

Gilroy Energy Center, LLC for Lambie Energy Center

5975 Lambie Road
Suisun City, CA 94585

VIA EMAIL and FEDEX

Friday, January 26, 2024

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

TV Tracking #: 872

1. RECEIVED IN 1/31/2024
ENFORCEMENT: _____

Re: Gilroy Energy Center, LLC for Lambie Energy Center
Semi-Annual Title V Monitoring and Excess Emissions Report
Facility #B4415
Reporting Period: July 1, 2023 through December 31, 2023.

Dear Andrew,


Enclosed is the Title V CEMS Semi-Annual Monitoring Report for the Gilroy Energy Center, LLC for Lambie Energy Center (LEC) for the reporting period of July 1, 2023 through December 31, 2023.

LEC is currently in compliance with the District CEMS regulations. LEC maintained compliance with the monitoring requirements listed in the Title V permit for LEC during this reporting period.

By signing this report I am certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the attached report are true, accurate, and complete.

If you have any questions or require additional information, please contact me at (707) 399-4393 or Ehab Aqleem, EHS Specialist, at (707) 399-4395.

Sincerely,

DocuSigned by:

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Andrew Gundershaug
Plant Manager and Responsible Official

cc:	Sadegh Sadeghipour	Permit Engineer	BAAQMD
	Jamie Wright	O&M Manager	Calpine Corporation
	EHS Walnut Creek	EHS Department	Calpine Corporation

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-1 – COMBUSTION GAS TURBINE
July 1, 2023 through December 31, 2023

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
NOx	BAAQMD 9-9-301.1.3	N		9 ppmv @ 15% O ₂ , dry	BAAQMD 9-9-501 and BAAQMD condition #20134, part 23c	C	CEM	X	
NOx	BAAQMD 9-9-301.1.3	N		9 ppmv @ 15% O ₂ , dry	BAAQMD condition #20134, part 24a	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
NOx	SIP Regulation 9-9-301.3	Y		9 ppmv @ 15% O ₂ , dry	SIP Regulation 9-9-501 and BAAQMD condition #20134, part 23c	C	CEM	X	
NOx	SIP Regulation 9-9-301.3	Y		9 ppmv @ 15% O ₂ , dry	BAAQMD condition #20134, part 24a	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y		75 ppmv @ 15% O ₂ , dry	NSPS 40 CFR 60.334(b)	C	CEM	X	
NOx	None	Y		None	40 CFR 75.10	C	CEM	X	
NOx	BAAQMD condition #20134, part 18.1	Y		2.5 ppmv @ 15% O ₂ , dry, 3-hr rolling average except during turbine startup or shutdown	BAAQMD condition #20134, parts 18.1 and 23c	C	CEM	X	
NOx	BAAQMD condition #20134, part 18.1	Y		2.5 ppmv @ 15% O ₂ , dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20134, part 24a	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
NOx	BAAQMD condition #20134, part 21	Y		121 lb/calendar day (as NO ₂)	BAAQMD condition #20134, part 23c	C	CEM	X	
NOx	BAAQMD condition #20134, part 21	Y		16.4 tons per calendar year (as NO ₂)	BAAQMD condition #20134, part 23c	C	CEM	X	
CO	BAAQMD condition #20134, part 18.3	Y		6 ppmv @ 15% O ₂ , dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20134, parts 18.3 and 23c	C	CEM	X	

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 #20134, part 18.3	Y		6 ppmv @ 15% O ₂ , dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20134, part 24c	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
CO	BAAQMD condition #20134, part 21	Y		163 lb/calendar day	BAAQMD condition #20134, part 23c	C	CEM	X	
CO	BAAQMD condition #20134, part 21	Y		29.1 tons per calendar year	BAAQMD condition #20134, part 23c	C	CEM	X	
CO ₂		Y		None	40 CFR 75.10	C	CEM (CO ₂) or CEM (O ₂) or fuel flow monitor	X	
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		X	
SO ₂	SIP 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		X	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD condition #20134, part 24f	P/8000 hrs or 3 yrs whichever comes first	Source test	X	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD condition #20134, part 23e	P/Q	Total sulfur analysis	X	
SO ₂	SIP 9-1-302	Y		300 ppm (dry)	BAAQMD condition #20010, part 23e	P/Q	Fuel Gas Total sulfur content analysis	X	
SO ₂	NSPS 40 CFR Subpart GG 60.333(a)	Y		0.015% (vol.) @ 15% O ₂ (dry)	40 CFR 75.11(d)(2), 40 CFR 75, Appendix D, part 2.3 NSPS 40 CFR 60.334(h)(3)		Fuel measurements, calculations	X	
SO ₂	None	Y		None	40 CFR 75.11(d)(2), 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations	X	
SO ₂	BAAQMD condition #20134, part 18.6	Y		1.39 lb/hr excluding startup and shutdown of turbines	BAAQMD condition #20134, part 23e	P/Q	Total sulfur analysis	X	
SO ₂	BAAQMD condition #20134, part 18.6	Y		1.39 lb/hr excluding startup and shutdown of turbines	BAAQMD condition #20134, part 24f	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	

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 #20134, part 21	Y		33 lb/calendar day	BAAQMD condition #20134, part 24f	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
SO ₂	BAAQMD condition #20134, part 21	Y		6.0 tons/calendar year	BAAQMD condition #20134, part 24f	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Opacity	BAAQMD 6-1-301	N		≥ Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
Opacity	SIP Regulation 6-301	Y		≥ Ringelmann No. 1 for no more than 3 minutes in any hour		N		X	
Opacity	BAAQMD condition #20134, part 17	Y		≥ Ringelmann No. 1 for no more than 3 minutes in any hour or equivalent 20% opacity		N		X	
Filterable Particulate	BAAQMD 6-1-310	N		0.15 grain/dscf		N		X	
Filterable Particulate	SIP Regulation 6-310	Y		0.15 grain/dscf		N		X	
PM ₁₀	BAAQMD condition #20134, part 18.5	Y		3.0 lb/ hr for S-1	BAAQMD condition #20134, part 24e	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
PM ₁₀	BAAQMD condition #20134, part 21	Y		72 lb/calendar day	BAAQMD condition #20134, part 24e	P/8000 hrs or 3 yrs whichever comes first.	Source Test	X	
PM ₁₀	BAAQMD condition #20134, part 21	Y		13.1 tons/calendar year	BAAQMD condition #20134, part 24e	P/8000 hrs or 3 yrs whichever comes first.	Source Test	X	
POC	BAAQMD condition #20134, part 18.4	Y		2 ppmv @ 15% O ₂ , dry, except during turbine startup or shutdown	BAAQMD condition #20134, part 24d	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
POC	BAAQMD condition #20134, part 21	Y		30.0 lb/calendar day	BAAQMD condition #20134, part 24d	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
POC	BAAQMD condition #20134, part 21	Y		4.9 ton/calendar year	BAAQMD condition #20134, part 24d	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
NH ₃	BAAQMD condition #20134, Part 18.2	N		10 ppmv @ 15% O ₂ , dry, except during turbine startup or shutdown	BAAQMD condition #20134, parts 18.2 and 23b	C	District approved correct ammonia slip calculation and correction factor determined by source test	X	

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 #20134, part 18.2	N		10 ppmv @ 15% O ₂ , dry, except during turbine startup or shutdown	BAAQMD condition #20134, part 24b	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		500 MM BTU/ hr (HHV), 3-hr average	BAAQMD condition #20134, part 23d	C	Fuel meter	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		500 MM BTU/ hr (HHV), 3-hr average	BAAQMD condition #20134, part 23d	P/Q	Fuel composition analysis	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		500 MM BTU/ hr (HHV), 3-hr average	BAAQMD condition #20134, part 24g	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		12,000 MM BTU/day (HHV)	BAAQMD condition #20134, part 23d	C	fuel meter, calculations	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		12,000 MM BTU/day (HHV)	BAAQMD condition #20134, part 31g	P/Q	Fuel composition analysis	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		4,380,000 MM BTU/yr	BAAQMD condition #20134, part 23d	C	fuel meter, calculations	X	
Heat input limit	BAAQMD condition #20134, part 22	Y		4,380,000 MM BTU/yr	BAAQMD condition #20134, part 31g	P/Q	Fuel composition analysis	X	
MW	N/A			None	BAAQMD condition #20134, part 24h	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Exhaust Gas Temp.	N/A			None	BAAQMD condition #20134, part 24j	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Stack gas flow	N/A			None	BAAQMD condition #20134, part 24i	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
NH ₃ injection rate	N/A			None	BAAQMD condition #20134, part 24k	P/8000 hrs or 3 yrs whichever comes first.	Source test	X	
Start-up Period	BAAQMD condition # 20134, part 19			60 minutes per start-up	BAAQMD condition # 20134, part 31(b)	P/E	Records	X	

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
Shutdown Period	BAAQMD condition # 20134, part 20			30 minutes per shutdown	BAAQMD condition # 20134, part 31(b)	P/E	Records	X	
Fuel Sulfur Content	40 CFR 60.333(b)	Y		0.8 percent by weight (8000 ppmw) sulfur	40 CFR 60.334(h)(1)	P	Fuel Sulfur Content Testing	X	

Table VII - B
Applicable Limits and Compliance Monitoring Requirements
S-2 – DIESEL FIREWATER PUMP

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
SO2	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	None	P/E	Fuel certification by vendor	X	
SO2	SIP 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	None	P/E	Fuel certification by vendor	X	
SO2	BAAQMD 9-1-304	Y		Sulfur content of fuel <0.5% by weight	None	P/E	Fuel certification by vendor	X	
SO2	SIP 9-1-304	Y		Sulfur content of fuel <0.5% by weight	None	P/E	Fuel certification by vendor	X	
Opacity	BAAQMD Regulation 6-1-303	N		≥ Ringelmann 2 for no more than 3 min/hr		N		X	
Opacity	SIP Regulation 6-303	Y		≥ Ringelmann 2 for no more than 3 min/hr		N		X	
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N		X	
FP	SIP Regulation 6-310	Y		0.15 grain/dscf		N		X	
Hours of operation	BAAQMD 9-8-330.1 BAAQMD Condition #22851 Part 2	N		Emergency use for an unlimited number of hours	BAAQMD 9-8-530 BAAQMD Condition #22851 Part 3 and 4	C P/E	Hour meter, recordkeeping	X	

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
Hours of Operation	BAAQMD Regulation 9-8-330.3	N		<= 50 hours each per calendar year for reliability testing, or limitations contained in a District permit,	BAAQMD Regulation 9-8-530	C P/E	Hour meter, recordkeeping	X	
Hours of Operation	BAAQMD Condition 22851, Part 1	Y		<= 34 hours/year for reliability-related activities	BAAQMD Condition 22851, Part 3 and 4	C	Hour meter, recordkeeping	X	

Table VII - C
Applicable Limits and Compliance Monitoring Requirements
S-3 – 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 Regulation 6-1-301	N		> Ringelmann 1 for no more than 3 min/hr		N		X	
Opacity	SIP Regulation 6-301	Y		≥ Ringelmann 1 for no more than 3 min/hr		N		X	
Particulate Weight	BAAQMD Regulation 6-1-310	N		0.15 grains per dscf		N		X	
Particulate Weight	SIP Regulation 6-310	Y		0.15 grains per dscf		N		X	
Particulate Weight	BAAQMD Regulation 6-1-311	Y		40 lb/hr	<u>N</u>	<u>N</u>		X	
Particulate Weight	SIP Regulation 6-311	Y		40 lb/hr	<u>N</u>	<u>N</u>		X	

Certificate Of Completion

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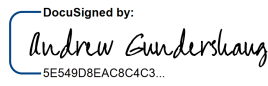
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Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	1/29/2024 1:58:47 PM
Certified Delivered	Security Checked	1/29/2024 6:51:55 PM
Signing Complete	Security Checked	1/29/2024 6:52:07 PM
Completed	Security Checked	1/29/2024 6:52:07 PM

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Electronic Record and Signature Disclosure

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