SILICON VALLEY POWER
CITY OF SANTA CLARA

TV Tracking #: 715 (Semi-Annual)
TV Tracking #: 716 (Annual)

1. ☐ RECEIVED IN ENFORCEMENT: 04/28/2023

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
compliance@baaqmd.gov

DATE: 04/28/2023

ATTN: Title V Reports 415-771-6000

SUBJECT: Silicon Valley Power DVR Title V Reports
BAAQMD Plant No. B4991

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	Oct. '22 to Mar. '23	0	Semi-Annual Cover Letter
9	Oct. '22 to Mar. '23	0	Semi-Annual Certification
14	April '22 to March '23	0	Annual Compliance Certification

These are transmitted:

X	In accordance with Permit to Operate Condition # 14194	25	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.

Signed:

Melissa Meslo
Staff Aide II

April 26, 2023

To: Director of Compliance and Enforcement
Bay Area Air Quality Management District
compliance@baaqmd.gov

Attn: Title V Reports

Subject: Title V Semi-annual Monitoring Report for City of Santa Clara, Silicon Valley Power (SVP), Donald Von Raesfeld Power Plant, BAAQMD Plant No. B4991 (S-1, 2, 3, 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) and Clause F (Monitoring Reports). The permit requires a reporting of specific events of non-compliance. During the period **October 1, 2022** through **March 31, 2023**, SVP completed all the required monitoring. There were no 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 based on information and belief formed after reasonable inquiry, 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,

Kevin Kolnowski
Name of Responsible Official

Signature

Electric Chief Operating Officer
Title of Responsible Official

4/26/2023
Date

Facility #B4991
City of Santa Clara,
Silicon Valley Power
Donald Von Raesfeld Power Plant
850 Duane Avenue
Santa Clara, CA 95054

Non-Compliance Summary

Unit	Start		Corrected		Duration	Remarks
	Date	Time	Date	Time	(hr:min)	
1						
2						
3						

The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), hourly (H), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
NO_X	BAAQMD 9-3-303	N		125 ppm	BAAQMD 1-520.1	C	CEM	**Yes**
NO_X	BAAQMD 9-9-301.2	N		0.15 lb/MW-hr or 5 ppmv	BAAQMD 9-9-501	C	CEM	**Yes**
NO_X	SIP 9-9-301.3	Y		9 ppmv @ 15% O_2, dry	BAAQMD 9-9-501	C	CEM	**Yes**
NO_X	NSPS, 40 CFR 60.332 (a)(1)	Y		75 ppmv, @ 15% O_2, dry 4-hr average	40 CFR 60.334(c) and BAAQMD Condition 24252, Part 27b	C	CEM	**Yes**
NO_X		Y		None	40 CFR 75.10	C	CEM	**Yes**

Table VII – A
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S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
NO_X	BAAQMD condition #24252, part 20b	Y		4.49 lb/hr, for each turbine and HRSG combined, except during turbine startup and shutdown	BAAQMD condition #24252, part 27b	C	CEM	**Yes**
NO_X	BAAQMD condition #24252, part 20b	Y		4.49 lb/hr, for each turbine and HRSG combined, except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum load	**Yes**
NO_X	BAAQMD condition #24252, part 20a	Y		2.0 ppmv, @ 15% O_2, dry, for each turbine and HRSG combined, 1-hr average except during turbine startup and shutdown	BAAQMD condition #24252, part 27b	C	CEM	**Yes**
NO_X	BAAQMD condition #24252, part 20a	Y		2.0 ppmv, @ 15% O_2, dry, each turbine and HRSG combined, 1-hr average except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum load	**Yes**
NO_X	BAAQMD condition #24252, part 21	Y		41 lb/turbine during start-up	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**
NO_X	BAAQMD condition #24252, part 21	Y		8 lb/turbine during shutdown	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**

NO_X	BAAQMD condition #24252, part 22a	Y		358.9 lb/day for turbines and HRSGs combined	BAAQMD condition #24252, part 27	C	CEM	**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
CO	BAAQMD condition #24252, part 23a	Y		43.3 ton/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 27	C	CEM	**Yes**
CO	BAAQMD condition #24252, part 20d	Y		5.47 lb/hr, for each turbine and HRSG combined, except during turbine startup and shutdown	BAAQMD condition #24252, part 27	C	CEM	**Yes**
CO	BAAQMD condition #24252, part 20d	Y		5.47 lb/hr, for each turbine and HRSG combined, except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**
CO	BAAQMD condition #24252, part 20c	Y		4 ppmv, @ 15% O_2, dry, for each turbine and HRSG combined, 3-hr average except during turbine startup and shutdown	BAAQMD condition #24252, part 27	C	CEM	**Yes**
CO	BAAQMD condition #24252, part 20c	Y		4 ppmv, @ 15% O_2, dry, for each turbine and HRSG combined, 3-hr average except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**

CO	BAAQMD condition #24252, part 21	Y		35 lb/turbine during start-up	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**
CO	BAAQMD condition #24252, part 21	Y		10 lb/turbine during shutdown	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
CO	BAAQMD condition #24252, part 22b	Y		377.9 lb/day for turbines and HRSGs combined	BAAQMD condition #24252, part 27	C	CEM	**Yes**
CO	BAAQMD condition #24252, part 23b	Y		48.4 ton/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 27	C	CEM	**Yes**
CO_2		Y		None	40 CFR 75.10	C	fuel flow monitor and CO_2 calculation	**Yes**
SO_2	BAAQMD 9-1-301	Y		GLC[1] of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		**Yes**
SO_2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		**Yes**

SO_2	NSPS 40 CFR 60.333	Y		0.015% (vol) @15% O_2 (dry) or total sulfur content of fuel less than or equal to 0.8% sulfur by weight (8,000 ppmw)	NSPS 40 CFR 60.334(h)(3) (ii) and BAAQMD Condition 24252, Part 45	P/M	Monthly fuel sulfur analysis	**Yes**
SO_2		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurement calculations	**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
SO_2	BAAQMD condition #24252, part 20h	Y		0.41 lb/hr for each turbine and HRSG power train	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**
SO_2	BAAQMD condition #24252, part 20h	Y		0.000676 lb/MM BTU of natural gas fired for each turbine and HRSG power train	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**
SO_2	BAAQMD condition #24252, part 22e	Y		18.2 lb/day for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
SO_2	BAAQMD condition #24252, part 23e	Y		2.93 ton/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
Opacity	BAAQMD 6-1-301	N		> Ringelmann No. 1 for no more than 3 minutes in any hour		N		**Yes**

Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N		**Yes**
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N		**Yes**
FP	SIP 6-310	Y		0.15 grain/dscf		N		**Yes**
FP	BAAQMD 6-1-310.3	N		0.15 grain/dscf @ 6% O_2		N		**Yes**
FP	SIP 6-310.3	Y		0.15 grain/dscf @ 6% O_2		N		**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
PM_{10}	BAAQMD condition #24252, part 20i	Y		3.0 lb/hr, for each turbine when HRSG is not in operation	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
PM_{10}	BAAQMD condition #24252, part 20i	Y		4.3 lb/hr, for each turbine and HRSG combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
PM_{10}	BAAQMD condition #24252, part 21	Y		3 lb/turbine during start-up	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**
PM_{10}	BAAQMD condition #24252, part 21	Y		3 lb/turbine during shutdown	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**

PM_{10}	BAAQMD condition #24252, part 22d	Y		197.8 lb/day for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
PM_{10}	BAAQMD condition #24252, part 23d	Y		28.1 ton/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
POC	BAAQMD condition #24252, part 20g	Y		1.56 lb/hr (as CH4) for each turbine and HRSG combined except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
POC	BAAQMD condition #24252, part 20g	Y		0.00255 lb/MM BTU of natural gas fired (as CH4) for each turbine and HRSG combined except during turbine startup and shutdown	BAAQMD condition #24252, part 31	P/A	Source test at maximum and minimum load	**Yes**
POC	BAAQMD condition #24252, part 21	Y		2 lb/turbine during start-up (as CH4)	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**
POC	BAAQMD condition #24252, part 21	Y		1 lb/turbine during shutdown (as CH4)	BAAQMD condition #24252, part 27	P/D	Records, calculations	**Yes**
POC	BAAQMD condition #24252, part 22c	Y		71.9 lb/day (as CH4) for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**

POC	BAAQMD condition #24252, part 23c	Y		11.2 ton/yr (as CH4) for turbines and HRSGs combined	BAAQMD condition #24252, part 28	P/D	Records, calculations	**Yes**
NH_3	BAAQMD condition #24252, Part 20e	N		10 ppmv, @ 15% O_2, dry, averaged over 3 hours for each turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #24252, part 30	P	Source Testing	**Yes**

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 GAS TURBINE #1 S-2 HRSG DUCT BURNER #1 S-3 GAS TURBINE #2 S-4 HRSG DUCT BURNER #2

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
NH_3	BAAQMD condition #24252, Part 20e	N		10 ppmv, @ 15% O_2, dry, averaged over 3 hours for each turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #24252, part 20e	C	Ammonia injection rate monitor	**Yes**
Formal-dehyde	BAAQMD condition #24252, part 26	N		2706 lb/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 29	P/D	Records, calculations	**Yes**
Benzene	BAAQMD condition #24252, part 26	N		112 lb/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 29	P/D	Records, calculations	**Yes**
Specified PAH's	BAAQMD condition #24252, part 26	N		0.71 lb/yr for turbines and HRSGs combined	BAAQMD condition #24252, part 29	P/D	Records, calculations	**Yes**

Heat input limit	BAAQMD condition #24252, part 14	Y		610.6 MM BTU/hr, 3-hr average for each Turbine and HRSG power train	BAAQMD condition #24252, part 27	C	Fuel meter, firing monitor, calculations	**Yes**
Heat Input Limit	BAAQMD condition #24252, part 15	Y		13,559.2 MM BTU/calendar day, for each Turbine and HRSG power train	BAAQMD condition #24252, part 27	C	fuel meter, firing monitor, calculations	**Yes**
Heat Input Limit	BAAQMD condition #24252, part 16	Y		8,682,544 MM BTU/yr for S-1, S-3, Turbines and S-2, S-4, HRSGs combined	BAAQMD condition #24252, part 27	C	fuel meter, firing monitor, calculations	**Yes**

Table VII - B
Applicable Limits and Compliance Monitoring Requirements
S-5 COOLING TOWER

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Yes/No
Opacity	BAAQMD 6-1-301	N		≥ Ringelmann No. 1 for no more than 3 minutes in any hour		N		**Yes**
Opacity	SIP 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour	N	N		**Yes**
FP	BAAQMD 6-1-310	N		0.15 grain/dscf	N	N		**Yes**
FP	SIP 6-310	Y		0.15 grain/dscf	N	N		**Yes**

ANNUAL COMPLIANCE CERTIFICATION REPORT

Site#: B4991 **Site name:** Donald Von Raesfeld Power Plant **Period:** 04/01/2022 **to** 03/31/2023

Address: 850 Duane Avenue **City:** Santa Clara **State:** CA **Zip:** 95054

Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
BAAQMD Regulation 1	**General Provisions and Definitions (7/9/08)**			
1-107	Combination of Emissions	Y	C	
1-520	Continuous Emission Monitoring	Y	C	
1-520.1	Monitoring of NO_x, CO_2, or O_2	Y	C	
1-520.8	Monitors required per Reg. 2-1-403	Y	C	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	C	
1-522.1	approval of plans and specifications	Y	C	
1-522.2	scheduling requirements	Y	C	
1-522.3	CEM performance testing	Y	C	
1-522.4	reporting of inoperative CEMs	Y	C	
1-522.5	CEM calibration requirements	Y	C	
1-522.6	CEM accuracy requirements	Y	C	
1-522.7	emission limit exceedance reporting requirements	Y	C	
1-522.8	monitoring data submittal requirements	Y	C	
1-522.9	recordkeeping requirements	Y	C	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.1	Parametric monitor periods of non operation	Y	C	
1-523.2	Limits on periods of non operation	Y	C	
1-523.3	Reports of Violations	Y	C	
1-523.4	Records	Y	C	
1-523.5	Maintenance and calibration	Y	C	
1-602	Area and Continuous Emission Monitoring Requirements	Y	C	
SIP Regulation 1	**General Provisions and Definitions (6/28/99)**			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	C	
1-522.7	Monitor excesses	Y	C	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	C	
1-523.3	Reports of Violations	Y	C	
BAAQMD Regulation 2, Rule 1	**Regulation 2, Rule 1 - Permits, General Requirements (7/19/06)**			
2-1-501	Monitors	Y	C	

ANNUAL COMPLIANCE CERTIFICATION REPORT

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Address: 850 Duane Avenue **City:** Santa Clara **State:** CA **Zip:** 95054

Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann Number 1 Limitation	Y	C	
6-1-305	Visible Particles	Y	C	
6-1-310	Particulate Weight Limitation	Y	C	
6-1-310.3	Heat Transfer Operations (HRSG Only)	Y	C	
6-1-401	Appearance of Emissions	Y	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann Number 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310	Particulate Weight Limitation	Y	C	
6-310.3	Heat Transfer Operations	Y	C	
6-401	Appearance of Emissions	Y	C	
BAAQMD Regulation 9, Rule 1	**Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)**			
9-1-301	Limitations on Ground Level Concentrations	Y	C	
9-1-302	General Emission Limitations	Y	C	
BAAQMD Regulation 9, Rule 3	**Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/82)**			
9-3-303	New or Modified Heat Transfer Operation Limits	Y	C	
BAAQMD Regulation 9, Rule 9	**Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/06)**			
9-9-113	Exemption – Inspection/Maintenance	Y	C	
9-9-114	Exemption – Start-Up/Shutdown	Y	C	
9-9-301	Emission Limits, General	Y	C	
9-9-301.1.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	Y	C	
9-9-301.2	Emission Limits, General	Y	C	
9-9-401	Certification, Efficiency	Y	C	
9-9-501	Monitoring and recordkeeping requirements	Y	C	
SIP Regulation 9 Rule 9	**Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/97)**			
9-9-113	Exemption – Inspection/Maintenance	Y	C	

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Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
9-9-114	Exemption – Start-Up/Shutdown	Y	C	
9-9-301	Emission Limits, General	Y	C	
9-9-301.3	Emission Limits, Turbines greater than 10 MW with SCR, NO_x less than 9 ppmv (dry, 15% O_2)	Y	C	
9-9-501	Monitoring and recordkeeping requirements	Y	C	
BAAQMD Regulation 10 Subpart GG	**NSPS Incorporation by Reference, Stationary Gas Turbines (2/16/2000)**			
10-40	Subpart GG - Standards of Performance For Stationary Gas Turbines	Y	C	
BAAQMD Manual of Procedures, Volume V	**Continuous Emission Monitoring Policy and Procedures (1/20/82)**	Y	C	
40 CFR 60 Subpart A	**Standards of Performance for New Stationary Sources – General Provisions (1/28/09)**	Y	C	
60.7	Notification and Recordkeeping	Y	C	
60.8	Performance Tests	Y	C	
60.9	Availability of Information	Y	C	
60.11(a)	Compliance with standards in this part	Y	C	
60.11(d)	Minimizing emissions	Y	C	
60.12	Circumvention	Y	C	
60.13	Monitoring Requirements	Y	C	
60.19	General notification and reporting requirements	Y	C	
Subpart GG	**Standards of Performance for Stationary Gas Turbines (2/24/06)**			
60.332(a)(1)	NO_x limit	Y	C	
60.333	Standard for sulfur dioxide	Y	C	
60.333(a)	SO_2 Concentration < 0.015 percent @15% O_2 (Turbine Only)	Y	C	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight (Turbine Only)	Y	C	
60.334	Monitoring of operations	Y	C	
60.334(c)	NO_x CEMs	Y	C	
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)	Y	C	

ANNUAL COMPLIANCE CERTIFICATION REPORT

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Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
60.334(j)(1)(iii)	NO_x Excess Emissions and Monitor Downtime reporting requirements	Y	C	
60.335	Test Methods and Procedures	Y	C	
40 CFR 60 Appendix B	**Performance Specifications**			
Performance Specification 2	Specifications and test procedures for SO_2 and NO_x continuous emission monitoring systems in stationary sources	Y	C	
Performance Specification 3	Specifications and test procedures for O_2 and CO_2 continuous emission monitoring systems	Y	C	
40 CFR 60 Appendix F	**Quality Assurance Procedures**			
Procedure 1	Quality assurance requirements for gas continuous emission monitoring systems used for compliance determination	Y	C	
40 CFR Part 72	**Title IV – Acid Rain Program**			
	Subpart A – Acid Rain Program General Requirements	Y	C	
72.6	Applicability	Y	C	
72.6(a)(3)	New utility unit (at the time of commencement of commercial operation)	Y	C	
72.9	Standard Requirements	Y	C	
72.9(a)	Permit Requirements	Y	C	
72.9(a)(1)(i)	Submittal of a complete acid rain permit application	Y	C	
72.9(a)(1)(iii)	Submittal of information in a timely manner	Y	C	
72.9(a)(2)(i)	Operation in compliance with Acid Rain permit	Y	C	
72.9(a)(2)(ii)	Have an Acid Rain Permit	Y	C	
72.9(b)	Monitoring Requirements	Y	C	
72.9(c)	Sulfur Dioxide Requirements	Y	C	
72.9(c)(1)	Requirement to hold allowances as of allowance transfer deadline	Y	C	
72.9(c)(2)	Each ton of excess SO_2 emissions is a separate violation of the CAA	Y	C	
72.9(c)(3)	Initial deadline to hold allowances	Y	C	
72.9(c)(3)(iv)	Deadline at time of monitor certification	Y	C	

Site#: B4991 **Site name:** Donald Von Raesfeld Power Plant **Period:** 04/01/2022 **to** 03/31/2023

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Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
72.9(c)(4)	Use of Allowance Tracking System	Y	C	
72.9(c)(5)	Allowances may not be deducted prior to year for which allowance was allocated	Y	C	
72.9(c)(6)	Limited authorization	Y	C	
72.9(e)	Excess emissions requirements	Y	C	
72.9(f)	Recordkeeping and Reporting Requirements	Y	C	
72.9(g)	Liability	Y	C	
72.9(h)	Effect on Other Authorities	Y	C	
	Subpart C – Acid Rain Permit Applications			
72.30(a)	Requirement to apply	Y	C	
72.30(c)	Duty to reapply. Requirement to submit complete acid rain application 6 months prior to expiration of current acid rain permit.	Y	C	
72.31	Information requirements for Acid Rain permit applications	Y	C	
72.31(a)	Identification of affected source	Y	C	
72.31(b)	Identification of each affected emissions unit	Y	C	
72.31(c)	Complete compliance plan	Y	C	
72.31(d)	Standard requirements under 40 CFR 72.9	Y	C	
72.31(e)	If the Acid Rain permit application is for Phase II and the unit is a new unit, the date that the unit has commenced or will commence operation and the deadline for monitor certification.	Y	C	
72.32	Permit application shield and binding effect of permit application	Y	C	
	Subpart E – Acid Rain Permit Contents			
72.50	General	Y	C	
72.50(a)	Acid Rain Permits	Y	C	
72.50(a)(1)	Permits must contain all elements of complete Acid Rain Application under 40 CFR 72.31	Y	C	
72.50(b)	Permits include terms in 40 CFR 72.2	Y	C	
72.51	Permit Shield	Y	C	
40 CFR Part 75	**Code of Federal Regulations, Continuous Emissions Monitoring**			
	Subpart A – General	Y	C	
75.2	Applicability	Y	C	

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
75.2(a)	Applicability to affected units subject to Acid Rain emission limitations	Y	C	
75.2(c)	The provisions of this part apply to sources subject to a State or federal NO_X mass emission reduction program, to the extent these provisions are adopted as requirements under such a program	Y	C	
75.4	Compliance Dates	Y	C	
75.4(b)	New affected unit (at the time of the commencement of commercial operation) shall ensure that all monitoring systems required under this part for monitoring of SO_2, NO_x, CO_2, opacity, and volumetric flow are installed and all certification tests are completed on or before the later of the following dates	Y	C	
75.4(b)(2)	The earlier of 90 unit operating days or 180 calendar days after the date the unit commences commercial operation, notice of which date shall be provided under subpart G of this part.	Y	C	
75.5	Prohibitions	Y	C	
	Subpart B – Monitoring Provisions	Y	C	
75.10	General Operating Requirements	Y	C	
75.10(a)	Primary Measurement Requirement	Y	C	
75.10(a)(1)	SO_2 Emissions, except as provided in §§75.11 and 75.16 and subpart E of this part	Y	C	
75.10(a)(2)	NO_x Emissions, except as provided in §§75.12 and 75.17 and subpart E of this part	Y	C	
75.10(a)(3)	CO_2 Emissions	Y	C	
75.10(a)(3)(ii)	CO_2 Emissions estimated using Carbon Content of fuel and procedures in Appendix G.	Y	C	

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
75.10(b)	Primary Equipment Performance Requirements Requires each CEM to meet equipment, installation, and performance specifications in part 75, Appendix A and quality assurance/quality control requirements in part 75 Appendix B.	Y	C	
75.10(c)	Heat Input Rate Measurement Requirement	Y	C	
75.10(d)	Primary equipment hourly operating requirements	Y	C	
75.10(d)(1)	Cycles of operation for each 15 minute period. Hourly average calculated from a minimum of four 15 minute periods.	Y	C	
75.10(d)(3)	Validity of data and data substitution	Y	C	
75.10(f)	Minimum measurement capability requirement	Y	C	
75.10(g)	Minimum recording and recordkeeping requirements	Y	C	
75.11	Specific provisions for monitoring SO_2 emissions	Y	C	
75.11(d)	Gas-fired and oil-fired units	Y	C	
75.11(d)(2)	Allows the use of Appendix D Optional SO_2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units to monitor SO_2 emissions.	Y	C	
75.12	Specific provisions for monitoring NO_x emission rates	Y	C	
75.12(a)	NO_x continuous emission monitor and diluent monitoring requirement	Y	C	
75.12(c)	NO_x mass emission rate determination according to Appendix F	Y	C	
75.13	Specific provisions for monitoring CO_2 emissions	Y	C	
75.13(b)	Determination of CO_2 emissions using Appendix G	Y	C	
75.14	Specific Provisions for monitoring opacity	Y	C	
75.14(c)	Gas-Fired Units Exempt from Opacity Monitoring	Y	C	

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
	Subpart C – Operation and Maintenance Requirements	Y	C	
75.20	Initial certification and recertification procedures	Y	C	
75.20(a)	Initial certification and approval process	Y	C	
75.20(b)	Recertification approval process	Y	C	
75.20(c)	Initial certification and recertification procedures	Y	C	
75.20(g)	Initial certification and recertification procedures for excepted monitoring systems under appendices D and E	Y	C	
75.21	Quality assurance and quality control requirements	Y	C	
75.21(a)	Continuous emission monitoring systems	Y	C	
75.21(c)	Calibration gases	Y	C	
75.21(d)	Notification for periodic Relative Accuracy Test Audits	Y	C	
75.21(e)	Consequences of audits	Y	C	
75.22	Reference test methods	Y	C	
75.24	Out-of-control periods and adjustment for system bias	Y	C	
	Subpart D – Missing Data Substitution Procedures	Y	C	
75.30	General Provisions	Y	C	
75.30(a)	Owner/operator shall provide substitute data for each affected unit using a continuous emission monitor according to this subpart whenever the unit is combusting fuel.	Y	C	
75.31	Initial missing data procedures	Y	C	
75.32	Determination of monitor data availability for standard missing data procedures	Y	C	
75.33	Standard missing data procedures for SO, NO, Hg, and flow rate	Y	C	

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Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
75.33(a)	Following initial certification and after following initial missing data procedures for 2,160 quality assured operating hours for NO_x continuous emissions monitors system the owner/operator shall follow the data substitution procedures in paragraph (b) and (c) of this section.	Y	C	
75.33(c)	Volumetric flow rate, NO_x emission rate and NO_x concentration data	Y	C	
75.34	Units with add-on emission controls	Y	C	
75.35	Missing data procedures for CO_2	Y	C	
75.36	Missing data procedures for heat input rate determinations	Y	C	
	Subpart F – Recordkeeping Requirements	Y	C	
75.53	Monitoring plan	Y	C	
75.53(a)	General provisions	Y	C	
75.53(b)	Updates to monitoring plan	Y	C	
75.53(e)	Contents of monitoring plan	Y	C	
75.53(f)	Contents of monitoring plan for specific situations	Y	C	
75.53(g)	Contents of the monitoring plan after January 1, 2009	Y	C	
75.53(h)	Contents of monitoring plan for specific situations	Y	C	
75.57	General recordkeeping provisions	Y	C	
75.57(a)	General recordkeeping provisions for affected sources	Y	C	
75.57(b)	Operating parameter record provisions. The owner or operator shall record for each hour the following information on unit operating time, heat input rate, and load, separately for each affected unit.	Y	C	
75.57(c)	SO_2 emission record provisions	Y	C	
75.57(d)	NO_x emission record provisions	Y	C	
75.57(e)	CO_2 emission record provisions	Y	C	
75.57(g)	Diluent record provisions	Y	C	
75.57(h)	Missing data records	Y	C	

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Sources: S-1, S-2, S-3, S-4 **Source names:** Turbine (S-1, S-3) Duct Burner (S-2, S-4)

Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
75.58	General recordkeeping provisions for specific situations	Y	C	
75.58(b)	Specific parametric data record provisions for calculating substitute emissions data for units with add-on emission controls	Y	C	
75.58(c)	Specific SO_2 emission record provisions for gas-fired or oil-fired units using optional protocol in appendix D to this part. In lieu of recording the information in §75.57(c), the owner or operator shall record the applicable information in this paragraph for each affected gas-fired or oil-fired unit for which the owner or operator is using the optional protocol in appendix D to this part for estimating SO_2 mass emissions	Y	C	
75.59	Certification, quality assurance, and quality control record provisions	Y	C	
75.59(a)	Continuous emission or opacity monitoring systems	Y	C	
75.59(b)	Excepted monitoring systems for gas-fired and oil-fired units. The owner or operator shall record the applicable information in this section for each excepted monitoring system following the requirements of appendix D to this part or appendix E to this part for determining and recording emissions from an affected unit.	Y	C	
75.59(c)	Except as otherwise provided in §75.58(b)(3)(i), units with add-on SO_2 or NO_x emission controls following the provisions of §75.34(a)(1) or (a)(2), and for units with add-on Hg emission controls, the owner or operator shall keep the following records on-site in the quality assurance/quality control plan required by section 1 of appendix B to this part:	Y	C	

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
75.59(f)	DAHS Verification. For each DAHS (missing data and formula) verification that is required for initial certification, recertification, or for certain diagnostic testing of a monitoring system, record the date and hour that the DAHS verification is successfully completed. (This requirement only applies to units that report monitoring plan data in accordance with §75.53(g) and (h).)	Y	C	
	Subpart G – Reporting Requirements	Y	C	
75.60	General Provisions	Y	C	
75.61	Notifications	Y	C	
75.62	Monitoring plan submittals	Y	C	
75.63	Initial certification or recertification application	Y	C	
75.64	Quarterly reports	Y	C	
75.66	Petitions to the administrator	Y	C	
BAAQMD Condition #24252				
Definitions	Definitions	Y	C	
part 13	S-1, S-2, S-3, and S-4 shall be fired on natural gas only (BACT for SO2 and PM10)	Y	C	
part 14	Hourly heat input limit for each gas turbine/HRSG power train (BACT, cumulative increase)	Y	C	
part 15	Daily heat input limit for each gas turbine/HRSG power train (BACT, cumulative increase)	Y	C	
part 16	Annual heat input limit for each gas turbine/HRSG power train (BACT, cumulative increase)	Y	C	
part 17	Duct burners shall not be fired unless turbines are in operation (BACT for NO_x, CO, POC)	Y	C	
part 18	SCR requirement for S-1 and S-2 (BACT for NO_x)	Y	C	
part 19	SCR requirement for S-3 and S-4 (BACT for NO_x)	Y	C	

ANNUAL COMPLIANCE CERTIFICATION REPORT

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
part 20	Emission limits (BACT, PSD, and Regulation 2, Rule 5)	Y	C	
part 20a	NO_x concentration limit (BACT for NO_x)	Y	C	
part 20b	NO_x mass emission limit (BACT for NO_x)	Y	C	
part 20c	CO concentration limit (BACT for CO)	Y	C	
part 20d	CO mass emission limit (BACT for CO)	Y	C	
part 20e	Ammonia concentration limit and monitoring (Regulation 2, Rule 5 for NH_3)	Y	C	
part 20f	POC concentration limits (BACT for POC)	Y	C	
part 20g	POC mass emission rate limits (BACT for POC)	Y	C	
part 20h	SO_2 mass emission rate limits (BACT for SO_2)	Y	C	
part 20i	PM_{10} mass emission rate limits (BACT for PM_{10})	Y	C	
part 20j	Allowable excursions from NOx mass and concentration emission limits specified in parts 20a and 20 b (BACT for NOx)	Y	C	
part 21	Gas Turbine start-up and shutdown emission rate limits for NOx, CO, POC, and PM10 (PSD)	Y	C	
part 22	Total Combined daily mass emission limits from S-1, S-2, S-3, and S-4 for NOx, CO, POC, PM10, and SO2 (PSD)	Y	C	
part 23	Total Combined consecutive twelve-month mass emission limits from S-1, S-2, S-3, and S-4 for NOx, CO, POC, PM10, and SO2 (Offsets)	Y	C	
part 26	Facility annual emission limits for toxic air contaminants (Regulation 2, Rule 5)	Y	C	
part 27	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	C	
part 28	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	C	
part 29	Calculation of emissions and recordkeeping for toxic air contaminants (Regulation 2, Rule 5)	Y	C	
part 30	Ammonia source test (Regulation 2, Rule 5)	Y	C	

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Citation	Title	Compliance	Cont or Int	Days Out of Compliance/Comments
part 31	Source testing to assure compliance with part 20a, b, c, d, f, g, h, and i (BACT, offsets)	Y	C	
part 32	District review of source test procedures (BACT)	Y	C	
part 33	Initial and biennial source tests for toxic air contaminants (Regulation 2, Rule 5)	Y	C	
part 34	Submittal of reports (2-6-502)	Y	C	
part 35	Retention of records for five years (2-6-502)	Y	C	
part 36	Notification of violations to District (2-1-403)	Y	C	
part 37	Stack heights (PSD, Regulation 2, Rule 5)	Y	C	
part 44	Federal CEM requirements (40 CFR part 75)	Y	C	
part 45	Natural gas sulfur content analysis (40 CFR 60, subpart GG)	Y	C	
S-5 COOLING TOWER REQUIREMENTS				
BAAQMD Regulation 6, Rule 1	**Particulate Matter, General Requirements (12/5/07)**			
6-1-301	Ringelmann Number 1 Limitation	Y	C	
6-1-305	Visible Particles	Y	C	
6-1-310	Particulate Weight Limitation	Y	C	
6-1-401	Appearance of Emissions	Y	C	
SIP Regulation 6	**Particulate Matter and Visible Emissions (9/4/98)**			
6-301	Ringelmann Number 1 Limitation	Y	C	
6-305	Visible Particles	Y	C	
6-310	Particulate Weight Limitation	Y	C	
6-401	Appearance of Emissions	Y	C	

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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.

Kevin Kolnowski
Electric Chief Operating Officer

Signature

April 01, 2022 through March 31, 2023
Certification Period

4/26/2023
Date

Facility #B4991
Donald Von Raesfeld Power Plant
City of Santa Clara, Silicon Valley Power
850 Duane Ave.
Santa Clara, CA 95054