March 16, 2018

SILICON VALLEY POWER.
CITY OF SANTA CLARA

Powering The Center of What's Possible

To: 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 and Annual Compliance Certification for City of Santa Clara, Silicon Valley Power (SVP) Cogeneration Plant, BAAQMD Plant No. A0621, Permit to Operate Condition 14194 (S-1, 2, 3, 4)

The City of Santa Clara Electric Department is submitting two reports 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 semi-annual reporting of operational hours and a reporting of specific events of non-compliance. During the period **September 1, 2017** through **February 28, 2018**, SVP completed all the required monitoring. There was one instance of non-compliance during this period on 2/23.

Also required is an Annual Compliance Certification Report for the period **March 01, 2017** through **February 28, 2018**. During this period, there was one instance of non-compliance on 2/23.

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. Roukema
Name of Responsible Official

John C Roukema
Signature

Chief Electric Utility Officer
Title of Responsible Official

3/12/18
Date

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

Compliance Certification Report

3/16/2018 **Site#:** A0621

Site#: A0621 **Site name:** Santa Clara Cogeneration Plant #1 **Period:** 03/01/17 to 02/28/18

Address: 524 Robert Avenue **City:** Santa Clara **State:** CA **Zip:** 95050

Source#: 01 **Source name:** Turbine

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
01-107	Combination of Emissions	Y	C	
01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
01-523.01	Reporting requirement for periods of inoperation >24 hours	Y	C	
01-523.02	Limit on duration of inoperation	Y	C	
01-523.03	Reporting requirement for violations of any applicable limits	Y	C	
01-523.04	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	C	
01-523.05	Maintenance and Calibration	Y	C	
06-301	Ringelmann No. 1 Limitation	Y	C	
06-305	Visible Particles	Y	C	
06-310.03	Particulate Weight Limitation, Heat Transfer Operation	Y	C	
09-01-301	Limitations on Ground Level Concentrations	Y	C	
09-01-302	General Emission Limitations	Y	C	
09-09-113	Exemption-Inspection/Maintenance	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
09-09-114	Exemption -- Start-Up/Shutdown	Y	C	
09-09-301.01	Emission Limits – Turbines below 10.0 MW	Y	C	
40 CFR 060.007	Notification and Record Keeping	Y	C	
40 CFR 060.008	Performance Tests	Y	C	
40 CFR 060.009	Availability of Information	Y	C	
40 CFR 060.011	Compliance with standards and maintenance requirements	Y	C	
40 CFR 060.012	Circumvention	Y	C	
40 CFR 060.013	Monitoring Requirements	Y	C	
40 CFR 060.013(a)	Applicability of monitoring section	Y	C	
40 CFR 060.013(b)	Installation of monitoring system prior to tests	Y	C	
40 CFR 060.013(e)	Continuous operation	Y	C	
40 CFR 060.013(f)	Representative measurements	Y	C	
40 CFR 060.332	Standard for Nitrogen Oxides	Y	C	
40 CFR 060.332(a)(2)	NOx Limit	Y	C	
40 CFR 060.333	Performance Standards, SO2	Y	C	
40 CFR 060.333(a)	Sulfur Dioxide Emission Standard	Y	C	
40 CFR 060.333(b)	Fuel Sulfur Content Limit	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
40 CFR 060.334	Monitoring of Operations	Y	C	
40 CFR 060.334(a)	Monitoring of water/steam fuel ratio	Y	C	
40 CFR 060.334(g)	Monitoring of steam or water to fuel ratio during performance testing	Y	C	
40 CFR 060.334(h)(3)	Fire only natural gas in lieu of fuel sulfur content monitoring	Y	C	
40 CFR 060.334(j)	Report any excess of a monitored parameter and all monitor down	Y	C	
40 CFR 060.334(j)(1)(I)	Requirement for Turbines using water/steam to fuel ratio monitoring	Y	C	
40 CFR 060.334(j)(5)	Deadline for Excess Emission Reports	Y	C	
Cond# 14194, part 01	Fuel Requirement	Y	C	
Cond# 14194, part 02	Heat Input Limit – Turbines	Y	C	
Cond# 14194, part 03	Heat Input Limit – Duct Burners	Y	C	
Cond# 14194, part 04	NOx Emissions Limit – Turbines	Y	C	
Cond# 14194, part 05	NOx Emissions Limit – Combined Turbine/Duct Burners	Y	C	
Cond# 14194, part 06	Water Injection System Requirements	Y	C	
Cond# 14194, part 07	Fuel Monitoring Requirement	Y	C	
Cond# 14194, part 08	Continuous Monitoring System	Y	C	
Cond# 14194, part 09	Annual Source Test Requirement	Y	C	
Cond# 14194, part 10	Recordkeeping	Y	C	
Cond# 14194, part 11	Reporting	Y	C	
SIP 01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
SIP 01-523.03	Reports of Violations	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Site#: A0621 **Site name:** Santa Clara Cogeneration Plant #1 **Period:** 03/01/17 to 02/28/18

Address: 524 Robert Avenue **City:** Santa Clara **State:** CA **Zip:** 95050

Source#: 02 **Source name:** Turbine

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
01-107	Combination of Emissions	Y	C	
01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
01-523.01	Reporting requirement for periods of inoperation >24 hours	Y	C	
01-523.02	Limit on duration of inoperation	Y	C	
01-523.03	Reporting requirement for violations of any applicable limits	Y	C	
01-523.04	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	C	
01-523.05	Maintenance and Calibration	Y	C	
06-301	Ringelmann No. 1 Limitation	Y	C	
06-305	Visible Particles	Y	C	
06-310.03	Particulate Weight Limitation, Heat Transfer Operation	Y	C	
09-01-301	Limitations on Ground Level Concentrations	Y	C	
09-01-302	General Emission Limitations	Y	C	
09-09-113	Exemption-Inspection/Maintenance	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
09-09-114	Exemption – Start-Up/Shutdown	Y	C	
09-09-301.01	Emission Limits – Turbines below 10.0 MW	Y	C	
40 CFR 060.007	Notification and Record Keeping	Y	C	
40 CFR 060.008	Performance Tests	Y	C	
40 CFR 060.009	Availability of Information	Y	C	
40 CFR 060.011	Compliance with standards and maintenance requirements	Y	C	
40 CFR 060.012	Circumvention	Y	C	
40 CFR 060.013	Monitoring Requirements	Y	C	
40 CFR 060.013(a)	Applicability of monitoring section	Y	C	
40 CFR 060.013(b)	Installation of monitoring system prior to tests	Y	C	
40 CFR 060.013(e)	Continuous operation	Y	C	
40 CFR 060.013(f)	Representative measurements	Y	C	
40 CFR 060.332	Standard for Nitrogen Oxides	Y	C	
40 CFR 060.332(a)(2)	NOx Limit	N	I	**Out of compliance on 2/23/2018 from 2005 to 2328 when water to fuel ratio was outside 57%-62% / Reported as RCA 07G37**
40 CFR 060.333	Performance Standards, SO2	Y	C	
40 CFR 060.333(a)	Sulfur Dioxide Emission Standard	Y	C	
40 CFR 060.333(b)	Fuel Sulfur Content Limit	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
40 CFR 060.334	Monitoring of Operations	Y	C	
40 CFR 060.334(a)	Monitoring of water/steam fuel ratio	Y	C	
40 CFR 060.334(g)	Monitoring of steam or water to fuel ratio during performance testing	Y	C	
40 CFR 060.334(h)(3)	Fire only natural gas in lieu of fuel sulfur content monitoring	Y	C	
40 CFR 060.334(j)	Report any excess of a monitored parameter and all monitor down	Y	C	
40 CFR 060.334(j)(1)(I)	Requirement for Turbines using water/steam to fuel ratio monitoring	Y	C	
40 CFR 060.334(j)(5)	Deadline for Excess Emission Reports	Y	C	
Cond# 14194, part 01	Fuel Requirement	Y	C	
Cond# 14194, part 02	Heat Input Limit – Turbines	Y	C	
Cond# 14194, part 03	Heat Input Limit – Duct Burners	Y	C	
Cond# 14194, part 04	NOx Emissions Limit – Turbines	N	I	**Out of compliance on 2/23/2018 from 2005 to 2328 when water to fuel ratio was outside 57%-62% / Reported as RCA 07G37**
Cond# 14194, part 05	NOx Emissions Limit – Combined Turbine/Duct Burners	Y	C	
Cond# 14194, part 06	Water Injection System Requirements	N	I	**Out of compliance on 2/23/2018 from 2005 to 2328 / Reported as RCA 07G36**
Cond# 14194, part 07	Fuel Monitoring Requirement	Y	C	
Cond# 14194, part 08	Continuous Monitoring System Requirement	Y	C	
Cond# 14194, part 09	Annual Source Test Requirement	Y	C	
Cond# 14194, part 10	Recordkeeping	Y	C	
Cond# 14194, part 11	Reporting	Y	C	
SIP 01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
SIP 01-523.03	Reports of Violations	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Site#: A0621 **Site name:** Santa Clara Cogeneration Plant #1 **Period:** 03/01/17 to 02/28/18

Address: 524 Robert Avenue **City:** Santa Clara **State:** CA **Zip:** 95050

Source#: 03 **Source name:** Duct Burner

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
01-107	Combination of Emissions	Y	C	
01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
01-523.01	Reporting requirement for periods of inoperation >24 hours	Y	C	
01-523.02	Limit on duration of inoperation	Y	C	
01-523.03	Reporting requirement for violations of any applicable limits	Y	C	
01-523.04	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	C	
01-523.05	Maintenance and Calibration	Y	C	
06-301	Ringelmann No. 1 Limitation	Y	C	
06-305	Visible Particles	Y	C	
06-310.03	Particulate Weight Limitation, Heat Transfer Operation	Y	C	
06-401	Appearance of Emissions	Y	C	Section 06-301 regulates this source. Therefore, this source is exempted from 06-401.
09-01-301	Limitations on Ground Level Concentrations	Y	C	
09-01-302	General Emission Limitations	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
09-09-301.01	Emission Limits – Turbines below 10.0 MW	Y	C	
40 CFR 060.007	Notification and Record Keeping	Y	C	
40 CFR 060.008	Performance Tests	Y	C	
40 CFR 060.009	Availability of Information	Y	C	
40 CFR 060.011	Compliance with standards and maintenance requirements	Y	C	
40 CFR 060.012	Circumvention	Y	C	
40 CFR 060.013	Monitoring Requirements	Y	C	
40 CFR 060.013(a)	Applicability of monitoring section	Y	C	
40 CFR 060.013(b)	Installation of monitoring system prior to tests	Y	C	
40 CFR 060.013(e)	Continuous operation	Y	C	
40 CFR 060.013(f)	Representative measurements	Y	C	
40 CFR 060.332	Standard for Nitrogen Oxides	Y	C	
40 CFR 060.332(a)(2)	NOx Limit	Y	C	
40 CFR 060.333	Performance Standards, SO2	Y	C	
40 CFR 060.333(a)	Sulfur Dioxide Emission Standard	Y	C	
40 CFR 060.333(b)	Fuel Sulfur Content Limit	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
40 CFR 060.334	Monitoring of Operations	Y	C	
40 CFR 060.334(a)	Monitoring of water/steam fuel ratio	Y	C	
40 CFR 060.334(g)	Monitoring of steam or water to fuel ratio during performance testing	Y	C	
40 CFR 060.334(h)(3)	Fire only natural gas in lieu of fuel sulfur content monitoring	Y	C	
40 CFR 060.334(j)	Report any excess of a monitored parameter and all monitor down	Y	C	
40 CFR 060.334(j)(1)(I)	Requirement for Turbines using water/steam to fuel ratio monitoring	Y	C	
40 CFR 060.334(j)(5)	Deadline for Excess Emission Reports	Y	C	
Cond# 14194, part 01	Fuel Requirement	Y	C	
Cond# 14194, part 02	Heat Input Limit – Turbines	Y	C	
Cond# 14194, part 03	Heat Input Limit – Duct Burners	Y	C	
Cond# 14194, part 04	NOx Emissions Limit – Turbines	Y	C	
Cond# 14194, part 05	NOx Emissions Limit – Combined Turbine/Duct Burners	Y	C	
Cond# 14194, part 06	Water Injection System Requirements	Y	C	
Cond# 14194, part 07	Fuel Monitoring Requirement	Y	C	
Cond# 14194, part 08	Continuous Monitoring System Requirement	Y	C	
Cond# 14194, part 09	Annual Source Test Requirement	Y	C	
Cond# 14194, part 10	Recordkeeping	Y	C	
Cond# 14194, part 11	Reporting	Y	C	
SIP 01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
SIP 01-523.03	Reports of Violations	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Site#: A0621 **Site name:** Santa Clara Cogeneration Plant #1 **Period:** 03/01/17 **to** 02/28/18

Address: 524 Robert Avenue **City:** Santa Clara **State:** CA **Zip:** 95050

Source#: 04 **Source name:** Duct Burner

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
01-107	Combination of Emissions	Y	C	
01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
01-523.01	Reporting requirement for periods of inoperation >24 hours	Y	C	
01-523.02	Limit on duration of inoperation	Y	C	
01-523.03	Reporting requirement for violations of any applicable limits	Y	C	
01-523.04	Records of inoperation, tests, calibrations, adjustments, & maintenance	Y	C	
01-523.05	Maintenance and Calibration	Y	C	
06-301	Ringelmann No. 1 Limitation	Y	C	
06-305	Visible Particles	Y	C	
06-310.03	Particulate Weight Limitation, Heat Transfer Operation	Y	C	
06-401	Appearance of Emissions	Y	C	Section 06-301 regulates this source. Therefore, this source is exempted from 06-401.
09-01-301	Limitations on Ground Level Concetrations	Y	C	
09-01-302	General Emission Limitations	Y	C	
09-09-113	Exemption-Inspection/Maintenance	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
09-09-114	Exemption – Start-Up/Shutdown	Y	C	
09-09-301.01	Emission Limits – Turbines below 10.0 MW	Y	C	
40 CFR 060.007	Notification and Record Keeping	Y	C	
40 CFR 060.008	Performance Tests	Y	C	
40 CFR 060.009	Availability of Information	Y	C	
40 CFR 060.011	Compliance with standards and maintenance requirements	Y	C	
40 CFR 060.012	Circumvention	Y	C	
40 CFR 060.013	Monitoring Requirements	Y	C	
40 CFR 060.013(a)	Applicability of monitoring section	Y	C	
40 CFR 060.013(b)	Installation of monitoring system prior to tests	Y	C	
40 CFR 060.013(e)	Continuous operation	Y	C	
40 CFR 060.013(f)	Representative measurements	Y	C	
40 CFR 060.332	Standard for Nitrogen Oxides	Y	C	
40 CFR 060.332(a)(2)	NOx Limit	Y	C	
40 CFR 060.333	Performance Standards, SO2	Y	C	
40 CFR 060.333(a)	Sulfur Dioxide Emission Standard	Y	C	
40 CFR 060.333(b)	Fuel Sulfur Content Limit	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
40 CFR 060.334	Monitoring of Operations	Y	C	
40 CFR 060.334(a)	Monitoring of water/steam fuel ratio	Y	C	
40 CFR 060.334(g)	Monitoring of steam or water to fuel ratio during performance testing	Y	C	
40 CFR 060.334(h)(3)	Fire only natural gas in lieu of fuel sulfur content monitoring	Y	C	
40 CFR 060.334(j)	Report any excess of a monitored parameter and all monitor down	Y	C	
40 CFR 060.334(j)(1)(I)	Requirement for Turbines using water/steam to fuel ratio monitoring	Y	C	
40 CFR 060.334(j)(5)	Deadline for Excess Emission Reports	Y	C	
Cond# 14194, part 01	Fuel Requirement	Y	C	
Cond# 14194, part 02	Heat Input Limit – Turbines	Y	C	
Cond# 14194, part 03	Heat Input Limit – Duct Burners	Y	C	
Cond# 14194, part 04	NOx Emissions Limit – Turbines	Y	C	
Cond# 14194, part 05	NOx Emissions Limit – Combined Turbine/Duct Burners	Y	C	
Cond# 14194, part 06	Water Injection System Requirements	Y	C	
Cond# 14194, part 07	Fuel Monitoring Requirement	Y	C	
Cond# 14194, part 08	Continuous Monitoring System Requirement	Y	C	
Cond# 14194, part 09	Annual Source Test Requirement	Y	C	
Cond# 14194, part 10	Recordkeeping	Y	C	
Cond# 14194, part 11	Reporting	Y	C	
SIP 01-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
SIP 01-523.03	Reports of Violations	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Site#: A0621 **Site name:** Santa Clara Cogeneration Plant #1 **Period:** 03/01/17 **to** 02/28/18

Address: 524 Robert Avenue **City:** Santa Clara **State:** CA **Zip:** 95050

Source#: Facility **Source name:** Facility

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
02-01-429	Federal emissions Statement	Y	C	
40 CFR Part 61, Subpart A	NESHAP – General Provisions	Y	C	
AB 2588	California Assembly Bill 2588 Toxics "Hot Spots"	Y	C	
Portable Equipment	California Health and Safety Code Section 41750 et seq.	Y	C	
Regulation 01	General Provisions and Definitions	Y	C	
Regulation 02, Rule 01	Permits, General Requirements	Y	C	
Regulation 04	Air Pollution Episode Plan	Y	C	
Regulation 05	Open Burning	N/A	N/A	
Regulation 06	Particulate Matter and Visible Emissions	Y	C	
Regulation 07	Odorous Substances	Y	C	
Regulation 08, Rule 01	Organic Compounds – General Provisions	Y	C	
Regulation 08, Rule 02	Org Compounds – Misc. Operations	Y	C	Regulation 8-2-110 provides a Natural Gas Exemption
Regulation 08, Rule 03	Org Compounds – Architectural Coatings	Y	C	

Compliance Certification Report

3/16/2018 **Site#:** A0621

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
Regulation 08, Rule 16	Org Compounds – Solvent Cleaning Operations	Y	C	
Regulation 08, Rule 40	Aeration of Contaminated Soil and Removal of Underground Storage	N/A	N/A	
Regulation 08, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction	N/A	N/A	
Regulation 08, Rule 49	Org. Compounds – Aerosol Paint Products	Y	C	
Regulation 08, Rule 51	Org. Compounds – Adhesive and Sealant Products	Y	C	
Regulation 11, Rule 01	Lead	N/A	N/A	
Regulation 11, Rule 02	Asbestos Demolition, Renovation, etc.	N/A	N/A	
Regulation 12, Rule 04	Sandblasting	N/A	N/A	
SIP Regulation 01	General Provisions and Definitions	Y	C	
SIP Regulation 02, Rule 01	Permits, General Requirements	Y	C	
SIP Regulation 04	Air Pollution Episode Plan	Y	C	
SIP Regulation 05	Open Burning	N/A	N/A	
SIP Regulation 08, Rule 49	Org. Compounds – Aerosol Products	Y	C	
SIP Regulation 08, Rule 51	Adhesive and Sealant Products	Y	C	
SIP Regulation 11, Rule 01	Hazardous Pollutants – Lead	N/A	N/A	
SIP Regulation 12, Rule 04	Sandblasting	N/A	N/A	

Compliance Certification

Based on information and belief formed after reasonable inquiry, the statements and information in the attached Compliance Certification form are true, accurate, and complete.

John C. Roukema
Name of Responsible Official

Signature

March 1, 2017 through February 28, 2018
Certification Period

3/12/18
Date

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