

Boiler SO2 lb/MWhr 1 Hour Downtime Report

Location: Gainesville, FL

Facility Name: Gainesville

BFB1

Source:

SO2_LB/MWHR Parameter: Data in the Reporting Period: 07/01/2016 00:00 to 09/30/2016 23:59

Corrective Action	Recertification
EPA Downtime Category	Calibration/QA
Reason	Calibration/QA
Duration Hours	30
End Date	09/30/2016 23:59
Start Date	09/29/2016 09:00
Incid. No.	-

Total Downtime in the Reporting Period = 39 Hours

Total Operating Time in the Reporting Period = 39 Hours

Data Availability for this Reporting Period = 0.00 %