Silicon Valley Power
CITY OF SANTA CLARA

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BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

Silicon Valley Power
City of Santa Clara
1500 Warburton Ave.
Santa Clara, CA 95050

LETTER OF TRANSMITTAL

TO: Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

DATE: 9/21/17

ATTN: Title V Reports 415-771-6000

SUBJECT: Silicon Valley Power Cogen Title V Reports
BAAQMD Plant No. 621, permit to Operate Condition #14194 (S-1, 2, 3 & 4).

We are sending you the following:

X	Attached Report		Separate Cover
	Drawing Originals		Drawing Prints
	Materials described below		Specifications

Quantity	Identification Number	Rev.	Description
1	Mar. '17 to Aug. '17	0	Semi-annual Monitoring Report

These are transmitted:

X	In accordance with Permit to Operate Condition # 14194	9	No. of pages including this letter of transmittal

Remarks: A copy of this report has been sent to the Director of the Air Division at USEPA Region IX. The report has been certified by the Responsible Official as true, accurate and complete (see letter dated 9/20/17 signed by John Roukema, Chief of Electric Utility Officer for Rajeev Batra, Acting City Manager).

Signed:

Monica Nguyen
Staff Aide II

City of Santa Clara
The Center of What's Possible

City Manager's Office

September 20, 2017

Bay Area Air Quality Management District
Director of Compliance and Enforcement
375 Beale Street, Suite 600
San Francisco, CA 94105

Attn: Title V Reports

Subject: Title V Semi-annual Monitoring Report for City of Santa Clara, Silicon Valley Power Cogeneration Plant, BAAQMD Plant No. A0621, Permit to Operate Condition 14194 (S-1, S-2, S-3, S-4)

The City of Santa Clara Electric Department – Silicon Valley Power (SVP) – is submitting this semi-annual report in accordance with the Major Facility Review Permit Section I (Standard Conditions), Clause F (Monitoring Reports), and the Permit to Operate Condition 14194. The permit requires a reporting of operational hours and a reporting of specific events of non-compliance. During the period **March 1, 2017** through **August 31, 2017**, SVP completed all the required monitoring. There were three instances of non-compliance during this reporting period. The attached forms provide data that details the compliance items.

I certify to the best of my knowledge that the statements and information contained in this report are true, accurate, and complete. A copy of this report has been sent to the Director of the Air Division, USEPA, Region IX.

Respectfully,

John C Freebern

Rajeev Batra
City Manager

9/19/17
Date

Facility #A0621
City of Santa Clara,
Silicon Valley Power
Cogeneration Plant
524 Robert Avenue
Santa Clara, CA 95050

COGENERATION SEMIANNUAL MONITORING REPORT

Excess Emission and Monitoring System Performance Report for BAAQMD & USEPA
Permit to Operate Condition No. 14194 (S-1, 2, 3 & 4)

BAAQMD Plant # 621-Silicon Valley Power COGENERATION PLANT NO. 1

Report for the period from **Mar-17** through **Aug-17**

I. Hours of Plant Operation:

For 6 months,				S-1 Gas Turbine	S-2 Gas Turbine	S-3 Supplemental Burner	S-4 Supplemental Burner
From	Mar-17	To	Aug-17				
Hours of Operation				4,061	3,469	0	0

II. Periods Water to Fuel Ratio Was Outside Permitted Range:

Unit	Start		Corrected		Duration	Ave Fuel Consumption and Turbine Load During Excursion		Remarks
	Date	Time	Date	Time	(hr:min)	MMBTU/HR	KW	
1	05/21/17	12:04 PM	05/21/17	12:16 PM	0:12	42.4	2,789.7	
1	07/15/17	6:08 AM	07/15/17	6:25 AM	0:17	40.5	1,682.8	
2	05/21/17	12:04 PM	05/21/17	12:05 PM	0:01	40.8	2,806.3	

III. Continuous Monitoring System Malfunctions:

Unit	Start		Corrected		Duration	Ave Fuel Consumption and Turbine Load During Monitor Malfunction		Remarks
	Date	Time	Date	Time	(hr:min)	MMBTU/HR	KW	
1					None			Continuous monitoring system was operative for the entire reporting period.
2					None			

IV. Monthly Operating Data:

(The following monthly data provides the basis of the three summary tables found on page 1)

Mar-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
		(1)			(1)			(1)			(1)	
1	0.62	1,248.49	24.00	80.81	0.00	0.00	0.62	1,104.53	24.00	69.53	0.00	0.00
2	0.62	1,240.99	24.00	80.49	0.00	0.00	0.62	1,100.70	24.00	69.45	0.00	0.00
3	0.62	1,242.37	24.00	80.61	0.00	0.00	0.62	1,103.83	24.00	69.69	0.00	0.00
4	0.62	1,251.61	24.00	80.58	0.00	0.00	0.62	1,116.32	24.00	70.23	0.00	0.00
5	0.62	1,260.43	24.00	80.91	0.00	0.00	0.62	1,115.23	24.00	69.66	0.00	0.00
6	0.62	1,261.76	24.00	80.97	0.00	0.00	0.62	1,111.50	24.00	69.53	0.00	0.00
7	0.62	1,252.97	24.00	80.86	0.00	0.00	0.62	1,108.84	24.00	69.63	0.00	0.00
8	0.62	1,246.54	24.00	80.56	0.00	0.00	0.62	1,109.21	24.00	69.83	0.00	0.00
9	0.62	1,234.62	24.00	80.06	0.00	0.00	0.62	1,102.68	24.00	69.69	0.00	0.00
10	0.62	1,228.86	24.00	79.70	0.00	0.00	0.62	1,101.13	24.00	69.64	0.00	0.00
11	0.62	1,233.19	24.00	79.90	0.00	0.00	0.62	1,102.96	24.00	69.62	0.00	0.00
12	0.59	1,182.58	23.00	76.25	0.00	0.00	0.59	1,054.85	23.00	66.18	0.00	0.00
13	0.62	1,220.65	24.00	78.77	0.00	0.00	0.62	1,094.21	24.00	68.81	0.00	0.00
14	0.62	1,213.59	24.00	78.22	0.00	0.00	0.62	1,075.88	24.00	67.17	0.00	0.00
15	0.62	1,239.90	24.00	80.08	0.00	0.00	0.62	1,079.38	24.00	67.23	0.00	0.00
16	0.62	1,236.48	24.00	79.76	0.00	0.00	0.62	1,078.39	24.00	67.13	0.00	0.00
17	0.62	1,207.74	24.00	77.51	0.00	0.00	0.62	1,077.93	24.00	67.21	0.00	0.00
18	0.62	1,200.74	24.00	76.60	0.00	0.00	0.62	1,077.34	24.00	66.98	0.00	0.00
19	0.60	1,174.07	24.00	74.10	0.00	0.00	0.62	1,079.12	24.00	67.01	0.00	0.00
20	0.62	1,213.60	24.00	76.68	0.00	0.00	0.62	1,084.34	24.00	67.04	0.00	0.00
21	0.62	1,205.64	24.00	76.64	0.00	0.00	0.62	1,077.35	24.00	67.03	0.00	0.00
22	0.62	1,254.79	24.00	80.53	0.00	0.00	0.62	1,096.64	24.00	68.21	0.00	0.00
23	0.62	1,255.63	24.00	81.36	0.00	0.00	0.62	1,091.23	24.00	68.33	0.00	0.00
24	0.62	1,275.72	24.00	82.15	0.00	0.00	0.62	1,095.36	24.00	68.19	0.00	0.00
25	0.62	1,247.97	24.00	80.63	0.00	0.00	0.62	1,091.42	24.00	68.32	0.00	0.00
26	0.62	1,260.01	24.00	81.02	0.00	0.00	0.62	1,098.55	24.00	68.46	0.00	0.00
27	0.62	1,250.77	24.00	80.59	0.00	0.00	0.62	1,095.88	24.00	68.29	0.00	0.00
28	0.62	1,242.22	24.00	80.15	0.00	0.00	0.62	1,091.03	24.00	68.26	0.00	0.00
29	0.62	1,238.22	24.00	79.90	0.00	0.00	0.62	1,091.97	24.00	68.40	0.00	0.00
30	0.62	1,246.18	24.00	79.94	0.00	0.00	0.62	1,091.99	24.00	67.56	0.00	0.00
31	0.62	1,206.55	24.00	77.040	0.00	0.00	0.62	1,090.01	24.00	67.932	0.00	0.00
TOTAL		38,274.88	743.00	2,463.34	0.00	0.00		33,889.79	743.00	2,120.22	0.00	0.00

Apr-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
	(1)	(1)	(1)	(1)	(1)	(1,2)	(1)	(1)	(1)	(1)	(1)	(1,2)
1	0.56	1,062.82	24.00	69.31	0.00	0.00	0.61	1,027.32	24.00	65.60	0.00	0.00
2	0.62	1,158.59	24.00	76.05	0.00	0.00	0.62	1,047.46	24.00	67.04	0.00	0.00
3	0.62	1,180.60	24.00	78.12	0.00	0.00	0.62	1,047.55	24.00	67.29	0.00	0.00
4	0.62	1,166.84	24.00	76.97	0.00	0.00	0.62	1,046.64	24.00	67.23	0.00	0.00
5	0.62	1,166.37	24.00	77.40	0.00	0.00	0.62	1,039.40	24.00	67.04	0.00	0.00
6	0.62	1,187.82	24.00	78.60	0.00	0.00	0.62	1,045.46	24.00	67.28	0.00	0.00
7	0.62	1,193.97	24.00	78.88	0.00	0.00	0.62	1,045.59	24.00	67.13	0.00	0.00
8	0.62	1,196.89	24.00	79.11	0.00	0.00	0.62	1,048.86	24.00	67.07	0.00	0.00
9	0.62	1,198.88	24.00	79.33	0.00	0.00	0.62	1,051.77	24.00	67.40	0.00	0.00
10	0.62	1,189.45	24.00	78.65	0.00	0.00	0.62	1,047.43	24.00	67.14	0.00	0.00
11	0.62	1,188.70	24.00	78.55	0.00	0.00	0.62	1,044.90	24.00	67.08	0.00	0.00
12	0.62	1,186.75	24.00	78.48	0.00	0.00	0.62	1,041.81	24.00	66.99	0.00	0.00
13	0.62	1,189.88	24.00	78.75	0.00	0.00	0.62	1,045.03	24.00	66.96	0.00	0.00
14	0.62	1,190.53	24.00	78.92	0.00	0.00	0.62	1,045.74	24.00	67.04	0.00	0.00
15	0.62	1,178.71	24.00	78.12	0.00	0.00	0.62	1,041.94	24.00	67.06	0.00	0.00
16	0.62	1,202.85	24.00	78.95	0.00	0.00	0.62	1,051.79	24.00	66.99	0.00	0.00
17	0.62	1,192.43	24.00	78.52	0.00	0.00	0.62	1,048.50	24.00	67.08	0.00	0.00
18	0.62	1,187.90	24.00	78.62	0.00	0.00	0.62	1,046.00	24.00	67.20	0.00	0.00
19	0.62	1,182.07	24.00	78.25	0.00	0.00	0.62	1,047.05	24.00	67.34	0.00	0.00
20	0.62	1,183.58	24.00	78.35	0.00	0.00	0.62	1,045.17	24.00	67.09	0.00	0.00
21	0.62	1,163.47	24.00	77.02	0.00	0.00	0.62	1,041.09	24.00	67.06	0.00	0.00
22	0.62	1,178.79	24.00	78.03	0.00	0.00	0.62	1,044.43	24.00	67.06	0.00	0.00
23	0.62	1,182.02	24.00	78.33	0.00	0.00	0.62	1,043.85	24.00	67.09	0.00	0.00
24	0.56	1,029.13	22.00	67.23	0.00	0.00	0.62	1,048.14	24.00	67.03	0.00	0.00
25	0.62	1,169.43	24.00	76.82	0.00	0.00	0.62	1,049.41	24.00	67.24	0.00	0.00
26	0.62	1,160.54	24.00	76.59	0.00	0.00	0.62	1,041.40	24.00	67.10	0.00	0.00
27	0.62	1,157.97	24.00	76.57	0.00	0.00	0.62	1,040.75	24.00	67.08	0.00	0.00
28	0.62	1,154.49	24.00	76.25	0.00	0.00	0.62	1,040.53	24.00	67.04	0.00	0.00
29	0.62	1,142.14	24.00	75.50	0.00	0.00	0.62	1,039.00	24.00	67.16	0.00	0.00
30	0.62	1,145.25	24.00	75.61	0.00	0.00	0.62	1,087.12	24.00	71.43	0.00	0.00
31												
TOTAL		35,068.88	718.00	2,315.90	0.00	0.00		31,381.12	720.00	2,016.33	0.00	0.00

(1) Fuel consumed is based on summarized one minute actual #/Hr flow rates / 60 min/Hr * 21,084 BTU/# (Gas) normalized to the revenue meter to correct for Therm Factor.

May-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
	(1)	(1)	(1)	(1)	(1)	(1,2)	(1)	(1)	(1)	(1)	(1)	(1,2)
1	0.62	1,129.85	24.00	74.496	0.00	0.00	0.62	1,094.64	24.00	72.22	0.00	0.00
2	0.62	1,117.63	24.00	73.495	0.00	0.00	0.62	1,083.47	24.00	71.16	0.00	0.00
3	0.62	1,113.59	24.00	73.171	0.00	0.00	0.62	1,058.67	24.00	68.93	0.00	0.00
4	0.62	1,144.87	24.00	75.628	0.00	0.00	0.62	1,083.41	24.00	71.00	0.00	0.00
5	0.62	1,176.03	24.00	77.998	0.00	0.00	0.62	1,051.61	24.00	67.80	0.00	0.00
6	0.62	1,179.87	24.00	78.258	0.00	0.00	0.62	1,090.20	24.00	71.30	0.00	0.00
7	0.62	1,160.85	24.00	76.832	0.00	0.00	0.62	1,067.99	24.00	69.61	0.00	0.00
8	0.62	1,161.34	24.00	76.687	0.00	0.00	0.62	1,063.75	24.00	69.04	0.00	0.00
9	0.62	1,149.24	24.00	75.874	0.00	0.00	0.62	1,039.84	24.00	67.03	0.00	0.00
10	0.62	1,177.90	24.00	77.667	0.00	0.00	0.62	1,065.86	24.00	68.89	0.00	0.00
11	0.62	1,178.36	24.00	77.893	0.00	0.00	0.62	1,081.04	24.00	70.29	0.00	0.00
12	0.62	1,188.72	24.00	78.460	0.00	0.00	0.62	1,052.95	24.00	67.14	0.00	0.00
13	0.62	1,187.92	24.00	78.456	0.00	0.00	0.62	1,050.63	24.00	67.12	0.00	0.00
14	0.62	1,184.11	24.00	78.185	0.00	0.00	0.62	1,126.51	24.00	74.34	0.00	0.00
15	0.62	1,145.98	24.00	74.545	0.00	0.00	0.62	1,141.34	24.00	75.39	0.00	0.00
16	0.62	1,148.04	24.00	74.649	0.00	0.00	0.62	1,151.02	24.00	76.11	0.00	0.00
17	0.62	1,177.42	24.00	77.727	0.00	0.00	0.62	1,084.53	24.00	70.54	0.00	0.00
18	0.62	1,157.65	24.00	76.206	0.00	0.00	0.62	1,046.46	24.00	67.24	0.00	0.00
19	0.62	1,136.27	24.00	74.686	0.00	0.00	0.62	1,041.46	24.00	67.00	0.00	0.00
20	0.62	1,127.51	24.00	74.041	0.00	0.00	0.62	1,040.92	24.00	67.08	0.00	0.00
21	0.61	1,130.66	24.00	73.863	0.00	0.00	0.62	1,049.66	24.00	67.18	0.00	0.00
22	0.62	1,151.42	24.00	74.956	0.00	0.00	0.62	1,057.78	24.00	67.26	0.00	0.00
23	0.62	1,158.88	24.00	75.632	0.00	0.00	0.62	1,055.60	24.00	67.12	0.00	0.00
24	0.62	1,169.03	24.00	76.367	0.00	0.00	0.62	1,055.78	24.00	67.24	0.00	0.00
25	0.62	1,183.46	24.00	77.607	0.00	0.00	0.62	1,062.30	24.00	67.82	0.00	0.00
26	0.62	1,181.73	24.00	77.753	0.00	0.00	0.62	1,148.61	24.00	75.89	0.00	0.00
27	0.62	1,178.23	24.00	77.660	0.00	0.00	0.62	1,144.96	24.00	75.55	0.00	0.00
28	0.62	1,180.96	24.00	77.766	0.00	0.00	0.62	1,145.24	24.00	75.49	0.00	0.00
29	0.62	1,153.15	24.00	75.166	0.00	0.00	0.62	1,134.72	24.00	73.72	0.00	0.00
30	0.62	1,186.66	24.00	77.715	0.00	0.00	0.62	1,119.79	24.00	72.64	0.00	0.00
31	0.62	1,170.50	24.00	76.50	0.00	0.00	0.62	1,127.43	24.00	73.42	0.00	0.00
TOTAL		35,987.83	744.00	2,365.94	0.00	0.00		33,618.17	744.00	2,182.55	0.00	0.00

Jun-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
	(1)	(1)	(1)	(1)	(1)	(1,2)	(1)	(1)	(1)	(1)	(1)	(1,2)
1	0.62	1,137.05	24.00	76.040	0.00	0.00	0.62	1,090.50	24.00	72.52	0.00	0.00
2	0.62	1,130.54	24.00	75.776	0.00	0.00	0.62	1,055.76	24.00	69.59	0.00	0.00
3	0.62	1,140.80	24.00	76.543	0.00	0.00	0.62	1,054.24	24.00	69.39	0.00	0.00
4	0.62	1,139.91	24.00	76.367	0.00	0.00	0.62	1,055.58	24.00	69.38	0.00	0.00
5	0.62	1,124.28	24.00	75.714	0.00	0.00	0.62	1,048.86	24.00	69.45	0.00	0.00
6	0.62	1,127.02	24.00	76.470	0.00	0.00	0.62	1,044.52	24.00	69.63	0.00	0.00
7	0.62	1,121.14	24.00	76.128	0.00	0.00	0.62	1,040.61	24.00	69.56	0.00	0.00
8	0.62	1,125.81	24.00	76.268	0.00	0.00	0.62	1,049.00	24.00	70.24	0.00	0.00
9	0.62	1,129.99	24.00	76.711	0.00	0.00	0.62	1,100.03	24.00	74.82	0.00	0.00
10	0.62	1,134.44	24.00	76.798	0.00	0.00	0.62	1,111.63	24.00	75.59	0.00	0.00
11	0.62	1,135.18	24.00	76.944	0.00	0.00	0.62	1,124.39	24.00	76.75	0.00	0.00
12	0.62	1,146.53	24.00	77.430	0.00	0.00	0.62	1,121.10	24.00	76.16	0.00	0.00
13	0.62	1,126.80	24.00	76.498	0.00	0.00	0.62	1,099.82	24.00	74.86	0.00	0.00
14	0.62	1,098.84	24.00	74.234	0.00	0.00	0.62	1,054.59	24.00	70.86	0.00	0.00
15	0.62	1,084.66	24.00	72.662	0.00	0.00	0.62	1,024.93	24.00	67.72	0.00	0.00
16	0.62	1,063.01	24.00	71.373	0.00	0.00	0.62	1,012.93	24.00	67.20	0.00	0.00
17	0.62	1,057.30	24.00	71.088	0.00	0.00	0.62	1,011.12	24.00	67.15	0.00	0.00
18	0.62	1,031.16	24.00	68.904	0.00	0.00	0.62	999.21	24.00	66.13	0.00	0.00
19	0.62	1,051.31	24.00	70.408	0.00	0.00	0.62	1,009.59	24.00	66.82	0.00	0.00
20	0.62	1,066.18	24.00	71.372	0.00	0.00	0.62	1,013.76	24.00	67.01	0.00	0.00
21	0.62	1,059.94	24.00	70.844	0.00	0.00	0.62	1,014.66	24.00	67.11	0.00	0.00
22	0.62	1,053.34	24.00	70.135	0.00	0.00	0.62	1,016.56	24.00	66.79	0.00	0.00
23	0.62	1,069.73	24.00	71.673	0.00	0.00	0.62	1,017.33	24.00	67.17	0.00	0.00
24	0.62	1,102.04	24.00	74.627	0.00	0.00	0.62	1,070.50	24.00	72.48	0.00	0.00
25	0.62	1,117.90	24.00	75.660	0.00	0.00	0.62	1,090.64	24.00	74.03	0.00	0.00
26	0.62	1,111.72	24.00	75.217	0.00	0.00	0.62	1,059.25	24.00	71.21	0.00	0.00
27	0.62	1,114.31	24.00	75.676	0.00	0.00	0.62	1,041.44	24.00	69.82	0.00	0.00
28	0.62	1,113.36	24.00	75.416	0.00	0.00	0.62	1,086.78	24.00	73.69	0.00	0.00
29	0.62	1,120.06	24.00	75.731	0.00	0.00	0.62	1,090.54	24.00	73.75	0.00	0.00
30	0.62	1,098.91	24.00	73.654	0.00	0.00	0.62	1,072.84	24.00	71.98	0.00	0.00
31												
TOTAL		33,133.28	720.00	2,232.36	0.00	0.00		31,682.72	720.00	2,118.84	0.00	0.00

(1) Fuel consumed is based on summarized one minute actual #/Hr flow rates / 60 min/Hr * 21,084 BTU/# (Gas) normalized to the revenue meter to correct for Therm Factor.

Jul-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
	(1)	(1)	(1)	(1)	(1)	(1,2)	(1)	(1)	(1)	(1)	(1)	(1,2)
1	0.61	1,035.43	24.00	68.35	0.00	0.00	0.62	1,074.58	24.00	72.03	0.00	0.00
2	0.62	1,083.85	24.00	71.95	0.00	0.00	0.62	1,076.24	24.00	72.01	0.00	0.00
3	0.42	693.16	17.00	45.42	0.00	0.00	0.62	1,054.47	24.00	70.05	0.00	0.00
4	0.62	1,100.68	24.00	73.60	0.00	0.00	0.62	1,056.39	24.00	70.30	0.00	0.00
5	0.62	1,098.83	24.00	73.58	0.00	0.00	0.62	1,044.10	24.00	69.45	0.00	0.00
6	0.62	1,084.89	24.00	72.59	0.00	0.00	0.62	1,040.47	24.00	69.33	0.00	0.00
7	0.62	1,067.74	24.00	71.14	0.00	0.00	0.62	1,028.24	24.00	68.22	0.00	0.00
8	0.62	1,070.12	24.00	70.88	0.00	0.00	0.62	1,019.24	24.00	66.65	0.00	0.00
9	0.62	1,101.39	24.00	72.72	0.00	0.00	0.62	1,053.98	24.00	69.21	0.00	0.00
10	0.62	1,105.61	24.00	73.28	0.00	0.00	0.62	1,071.51	24.00	71.11	0.00	0.00
11	0.62	1,107.76	24.00	73.43	0.00	0.00	0.62	1,073.80	24.00	71.01	0.00	0.00
12	0.62	1,102.32	24.00	72.75	0.00	0.00	0.62	1,049.87	24.00	68.79	0.00	0.00
13	0.62	1,100.59	24.00	72.38	0.00	0.00	0.62	1,052.61	24.00	68.79	0.00	0.00
14	0.62	1,104.77	24.00	72.69	0.00	0.00	0.62	1,058.94	24.00	69.35	0.00	0.00
15	0.24	298.07	8.00	19.65	0.00	0.00	0.18	309.17	8.00	20.15	0.00	0.00
16	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
17	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
18	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
19	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
20	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
21	0.00	10.76	1.00	0.21	0.00	0.00	0.00	1.16	1.00	0.19	0.00	0.00
22	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
23	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
24	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
25	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
26	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
27	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
28	0.17	334.50	9.00	20.71	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00
29	0.62	1,143.86	24.00	77.88	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
30	0.62	1,135.08	24.00	76.92	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
31	0.62	1,157.80	24.00	79.18	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
TOTAL		18,937.23	419.00	1,261.66	0.00	0.00		15,064.77	345.00	999.53	0.00	0.00

Aug-17	UNIT 1						UNIT 2					
	S-1 Gas Turbine				S-3 Supp Burner		S-2 Gas Turbine				S-4 Supp Burner	
Day	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs	Avg 24Hr H2O/Fuel Ratio	Fuel Used MMBTU	Hrs	MWH	Fuel Used MMBTU	Hrs
	(1)	(1)	(1)	(1)	(1)	(1,2)	(1)	(1)	(1)	(1)	(1)	(1,2)
1	0.62	1,151.94	24.00	77.76	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
2	0.62	1,135.07	24.00	76.55	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
3	0.62	1,138.13	24.00	76.41	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
4	0.62	1,139.17	24.00	76.64	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
5	0.62	1,155.50	24.00	78.09	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
6	0.52	891.08	23.00	58.02	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
7	0.62	1,163.04	24.00	78.38	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
8	0.62	1,156.00	24.00	77.57	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
9	0.62	1,161.22	24.00	77.74	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
10	0.62	1,154.90	24.00	77.30	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
11	0.62	1,147.59	24.00	76.44	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
12	0.62	1,146.47	24.00	76.25	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
13	0.62	1,140.05	24.00	75.46	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
14	0.62	1,146.44	24.00	76.38	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
15	0.62	1,142.40	24.00	76.21	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
16	0.62	1,140.03	24.00	75.76	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
17	0.62	1,129.95	24.00	75.13	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
18	0.62	1,125.19	24.00	74.68	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
19	0.62	1,130.88	24.00	75.02	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
20	0.62	1,128.05	24.00	74.65	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
21	0.62	1,126.73	24.00	74.34	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
22	0.62	1,120.01	24.00	73.77	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
23	0.28	478.66	11.00	31.62	0.00	0.00	0.10	165.88	5.00	10.33	0.00	0.00
24	0.28	477.32	11.00	31.01	0.00	0.00	0.62	1,119.90	24.00	76.68	0.00	0.00
25	0.62	1,099.28	24.00	71.68	0.00	0.00	0.62	1,125.57	24.00	76.62	0.00	0.00
26	0.62	1,084.51	24.00	70.25	0.00	0.00	0.62	1,118.92	24.00	75.84	0.00	0.00
27	0.62	1,086.56	24.00	70.25	0.00	0.00	0.62	1,117.84	24.00	75.42	0.00	0.00
28	0.62	1,088.03	24.00	70.71	0.00	0.00	0.62	1,117.07	24.00	75.81	0.00	0.00
29	0.62	1,100.34	24.00	71.574	0.00	0.00	0.62	1,127.49	24.00	76.63	0.00	0.00
30	0.62	1,101.37	24.00	71.578	0.00	0.00	0.62	1,125.19	24.00	76.37	0.00	0.00
31	0.62	1,072.88	24.00	69.557	0.00	0.00	0.62	1,098.35	24.00	74.34	0.00	0.00
TOTAL		33,458.81	717.00	2,075.62	0.00	0.00		9,116.19	197.00	622.26	0.00	0.00

(1) Fuel consumed is based on summarized one minute actual #/Hr flow rates / 60 min/Hr * 21,084 BTU/# (Gas) normalized to the revenue meter to correct for Therm Factor.

Title V Semi - Annual Monitoring Verification Report

Applicable Limits and Compliance Monitoring

This report summarizes the applicable source – specific emission limits for the Cogeneration Plant, facility #A0621. The following table shows the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. Also, for periodic monitoring, the frequency of the monitoring is shown: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) is required if the current applicable rule or regulation does not require monitoring – where our facility's operation will not deviate from the applicable emission limit based upon the nature of its operation. The last two columns indicate our facility's compliance from **March 1, 2017** through **August 31, 2017**.

(Adapted from Table VII-A of the Major Facility Review Permit)
Applicable Limits and Compliance Monitoring Requirements
S1, S2 – Gas Turbines w/Water Injection

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
PM	BAAQMD Regulation 6-301	Y		Ringelmann 1.0		N		Yes *(1)*
	BAAQMD Regulation 6-301	Y		0.15 gr/dscf @ 6% O_2		N		Yes *(1)*
NOx	BAAQMD 9-9-301.1	Y		42 ppmv @15% O_2	Condition #14194, Part 9	P/A	Source Test	Yes
	NSPS Subpart GG 60.332 (a)(2)	Y		141 ppmv @15% O_2	NSPS Subpart GG 60.334(a)	C	Water-to fuel ratio	No 2 instances for S1, 1 instance for S2
	Condition #14194, part 4	Y		42 ppmv @15% O_2 (dry), each turbine (except during startup and shutdown)	Condition #14194, Part 9	P/A	Source Test	Yes

(Adapted from Table VII-A of the Major Facility Review Permit)
Applicable Limits and Compliance Monitoring Requirements (continued)
S1, S2-Gas Turbine w/Water Injection

Type of limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
NOX	Condition #14194, part 5	Y		42 ppmv @ 15% O_2 (dry), each turbine supplemental burner combination	Condition #14194, part 9	P/A	Source Test	Yes
S02	BAAQMD 9-1-301	Y		Ground level concentrations: 0.5ppm for 3 consecutive minutes, 0.25 ppm averaged over 60 consecutive minutes, 0.05 ppm averaged over 24 hours		N		Yes *(1)*
	BAAQMD 9-1-302	Y		300 ppm (dry) general emission limitation		N		Yes *(1)*
	40 CFR 60 Subpart GG 60.333 (b)	Y		0.8% (wt) fuel sulfur content	Monitoring requirement subsumed by BAAQMD condition #14194, part 1. See Permit Shield	N		Yes *(1)*
Fuel Usage	BAAQMD Condition #14194 part 2	Y		55.1 MMBTU/hr heat input (each turbine)	BAAQMD Condition #14194 part 7	C	Continuous Fuel Usage Monitors	Yes
Water-to-Fuel Ratio	BAAQMD Condition #14194 part 6	Y		Water-to-Fuel Ratio: 57% to 62% (wt)	BAAQMD Condition #14194 part 7	C	Continuous Water-to-Fuel Ratio	No 2 instances for S1, 1 instance for S2

(Adapted from Table VII-B of the Major Facility Review Permit)
Applicable Limits and Compliance Monitoring Requirements (continued)
S3, S4-Duct Burner

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
PM	BAAQMD Regulation 6-301	Y		Ringelmann 1.0		N		Yes *(1)*
	BAAQMD Regulation 6-310.3	Y		0.15 gr/dscf @ 6% O_2		N		Yes *(1)*
NOx	Condition #14194, part 5	Y		42 ppmv @ 15% O_2 (dry),each turbine/supplemental burner combination	Condition #14194, part 9	P/A	Source Test	Yes
S02	BAAQMD Regulation 9-1-301	Y		Ground Level Concentrations: 0.5 ppm for 3 consecutive minutes, 0.25 ppm averaged over 60 consecutive minutes, 0.05 ppm averaged over 24 hours		N		Yes *(1)*
	BAAQMD Regulation 9-1-302	Y		300 ppm (dry) general emission limitation		N		Yes *(1)*
Fuel Usage	BAAQMD Condition #14194 part 3	Y		13.5 MMBTU/hr heat input (each duct burner)	BAAQMD condition #14194 part 7	C	Continuous Fuel Usage Monitors	Yes

(1) This facility uses PUC pipeline quality natural gas. Enforceable limits are "subsumed" by use of this fuel. (Reference: Section IX "Permit Shield" of this plant's Major Facility Review Permit.