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CALPINE KING CITY COGEN, LLC
(85-AFC-5C)

KING CITY POWER PLANT

CALIFORNIA ENERGY COMMISSION

ANNUAL COMPLIANCE REPORT

Calendar Year 2020

Calpine King City Cogen, LLC
750 Metz Road
King City, CA 93930

California Energy Commission
2020 Annual Compliance Report
January 1, 2020 - December 31, 2020

CURRENT PROJECT STATUS

On April 28, 1999 the terms of the PPA required the facility to adopt a 24 hours per day, 7 days per week operating schedule for the remainder of the term of the agreement (year 2019). The Cogen operated through 2007 according to this schedule when economically viable. During this period the facility was shut down for maintenance outages, economic curtailments and experienced forced outages.

In November 2006, the facility began 5x13 operation running Monday through Friday 08:30 to 21:30. This operating schedule continued through April 2019, at which time the PPA ended. Calpine King City Cogen, LLC (CKCC) has been operating a combustion turbine as a cogeneration electric generation facility supplying energy to Pacific Gas and Electric Company under a Standard Offer No. 4 (SO4) contract and steam to an industrial host under a steam supply contract. These contracts expired on April 28, 2019, and as a result, CKCC was no longer exempt from Acid Rain program requirements under 40 CFR 72.6(b).

CKCC submitted an application the Monterey Bay Air Resources District (MBARD) for a modification of the King City Title V Permit, TV-0000012, in May 2019, requesting to amend their Title V permit to include the Acid Rain permit requirements of 40 CFR Part 72 to the cogeneration facility with the General Electric (GE) Frame 7 gas turbine. Notification was given to EPA, MBARD and CEC in 2019 that the CTG of the CKCC facility commenced commercial operation on June 18, 2019. The Title V Permit TV-00000012A was issued by the MBARD on March 10, 2020, including the Acid Rain permit. The CKCC facility continued commercial operations through 2020.

Operation details for the combustion and steam turbine including Operating, Availability, Outage and Capacity information are included in the 2020 Monthly Performance Reports provided in Attachment 1. The scheduled maintenance outages occurred in March and November of 2020.Overall, the facility continued to maintain an excellent record of availability for electrical production.

The California Energy Commission also conducted an on-site inspection and documentation review on February 26, 2020. This included review of worker safety, hazardous materials management, fire safety, security, waste management, storm water management, wastewater treatment, and air quality monitoring systems. This inspection found that the documents, procedures and records reviewed did not identify any violations with King City Cogeneration's conditions of certification. On July 17, 2020, the California Energy Commission issued a letter considering the inspection complete and closed (copy provided in Attachment 5).

STATUS OF COMPLIANCE PLAN REQUIREMENTS FOR WHICH ACTION WAS SCHEDULED DURING THIS PERIOD

Cogeneration

Cogen-01 Project Owner shall file with the California Energy Commission during each calendar year an annual report in which monthly average values of the following parameters will be given; 1) monthly fuel use (quantity and Btu value) as evidenced by an invoice from the gas supplier, 2) monthly electrical sales (KWh) as evidenced by invoice from PG&E, 3) monthly steam sales (quantity and Btu value) as evidenced by an invoice to RAVA, 4) feedwater rate (lb/hr) and temperature (F), 5) condensate return rate (lb/hr) and temperature, 6) process steam from auxiliary boilers (lb/hr) and temperature, pressure, enthalpy, auxiliary boilers operating hours.

Status – The facility remained in compliance with this condition in 2020. Refer to 2020 Monthly Performance Reports provided in Attachment 1.

Reliability and Safety

RE-01 Project Owner shall inform the CEC of any design changes made subsequent to certification by the Commission, whether made during final design or construction, which would affect the project's availability or capacity factors.

Status – The facility remained in compliance with this condition in 2020. No design changes were made during 2020 that would affect the projects availability or capacity factors.

RE-03 Project Owner shall prepare an annual report documenting the plant availability and capacity factors achieved, supported by the following information: Combustion turbine/generators, Heat Recovery steam generators, Feedwater pumps, Steam turbine/generators, Condensers, Condensate pumps, Cooling water pumps, Controls. For each forced outage a precise identification of the equipment whose failure resulted in the forced outage and resulting forced outage hours. Identification of equipment or other causes (curtailments) for which planned outage was instituted in any given month. Annual plant availability and capacity factors, per EPRI definitions.

Status – The facility remained in compliance with this condition in 2020. Refer to 2020 Monthly Performance Reports provided in Attachment 1.

Public Health

PH-01 Project Owner shall cause to be established an ambient monitoring system for ozone, TSP, and PM10 in the Salinas Valley, downwind and south of the facility.

Status – The facility remained in compliance with this condition in 2020. Project Owner continues to financially support the operation of the King City Air Monitoring Station. The station commenced operation on March 8, 1998 at the Industrial Road site. In May 2007, the station was relocated when the original site became unsuitable to its current location at the San Lorenzo School on Pearl Street in King City. The station is located in King City. The King City Air Monitoring Station is owned and operated by Monterey Bay Unified Air Pollution Control District effective July 1, 2010. The station is currently monitoring ozone, PM10, PM-2.5, shelter temperature, wind speed, wind direction, ambient temperature and relative humidity. The Air Monitoring Station was maintained and operated in 2020.

PH-02 Project Owner shall limit ammonia emission due to ammonia slip in the NOx reduction process to no greater than 10 parts of ammonia per 1 million parts of flue gas.

Status - The facility remained in compliance with this condition in 2020.

Ammonia Safety

AM-01 Project Owner shall comply with storage and handling requirements of anhydrous ammonia as specified in Title 29, CFR, Sec. 1910.111; Title 8, CAC, Ch. 4, Subchapter 1, Article 6, and ANSI K61.1 – 1981. Verify via Monterey County Department of Health Permit.

Status – The facility remained in compliance with this condition in 2020, and is in compliance with the ammonia storage and handling requirements. The hazardous materials permit is issued by the Monterey County Department of Environmental Health, the local Certified Unified Program Agency (CUPA). The annual hazardous material permit was renewed and remains valid until June 30, 2021.

AM-03 Project Owner shall contract only with Department of Transportation licensed haulers for the transport of anhydrous ammonia.

Status – The facility remained in compliance with this condition in 2020.

AM-09 Project Owner shall facilitate on-site worker safety inspections conducted by the California Division of Occupational Safety and Health during construction and operation of the facility when an employee complaint has been received.

Status – The facility did not receive any employee complaints in 2020. The facility remained in compliance with this condition in 2020.

Air Quality

AQ-01 Before implementing any major change in the Air Pollution Control (APC) systems identified in Determination of Compliance (DOC) Conditions 8, 15, and 16, the Emissions Monitoring Systems (EMS) identified in DOC Conditions 17 through 24, or if any changes to any Conditions of Certification related to air quality are proposed, the project owner shall submit the proposed change to the Monterey Bay Unified Air Pollution Control District (MBUAPCD or District) and the Energy Commission for approval. Examples of major changes are the use of alternative APC systems, EMS, or equipment, or a major change in the performance criteria specified in the referenced DOC Conditions.

Status – During 2020 the facility did not implement any major changes to the air pollution control system, the emissions monitoring system or make any changes affecting air quality conditions of certification. The facility remained in compliance with this condition in 2020.

AQ-02 The project owner shall report any minor change in the APC systems identified in DOC Conditions 8, 15, and 16, or the EMS identified in DOC Conditions 17 through 22, to the MBUAPCD and CPM CEC staff. Examples of minor changes are modifications made grade during initial startup of the facility to ensure compliance with applicable emission limitations or use of alternative hardware to meet the required performance criteria.

Status – During 2020 the facility did not implement or make any minor changes to the air pollution control system or the emissions monitoring system. The facility remained in compliance with this condition in 2020.

AQ-05 The MBUAPCD shall monitor all activities related to site preparation and construction, and monitor operation of the project to ensure compliance with the Conditions of Certification contained in the Commission Decision relating to Air Quality. The MBUAPCD shall perform all duties and functions normally performed by the MBUAPCD and shall have the authority to issue a Permit to Operate. The conditions of the Permit to Operate will be consistent with the Certification Conditions in the Commission Decision. The project owner shall submit to the CPM a report on the status of compliance for each condition related to air quality in the Commission Decision on the project. These reports shall be submitted annually.

Status – The facility remained in compliance with this condition in 2020. The facility submits the annual Title V compliance certification report to MBUAPCD by Feb 15th of each year. Refer to the 2020 Title V Annual Certification Report (Attachment 2). The MBUAPCD renews the Permits to Operate annually in May. The PTOs for all equipment at the facility remain valid.

AQ-07 The annual emissions of the gas turbine shall not exceed 130 tons per year of NO_x and 82 tons per year of CO.

Status – The facility remained in compliance with this condition in 2020. In 2020, the gas turbine emissions remained below the 130 tons per year of NOx limit and 82 tons per year of CO. Refer to the 2020 Annual Facility Emission Summary (Attachment 3).

AQ-08 The maximum annual NOx emission cap for the combined or individual operation of the gas turbine and/or the boiler(s) shall not exceed 133.40 tons per year.

Status – The facility remained in compliance with this condition in 2020. In 2020, the gas turbine and boilers annual NOx emissions total for the plant remained below 133.4 tons per year. Refer to the 2020 Annual Facility Emission Summary (Attachment 3).

AQ-20 The auxiliary boilers shall be fired on natural gas, except that No.2 fuel oil may be used during training/testing, or periods of natural gas curtailment by the utility, or in the event of natural gas supply malfunction or disruption not within the control of the project owner. In any event, No.2 fuel oil shall not be used for more than 240 hours per year per boiler.

Status – The facility remained in compliance with this condition in 2020. The auxiliary boilers were not fired on No.2 fuel oil for training/testing or natural gas curtailments during 2020.

AQ-23 The sulfur content of any No.2 oil used as fuel in the turbine or auxiliary boilers shall not exceed 0.05 percent by weight. All fuel received must be certified to contain 0.05 percent sulfur, or less, by weight.

Status – The facility remained in compliance with this condition in 2020. The gas turbine or auxiliary boilers did not operate on No.2 fuel oil during 2020. The No.2 fuel oil storage tank remained empty during 2020.

AQ-16 Submit gas turbine cold and hot startup protocols which minimize emissions. Amend protocols based on operating experience.

Status – The facility remained in compliance with this condition in 2020. The gas turbine startup protocol was reviewed and kept current in 2020.

AQ-34: An annual compliance test shall be conducted prior to January 1 of each year in accordance with the MBUAPCD test procedures, and the written results of the compliance test shall be provided to the District within sixty 60 days after testing. A testing protocol shall be submitted to the District 30 days prior to testing and the District shall be notified at least 10 days prior to the actual testing day so that a District observer can be present.

Status – The facility remained in compliance with this condition in 2020. The annual compliance test was conducted in June 2020 by Montrose Air Quality Services.

AQ-36 Conduct gas turbine ammonia slip tests per MBUAPCD approved procedures on an annual basis to determine turbine stack discharge ammonia emissions.

Status – The facility remained in compliance with this condition in 2020. The annual compliance testing including ammonia slip was conducted in June 2020 by Montrose Air Quality Services. Ammonia slip test results demonstrate the facility remains below permit limits.

AQ-38 Monitor and record all periods of oil firing in a log maintained on site and shall submit a summary of this data on an annual basis, at the time of permit renewal.

Status – The facility remained in compliance with this condition in 2020. Neither the gas turbine nor the auxiliary boilers were fired on fuel oil during 2020.

AQ-39 Project Owner shall monitor and record all startup, shutdown, and operational profiles in a log maintained on site.

Status – The facility remained in compliance with this condition in 2020. Startup, shutdowns and operating profiles are recorded in the control room electronic J5 logbook.

AQ-41 Submit a statement in the Annual Compliance Report that operations have been conducted in compliance with all data and specifications submitted with the application.

Status – The facility remained in compliance with this condition in 2020. Operations of the King City Cogen Power Plant during 2020 have been conducted in compliance with all data and specifications submitted with the application. Also included is the 2020 Title V Annual Certification Report (Attachment 2).

AQ-42 Submit a statement in the Annual Compliance Report that equipment must be properly maintained and kept in good operating condition.

Status – The facility remained in compliance with this condition in 2020. The equipment has been properly maintained and kept in good operating condition during the 2020 reporting period. Also included is the 2020 Title V Annual Certification Report (Attachment 2).

AQ-43 Submit a statement in the Annual Compliance Report equipment must not be operated unless it is vented to air pollution control equipment which is in full use.

Status – The facility remained in compliance with this condition in 2020. The plant equipment was not operated in 2020 unless it was vented to air pollution control equipment, which was in full use. Also included is the 2020 Title V Annual Certification Report (Attachment 2).

AQ-44 The project owner shall cause to be operated an ambient monitoring station at a site approved by the Air Pollution Control Officer, for NO_2, PM10, and O_3 and standard meteorological parameters on a continuous basis, in accordance with the EPA requirement contained in 40 CFR 58, and as deemed necessary in accordance with the California Air Resources Board guidelines as deemed necessary. The monitoring station instrumentation shall be compatible with the District's daily data retrieval polling methods.

Status – The facility remained in compliance with this condition in 2020. The ambient air monitoring station is owned and operated by MBUAPCD since July 1, 2010. Parameters being monitored at the King City station are Ozone, PM-10, PM-2.5, Wind Speed, Wind Direction, and Ambient Temperature. The Air Monitoring Station was maintained and operated in 2020.

AQ-45 Allow MBUAPCD and CEC personnel site entry for inspection and access to records described in permits. Submit a statement in the Annual Compliance Report on compliance with this condition.

Status – The facility remained in compliance with this condition in 2020.

AQ-47 The gas turbine and the auxiliary boilers must not be operated simultaneously for more than 6 full load equivalent hours during any 24-hour period.

Status – The facility remained in compliance with this condition in 2020. AQ-08 was amended on 8/22/00 by the CEC to eliminate the restrictive hours of operations placed on the two auxiliary boilers. Quarterly emission caps were applied per MBUAPCD Permit to Operate effective October 6, 2000. Quarterly and annual NOx emission for the plant remained below permit limit in 2020. Refer to the 2020 Annual Facility Emission Summary (Attachment 3).

AQ-50 Conduct monthly tests to measure total dissolved solids (TDS) in circulating water. Monitoring records shall be available to the MBUAPCD and CPM upon request.

Status – The facility remained in compliance with this condition in 2020. Monthly cooling tower TDS test samples were collected and analyzed in 2020 by FGL a certified laboratory. Copies of the monthly TDS lab reports are available to the MBUAPCD and CPM upon request.

AQ-51 Design and operate the cooling tower so that PM-10 drift emissions do not exceed 20 pounds per day.

Status – The facility remained in compliance with this condition in 2020. Emissions from the cooling tower did not exceeded 20 pounds per day of PM-10 in 2020. PM10 emissions are submitted in the monthly report to the MBUAPCD.

AQ-53 Cumulative emissions, including emissions generated during Start-ups and Shutdown, from all equipment at Project Owner King City Cogen and the Gilroy Energy Center shall not exceed the following quarterly and annual limits:

	NOx (lb.)	CO (lb.)	PM10 (lb.)	VOC (lb.)	SO_2 (lb.)
1st Quarter	72,452	58,445	12,071	4,762	1,748
2nd Quarter	73,178	59,095	12,204	4,815	1,768
3rd Quarter	73,905	59,744	12,339	4,868	1,787
4th Quarter	73,905	59,744	12,339	4,868	1,787
Annual	293,440	237,028	48,953	19,313	7,090

Status – The facility remained in compliance with this condition in 2020. The facility quarterly emissions are submitted quarterly to the MBUAPCD. Refer to the 2020 Annual Facility Emission Summary (Attachment 3).

AQ-54 The emission limits contained in Conditions of Certification AQ-6, AQ-10, AQ-11 and AQ-12 shall not apply during periods of combustor tuning, balancing, or non-Air District regulatory mandated performance testing. These periods shall not exceed 100 hours per year. The project owner shall notify the District prior to initiating any of these activities, and shall monitor and record all periods of these activities in a log maintained on-site and shall submit a summary of this data to the District and CPM as part of the annual report

Status – The facility remained in compliance with this condition in 2020. No Tuning was conducted in 2020.

AQ-55 The emission limits contained in Conditions of Certification AQ-18, AQ-19 and AQ-21 shall not apply during periods of boiler tuning. Boiler tuning shall not exceed 50 hours per year per boiler.

Status - The facility remained in compliance with this condition in 2020. No Tuning was conducted in 2020.

Safety

SY-07 Project Owner and the King City Fire Department shall annually re-examine the fire protection program.

Status – The facility remained in compliance with this condition in 2020. The City of King, Fire Marshall conducted a site inspection and reviewed the facility fire protection program on November 19, 2020. There were no issues or findings from this inspection (copy of Inspection Record in Attachment 4).

SY-09 Project Owner shall facilitate on-site worker safety inspections conducted by the California Division of Occupational Safety and Health during construction and operation of the facility when an employee complaint has been received.

Status – The facility remained in compliance with this condition in 2020. The facility did not received any employee complaints in 2020.

SY-12 Project Owner shall contract only with Department of Transportation licensed haulers for the transportation of hazardous materials.

Status – The facility remained in compliance with this condition in 2020. The facility uses DOT licensed haulers to transport hazardous materials.

Transmission Line Safety and Nuisance

TSN-01 Project Owner shall request PG&E to inspect the transmission line annually to ensure compliance with applicable standards, ordinances, and laws.

Status - The facility remained in compliance with this condition in 2020. Project Owner has requested PG&E to inspect the transmissions lines annually.

TSN-06 Project Owner shall request PG&E to keep each transmission line pole site free of waste material, rubbish, and vegetation as required by regulation. Calpine shall submit at least once a year a record of PG&E inspection and clean-up reports of the fire prevention activities around the transmission line poles.

Status - The facility remained in compliance with this condition in 2020. The transmission line poles sites were free of waste material, rubbish and vegetation in 2020.

Transportation

TT-01 Project Owner shall notify the CEC of any overload permits obtained from Caltrans and Monterey County or of the alternative transport of heavy equipment to the site by rail.

Status – The facility remained in compliance with this condition in 2020. No overload permit(s) were obtained from Caltrans and Monterey County in 2020.

TT-02 Project Owner shall notify the CEC upon satisfaction of the encroachment and excavation permit requirements. The site shall also file any required or requested information with the City.

Status – The facility remained in compliance with this condition in 2020. No encroachment and excavation permit(s) were obtained from the City in 2020.

TT-03 Project Owner shall comply with the King City ordinance regarding use of designated city streets.

Status – The facility remained in compliance with this condition in 2020. Contracted deliveries were in compliance with King City Ordinance in 2020.

TT-04 Project Owner shall enter into the standard contractual agreement with King City to restore to pre-project conditions any areas impacted by project-related related truck traffic.

Status – The facility remained in compliance with this condition in 2020. In 2020 there was no project related truck traffic impacting the city streets.

TT-05 Project Owner shall place under Metz Road any utility extensions or new water lines required, and through traffic will be maintained on Metz Road during such utility placement.

Status - The facility remained in compliance with this condition in 2020. No utility extensions or new water lines were installed in 2020.

TT-06 Project Owner shall comply with applicable transportation safety standards, ordinances, and laws in transporting ammonia to the project site.

Status – The facility remained in compliance with this condition in 2020. All applicable standards, ordinances, and laws regarding ammonia transportation were complied with in 2020.

Visual Resources

VR-01 Project Owner shall paint all structures, stacks and tanks a color that will blend with the bluff north of the site.

Status – The facility remained in compliance with this condition in 2020. No structures, stacks or tanks were painted in 2020.

Waste Management

WM-02 Project Owner shall dispose of periodic operational wastes in a Class I landfill or obtain approval from the Regional Water Quality Control Board (RWQCB) that such waste can be otherwise legally be disposed.

Status – The facility remained in compliance with this condition in 2020.

WM-04 If Project Owner stores hazardous waste onsite for more than 90 days, it shall obtain a determination that the requirements for storing hazardous waste at the facility have been satisfied.

Status - The facility remained in compliance with this condition in 2020.

WM-05 Project Owner shall use only licensed hazardous waste haulers for transporting hazardous wastes.

Status – The facility remained in compliance with this condition in 2020. Coles Environmental Services, a contracted California licensed hazardous waste hauler, was used in 2020 for handling and disposing of facility wastes.

Attachments:

1. **Operating, Availability and Capacity Report**
2. **Title V Annual Certification Report**
3. **Annual Facility Emission Summary**
4. **2020 Fire Marshall Inspection Record**
5. **2/26/2020 CEC Site Visit Closure Letter**

Attachment 1

2020 Monthly Operating, Availability and Capacity Summary Reports

CALPINE NERC GADS DATABASE
GADS ANALYSIS & REPORTING

Operating Data Summary

January 2020 Through December 2020

MONTH	GENERATION MWh GROSS	GENERATION MWh NET	STARTS ATT	STARTS ACT	SERVICE HOURS	OUTAGE HOURS	PRIMARY FUEL QUANTITY BURNED	SECONDARY FUEL QUANTITY BURNED	HEAT RATE Btu/kWh GROSS	HEAT RATE Btu/kWh NET
Jan 2020										
KC1CT1	0	0	0	0	0.00	0.00	0.000 MMcf GG	0.000		
KC1ST1	0	0	0	0	0.00	0.00	0.000 WH	0.000		
KC2JT1	0	0	0	0	0.00	0.00	0.000 MMcf GG	0.000		
All Units	0	0	0	0	0.00	0.00				

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	GROSS	NET	ATT	ACT					GROSS	NET
Feb 2020										
KC1CT1	0	0	0	0	0.00	9.50	0.000 MMcf GG	0.000		
KC1ST1	0	0	0	0	0.00	9.50	0.000 WH	0.000		
KC2JT1	91	86	3	3	3.82	112.80	1.041 MMcf GG	0.000	11,843	12,494
All Units	91	86	3	3	3.82	131.80			11,843	12,494

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	GROSS	NET	ATT	ACT					GROSS	NET
Mar 2020										
KC1CT1	119	115	1	1	3.59	189.56	1.874 MMcf GG	0.000	16,181	16,815
KC1ST1	37	36	1	1	1.68	191.45	0.000 WH	0.000	0	0
KC2JT1	202	193	3	3	9.68	0.00	2.371 MMcf GG	0.000	12,077	12,652
All Units	358	344	5	5	14.95	381.01			12,211	12,737

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Apr 2020										
KC1CT1	0	0	0	0	0.00	17.02	0.000 MMcf GG	0.000		
KC1ST1	0	0	0	0	0.00	17.02	0.000 WH	0.000		
KC2JT1	118	112	5	5	4.63	1.75	1.297 MMcf GG	0.000	11,367	12,006
All Units	118	112	5	5	4.63	35.79			11,367	12,006

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May 2020										
KC1CT1	2,752	2,684	8	8	48.67	0.00	34.810 MMcf GG	0.000	13,041	13,371
KC1ST1	1,192	1,150	8	8	41.47	0.00	0.000 WH	0.000	0	0
KC2JT1	850	806	9	9	28.85	52.13	8.718 MMcf GG	0.000	10,574	11,151
All Units	4,794	4,640	25	25	118.99	52.13			9,361	9,671

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Jun 2020										
KC1CT1	2,211	2,140	5	5	36.81	60.47	27.624 MMcf GG	0.000	12,844	13,269
KC1ST1	999	968	5	5	31.11	60.47	0.000 WH	0.000	0	0
KC2JT1	669	625	7	7	27.40	56.38	7.251 MMcf GG	0.000	11,138	11,934
All Units	3,879	3,732	17	17	95.32	177.32			9,243	9,606

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	GROSS	NET	ATT	ACT					GROSS	NET
Jul 2020										
KC1CT1	2,902	2,823	8	8	51.88	0.00	36.915 MMcf GG	0.000	13,153	13,521
KC1ST1	1,274	1,239	8	8	42.90	0.00	0.000 WH	0.000	0	0
KC2JT1	536	503	11	11	19.95	0.83	5.695 MMcf GG	0.000	10,986	11,707
All Units	4,712	4,565	27	27	114.73	0.83			9,350	9,651

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	GROSS	NET	ATT	ACT					GROSS	NET
Aug 2020										
KC1CT1	13,770	13,636	20	20	212.77	13.03	166.991 MMcf GG	0.000	12,539	12,662
KC1ST1	6,402	5,984	20	20	196.29	13.03	0.000 WH	0.000	0	0
KC2JT1	2,277	2,158	15	15	71.65	0.98	22.446 MMcf GG	0.000	10,195	10,755
All Units	22,449	21,778	55	55	480.71	27.04			8,725	8,994

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	GROSS	NET	ATT	ACT					GROSS	NET
Sep 2020										
KC1CT1	11,077	10,675	9	9	171.72	2.38	133.735 MMcf GG	0.000	12,435	12,903
KC1ST1	5,212	5,148	9	9	162.40	2.80	0.000 WH	0.000	0	0
KC2JT1	1,623	1,538	15	15	56.25	1.85	16.621 MMcf GG	0.000	10,548	11,131
All Units	17,912	17,361	33	33	390.37	7.03			8,645	8,920

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MONTH	GENERATION MWh		STARTS		SERVICE HOURS	OUTAGE HOURS	PRIMARY FUEL QUANTITY BURNED	SECONDARY FUEL QUANTITY BURNED	HEAT RATE Btu/kWh	
	GROSS	NET	ATT	ACT					GROSS	NET
Oct 2020										
KC1CT1	8,064	7,780	13	13	135.00	2.12	99.802 MMcf GG	0.000	12,747	13,212
KC1ST1	3,710	3,662	13	13	123.46	2.12	0.000 WH	0.000	0	0
KC2JT1	914	861	19	18	30.56	116.57	9.323 MMcf GG	0.000	10,506	11,152
All Units	12,688	12,303	45	44	289.02	120.81			8,858	9,135

CALPINE NERC GADS DATABASE
GADS ANALYSIS & REPORTING

Operating Data Summary

January 2020 Through December 2020

MONTH	GENERATION MWh GROSS	GENERATION MWh NET	STARTS ATT	STARTS ACT	SERVICE HOURS	OUTAGE HOURS	PRIMARY FUEL QUANTITY BURNED	SECONDARY FUEL QUANTITY BURNED	HEAT RATE Btu/kWh GROSS	HEAT RATE Btu/kWh NET
Nov 2020										
KC1CT1	1,743	1,679	4	4	28.94	305.08	21.442 MMcf GG	0.000	12,818	13,307
KC1ST1	768	755	4	4	24.69	305.08	0.000 WH	0.000	0	0
KC2JT1	1,362	1,282	22	22	45.47	0.00	13.555 MMcf GG	0.000	10,370	11,017
All Units	3,873	3,716	30	30	99.10	610.16			9,415	9,813

CALPINE NERC GADS DATABASE
GADS ANALYSIS & REPORTING

Operating Data Summary

January 2020 Through December 2020

MONTH	GENERATION MWh GROSS	GENERATION MWh NET	STARTS ATT	STARTS ACT	SERVICE HOURS	OUTAGE HOURS	PRIMARY FUEL QUANTITY BURNED	SECONDARY FUEL QUANTITY BURNED	HEAT RATE Btu/kWh GROSS	HEAT RATE Btu/kWh NET
Dec 2020										
KC1CT1	807	780	2	2	13.65	0.00	10.070 MMcf GG	0.000	12,960	13,398
KC1ST1	340	334	2	2	11.07	0.00	0.000 WH	0.000	0	0
KC2JT1	2,643	2,524	30	30	74.93	15.30	25.186 MMcf GG	0.000	9,891	10,357
All Units	3,790	3,639	34	34	99.65	15.30			9,657	10,057

CALPINE NERC GADS DATABASE
GADS ANALYSIS & REPORTING

Operating Data Summary

January 2020 Through December 2020

	GENERATION MWh		STARTS						HEAT RATE Btu/kWh	
MONTH	GROSS	NET	ATT	ACT	SERVICE HOURS	OUTAGE HOURS	PRIMARY FUEL QUANTITY BURNED	SECONDARY FUEL QUANTITY BURNED	GROSS	NET

January 2020 Through December 2020

Custom Selection
KING CITY CT1
KING CITY PEAKER JT1
KING CITY ST1

Attachment 2

2020 Title V Annual Certification Report

CERTIFICATION REPORT
(FORM 218-K1)

DISTRICT:	< DISTRICT USE ONLY =
MBUAPCD	DISTRICT ID:
COMPANY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC For King City	FACILITY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC For King City

I. FACILITY INFORMATION

1. Company Name: Calpine King City Cogeneration, LLC and Gilroy Energy Center, LLC for King City
2. Facility Name (if different than Company Name): Calpine King City Cogeneration, LLC & Gilroy Energy Center, LLC for King City
3. Mailing Address: 750 Metz Road, King City, CA 93930
4. Street Address or Source Location: 750 Metz Road, King City, CA and 51 Don Bates Way, King City, CA 93930
5. Facility Permit Number: TV-0000012A

II. GENERAL INFORMATION

1. Reporting period (specify dates): 1/1/2020 – 12/31/2020
2. Due date for submittal of report: 2/15/2020

3. Type of submittal: [ ] Monitoring Report (complete Section III below)
   [ ] Compliance Schedule Progress Report (complete Section IV of Form 218-K2)
   [X] Compliance Certification (complete Section V of Form 218-K2)

III. MONITORING REPORT INFORMATION

1. Were deviations from monitoring requirements encountered during the reporting period?
   [ ] No [X] Yes

2. Were deviations from permit conditions discovered during the required monitoring?
   [ ] No [X] Yes (If Yes, complete Form 218-L or a summary of previously reported deviations)

CERTIFICATION REPORT
(FORM 218-K2)

DISTRICT:	< DISTRICT USE ONLY =
MBUAPCD	DISTRICT ID:
COMPANY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC For King City	FACILITY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC For King City

IV. COMPLIANCE SCHEDULE PROGRESS INFORMATION

1. Dates the activities, milestones, or compliance required by schedule of compliance was achieved/will be achieved:

2. Provide explanation of why any dates in schedule of compliance were not/will not be met:

3. Describe in chronological order preventive or corrective action taken:

V. COMPLIANCE CERTIFICATION

1. Was source in compliance during the reporting period specified in Section II of Form 218-K1?

   [ ] Yes [X] No (If no, document period(s) of noncompliance or resubmit Forms 218-I and J) See form 218-L

2. Is source currently in compliance with all applicable federal requirements and permit conditions?

   [X] Yes [ ] No

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

Signature of Responsible Official

Date: February 11, 2021

Print Name of Responsible Official: Kevin Karwick

Title of Responsible Official and Company Name: General Plant Manager, Central Coast Projects, Calpine Corp.

Telephone Number of Responsible Official: (408) 337-3429

DEVIATION REPORT
(FORM 218-L)

DISTRICT:	< DISTRICT USE ONLY =
MBUAPCD	DISTRICT ID:
COMPANY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC For King City	FACILITY NAME: Calpine King City Cogeneration, LLC; and Gilroy Energy Center, LLC

I. DEVIATION INFORMATION

1. Permit number(s) of emission unit or control unit affected:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

2. Description of deviation:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

3. Description and identification of permit condition(s) deviated:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

4. Associated equipment and equipment operation (if any):
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

5. Date and time when deviation was discovered:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

6. Date, time and duration of deviation:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

7. Probable cause of deviation:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

8. Preventive or corrective action taken:
   See Breakdown/Deviation Report on the ammonia flow transmitter breakdown occurrence on 04/25/2020 and the Summary of combustor tuning conducted in 2020 (both attached) for the Gilroy Energy Center, LLC for King City.

COMPLIANCE CERTIFICATION REPORT ATTACHMENT FOR CALPINE KING CITY COGEN AND GILROY ENERGY CENTER

Reporting Period: January 1, 2020 to December 31, 2020

TV-0000012-Effective March 10, 2017 and TV-0000012A-Effective March10, 2020

CONDITION	COMPLIANCE STATUS (CONTINUOUS OR Continuous)	METHOD USED TO DETERMINE COMPLIANCE STATUS
1	Continuous Compliance	CEM and Annual Compliance Tests
2	Continuous Compliance	CEM and Annual Compliance Tests
3	Continuous Compliance	CEM and Annual Compliance Tests
4	Continuous Compliance	CEM and Annual Compliance Tests
5	Continuous Compliance	CEM and Annual Compliance Tests
6	Continuous Compliance	CEM and Annual Compliance Tests
7	Continuous Compliance	CEM & Plant data
8	Continuous Compliance	CEM & Annual compliance test.
9	Continuous Compliance	CEM & Annual compliance test
10	Continuous Compliance	CEM & Annual compliance test.
11	Continuous Compliance	CEM
12	Continuous Compliance	No fuel oil fired
13	Continuous Compliance	No fuel oil fired
14	Continuous Compliance	No fuel oil fired
15	Continuous Compliance	No fuel oil fired
16	Continuous Compliance	No fuel oil fired
17	Continuous Compliance	No fuel oil fired
18	Continuous Compliance	Logbook,MBUAPCD notification, Annual Report
19	Continuous Compliance	Logbook and MBUAPCD notification
20	Continuous Compliance	Protocol on-site and reviewed
21	Continuous Compliance	CEM and Plant data. No fuel oil fired
22	Continuous Compliance	CEMS, Quarterly Facility Emissions Report
23	Continuous Compliance	Did not fire on No. 2 fuel oil

COMPLIANCE CERTIFICATION REPORT ATTACHMENT FOR CALPINE KING CITY COGEN AND GILROY ENERGY CENTER

Reporting Period: January 1, 2020 to December 31, 2020

TV-0000012-Effective March 10, 2017 and TV-0000012A-Effective March10, 2020

CONDITION	COMPLIANCE STATUS (CONTINUOUS OR Continuous)	METHOD USED TO DETERMINE COMPLIANCE STATUS
24	Continuous Compliance	Compliance Reports to MBARB & CEC
25	Continuous Compliance	CRO Logs and Maintenance Records
26	Continuous Compliance	CEM and Plant data
27	Continuous Compliance	Operational records, calculations & CEM
28	Continuous Compliance	No chromium in water treatment chemicals, MSDS
29	Continuous Compliance	SO2 Allowance account established and necessary deposits made.
30	Continuous Compliance	Plant records/ CRO Logs
31	Continuous Compliance	Air Monitoring station operated
32	Continuous Compliance	RMP document and records maintained
33	Continuous Compliance	Refrigeration Contractors EPA Certified
34	Continuous Compliance	Testing and subsequent reporting completed
35	Continuous Compliance	Testing and subsequent reporting completed
36	Continuous Compliance	Testing and subsequent reporting completed
37	Continuous Compliance	No fuel oil fired
38	Continuous Compliance	No fuel oil delivered for turbine or boilers
39	Continuous Compliance	Lab tests for TDS, monthly reports
40	Continuous Compliance	Lab tests for TDS, monthly reports
41	Continuous Compliance	No fuel oil fired
42	Intermittent - Deviation NH3 flow monitoring - 4/25/2020 10:55 to 11:46 (See Attached)	CEMS, Plant Records
43	Continuous Compliance	CEMS, Monthly Reports
44	Continuous Compliance	CEM Records
45	Continuous Compliance	CEM Records

COMPLIANCE CERTIFICATION REPORT ATTACHMENT FOR CALPINE KING CITY COGEN AND GILROY ENERGY CENTER
Reporting Period: January 1, 2020 to December 31, 2020
TV-0000012-Effective March 10, 2017 and TV-0000012A-Effective March10, 2020

CONDITION	COMPLIANCE STATUS (CONTINUOUS OR Continuous)	METHOD USED TO DETERMINE COMPLIANCE STATUS
46	Continuous Compliance	CEMS Records
47	Continuous Compliance	CEMS Records
48	Continuous Compliance	QA/QC Plan, Operational Records
49	Continuous Compliance	QA/QC Plan, Operational Records
50	Intermittent - Deviation NH3 flow monitoring - 4/25/2020 10:55 to 11:46 (See Attached)	CEM Records; Operational Records
51	Continuous Compliance	CEM Records, Plant DCS
52	Continuous Compliance	CEMS, Breakdown Reports, Plant Records
53	Continuous Compliance	CEMS records and Plant DCS
54	Continuous Compliance	Plant DCS and Plant Records
55	Continuous Compliance	Plant DCS and Plant Records
56	Continuous Compliance	Plant Records/CRO Log
57	Continuous Compliance	Plant DCS and Plant Records - no oil firing
58	Continuous Compliance	Data provided as requested
59	Continuous Compliance	Records maintained
60	Continuous Compliance	Records maintained
61	Continuous Compliance	Breakdown Reported 4/25/2020
62	Continuous Compliance	Reports submitted on time, as required
63	Continuous Compliance	Reports submitted on time, as required
64	Continuous Compliance	Reports submitted on time, as required
65	Continuous Compliance	Reports submittedon time, as required
66	Continuous Compliance	Reports submittedon time, as required

COMPLIANCE CERTIFICATION REPORT ATTACHMENT FOR CALPINE KING CITY COGEN AND GILROY ENERGY CENTER
Reporting Period: January 1, 2020 to December 31, 2020
TV-0000012-Effective March 10, 2017 and TV-0000012A-Effective March10, 2020

CONDITION	COMPLIANCE STATUS (CONTINUOUS OR Continuous)	METHOD USED TO DETERMINE COMPLIANCE STATUS
67	Continuous Compliance	In compliance with permit conditions
68	Continuous Compliance	No enforcement action
69	Continuous Compliance	No cause for action determined by District
70	Continuous Compliance	No rights conveyed by permit
71	Continuous Compliance	Data provided upon request
72	Continuous Compliance	All requirements met
73	Continuous Compliance	All requirements met
74	Continuous Compliance	No violations reported
75	Continuous Compliance	All requirements met
76	Continuous Compliance	No admiistrative or judicial challenges
77	Continuous Compliance	Annual emission fee paid
78	Continuous Compliance	TV-0000012 on file and posted at facility
79	Continuous Compliance	No emergency, as defined in District Rule 218
80	Continuous Compliance	Access to faiclity granted to authorized personnel
81	Continuous Compliance	Title V Permit TV-0000012A Issued 3/10/2020. An application for renewal shall be submitted between September 9, 2020 and September 8, 2021, if needed.

Gary Fuller

From:	Gary Fuller
Sent:	Wednesday, April 29, 2020 11:06 AM
To:	reports@mbard.org; Leif Halvorson (LHalvorson@mbard.org)
Cc:	Teresa Sewell (tsewell@mbuapcd.org) (tsewell@mbuapcd.org); Kevin Karwick; Paul Mansfield; David Williams (David.Williams@calpine.com)
Subject:	MBARD - Breakdown/Deviation Report - Gilroy Energy Center, LLC For King City - Reported 4/25/2020
Attachments:	Gilroy Energy Center for King City_2020-04-25 MBARD Breakdown Report.pdf

Dear Mr. Halvorson,

Per our conversation yesterday, I've attached the Breakdown/Deviation Report for the Gilroy Energy Center, LLC For King City regarding the breakdown called into the MBARD last Saturday, April 25th, 2020.

Please contact me if you have any questions, or need additional information.

Thank You,
Gary Fuller

Gary M. Fuller
EHS Specialist
Calpine Corp.
King City Energy Center
Pastoria Energy Facility
(661) 282-4405 – Office
(661) 332-2046 – Cell
fullerg@calpine.com

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Richard Stedman

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

BREAKDOWN/DEVIATION REPORTING FORM
TITLE V FACILITY

Reporting:
✓ Applicable box(es)

☑ **BREAKDOWN** - Exceeding Permitted Emission Limits or Rule Requirements due to an unforeseeable Equipment Breakdown.

District Permit to Operate Number: PTO 15134 Condition No.: 10

- ☑ Notify MBUAPCD within 1 Hour @ (831) 647-9411 after occurrence (after-hrs press #7)
- ☑ The Equipment is to operate only until the end of run or 24 hours, whichever is sooner (except for CEM equipment, for which the period shall be 96 hours) at which time it shall be shutdown for repairs. If breakdown will last longer than 24 hours, contact MBUAPCD to file for a variance.
- ☑ Notify MBUAPCD of estimated time for repair within 24 hours of occurrence.
- ☑ Submit Completed Form to Compliance Division of the MBUAPCD within five (5) days after the occurrence has been corrected.

☑ **DEVIATION** - A violation of a requirement contained in the Title V permit.

Title V Permit No.: TV-0000012A Condition No.: 42, 50

- ☑ Submit Completed Form (bolded sections) within 96 hours of occurrence to Compliance Division of the MBUAPCD.
- ☑ I certify based on information and belief formed after reasonable inquiry, the statement and information in this document and supplements are true, accurate, and complete.

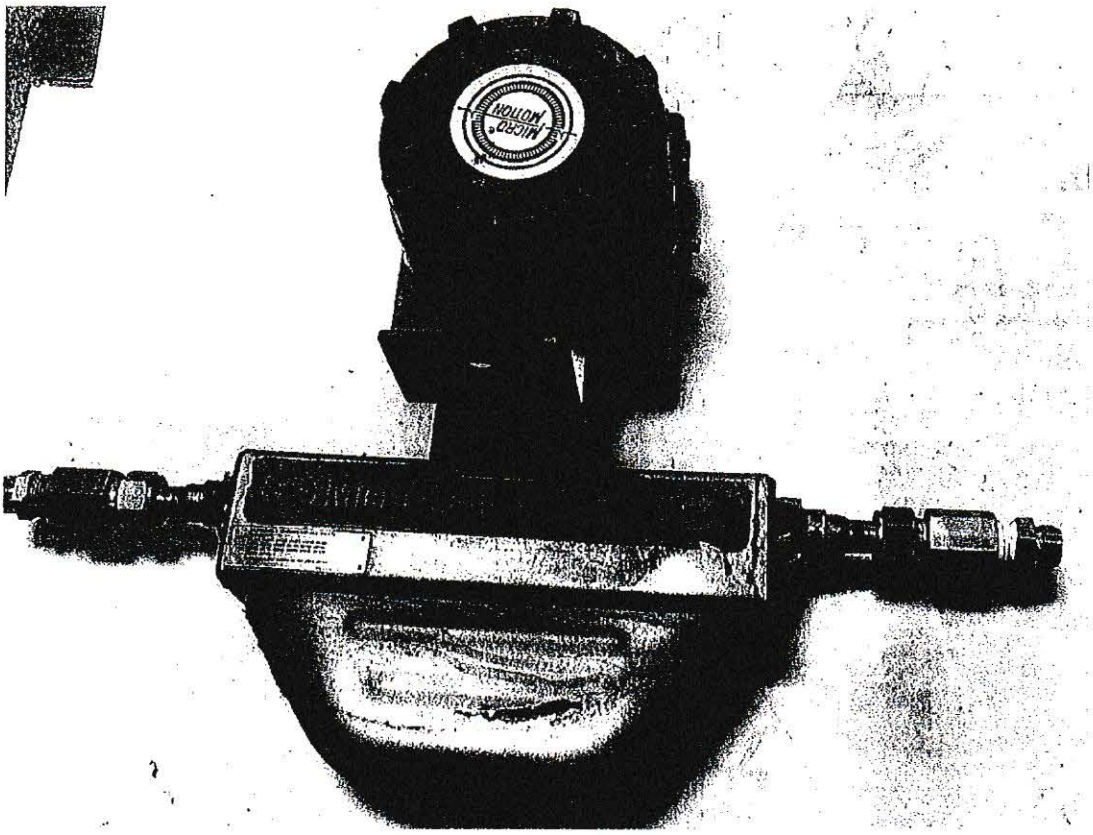
Signature of Responsible Official: Date: 4/29/2020

Print Name of Responsible Official: Kevin Karwick Title: GENERAL MANAGER CENTRAL COAST PROJECTS

Company Name: Gilroy Energy Center, LLC For King City	**Phone No.: (831) 970-1015**
Address: 51 Don Bates Way, King City, CA 93930	
Person Discovering Incident: Branden Wales	Date/Time of Discovery: 04/25/2020 01:35 pm
Person Reporting Incident: Gary Fuller	Phone No.: (661) 332-2046
Date/Time Breakdown Reported : 04/25/2020 02:21 pm	Person Contacted: MBARD Message – (831) 647-9411
Date/Time When Release/Breakdown/Deviation Began: 04-25-2020/10:55am	
Date/Time When Release/Breakdown/Deviation Stopped:04-25-2020/ 11:46am Process shut down Yes	
Date/Time Breakdown Repair Reported:04-28-2020/ 12:25 PM	Person Contacted: Leif Halverson
Description of equipment and reasons for the occurrence/release/deviation:	
On 4/25/20, at 10:55am, the Control Room Operator (CRO) started up the King City Peaker turbine. During this startup the CRO noticed the CO emissions were erratic and shutdown the turbine to investigate (Unit offline at 11:46). During the course of this investigation it was discovered at approximately 1:35 pm that the ammonia flow meter transmitter was inoperative. The ammonia control system and valve was operational and flowing ammonia, but the flow meter transmitter was not sending a signal and the DAS was not recording the ammonia flowrate.	
Detail actions(s) taken to reduce or correct incident/deviation:	
The ammonia flow meter and transmitter was replaced on 4/27/2020 at approximately 7:00 pm. The unit did not operate after it was shut down on the morning of 04/25/2020. The turbine was started back up on 4/28/2020 at 7:36pm with the DAS successfully recording ammonia flow. A photograph of the broken ammonia flow meter and transmitter that was replaced is attached.	
Detail action(s) to be taken to avoid future reoccurrence (include schedule):	
(1) Maintain a spare ammonia flow meter and transmitter in inventory for expedited response in repair/replacement. (2) Install an audio and visual alarm to alert and notify the operator, when there is no signal from the ammonia flow meter.	
Indicate kind and total amount in pounds of release:	
There were no excess emissions related to this breakdown/deviation of permit conditions.	

Gilroy Energy Center, LLC for King City

Peaker Gas Turbine Ammonia Flow Meter with Transmitter



Gilroy Energy Center, LLC

750 Metz Road
King City, CA 93930
Phone: (831) 385-4090
Fax: (831) 385-6683

February 11, 2021

Ms. Teresa Sewell
Monterey Bay Air Resources District
24580 Silver Cloud Court
Monterey, CA 93940

RE: Gilroy Energy Center, LLC (King City Energy Center)
Summary of Combustor Tuning for 2020

Dear Mrs. Sewell:

In accordance with Title V Permit: TV-0000012A, Condition 18 and Permit to Operate: PTO 15134, the following is a summary of the activities and results of the combustor tuning conducted in 2020.

There were two days, in 2020, of combustor tuning on the Gilroy Energy Center, LLC for King City LM6000 natural gas fired turbine conducted by a General Electric Technician, starting on May 19 and finishing May 20 (A copy of the Notification Letter for this combustor tuning activity, emailed to MBARD on May 13, 2020, is attached). For the duration of combustor tuning, the gas turbine experienced one excess emission hour, where the NOx emission concentration was 5.66 ppm @ 15% O_2 verses limit of 5.00 ppm @ 15% O_2. This occurred hour 12 on May 19, 2020, during the initial stages of the combustor tuning where the turbine is operating at the lowest load(s), well below normal operation. The NOx mass emissions for this hour, 4.06 pounds was well below the limit, 8.65 pounds per hour.

Also attached are the hourly emission reports for the two days of combustor tuning conducted in 2020.

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

Sincerely,

Kevin Karwick
General Plant Manager
Enclosures

cc: Christopher Cullison (Calpine Corp.)

Gilroy Energy Center LLC for King City

King City Test Data

Turbine #1- Daily Emissions & Operations Report

May 19, 2020

1-Hr Emission Limits			3-Hr Rolling Emission Limits		Daily Emission Limits	
NOx ppm @15% O2 - 5	NOx lb/hr - 8.65	CO lb/hr - 6.31	CO ppm @15% O2 - 6		NOx lb/day - 233.95	CO lb/day - 172.13
NH3 Slip lb/hr - 6.27	NOx lb/Startup - 35	CO lb/Startup - 27	NH3 ppm @15% O2 - 10		NH3 Slip lb/day - 150.48	

Hour	O2%	NOx ppm	NOx ppm @15% O2	NOx lbs	CO ppm	CO ppm @15% O2	3-Hr Rlng CO ppm @15% O2	CO lbs	NH3 ppm @15% O2	3-Hr Rlng NH3 ppm @15% O2	NH3 Slip lbs	Nat Gas Flow kscf	Heat Input mmBtu	NH3 Flow lbs	Process Status	Turbine On-Time
00	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
01	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
02	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
03	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
04	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
05	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
06	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
07	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
08	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
09	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
10	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
11	17.87	3.09	6.02	3.15	4.28	8.33	NSD	2.65	11.49	NSD	2.23	138.10	142.6	43.7	Startup	0.85
12	17.69	3.08	5.66	4.06	1.98	3.64	NSD	1.58	9.02	NSD	2.40	189.11	195.3	70.0	Normal	1.00
13	17.21	2.56	4.09	3.39	2.31	3.69	5.22	1.87	8.99	9.83	2.75	218.64	225.8	75.7	Normal	1.00
14	17.20	2.82	4.50	4.02	3.32	5.29	4.21	2.87	7.53	8.51	2.48	235.74	243.4	75.9	Normal	1.00
15	16.96	OOC	OOC	3.31	1.63	2.44	3.81	1.47	OOC	OOC	2.56	258.46	266.9	80.9	Normal	1.00
16	17.08	1.97	3.04	2.91	1.49	2.30	3.34	1.33	8.42	OOC	2.97	251.90	260.1	87.6	Normal	1.00
17	16.80	2.30	3.31	3.95	1.51	2.17	2.30	1.59	6.75	OOC	2.98	313.88	324.1	83.7	Normal	1.00
18	16.61	1.45	1.99	2.88	1.29	1.77	2.08	1.58	5.75	6.97	3.08	382.39	394.9	87.9	Shutdown	1.00
19	18.78	2.71	7.54	0.06	2.18	6.07	3.34	0.03	17.23	9.91	0.05	2.24	2.3	0.9	Shutdown	0.02
20	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
21	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
22	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
23	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
Average	17.36	2.50	4.52	3.08	2.22	3.97		1.66	9.40		2.39	221.16	228.4	67.4		
Total				27.73				14.97			21.50	1990.46	2055.4	606.3		7.87
Maximum			7.54				5.22			9.91						

Gilroy Energy Center LLC for King City

King City Test Data

Turbine #1- Daily Emissions & Operations Report

May 20, 2020

1-Hr Emission Limits			3-Hr Rolling Emission Limits		Daily Emission Limits	
NOx ppm @15% O2 - 5	NOx lb/hr - 8.65	CO lb/hr - 6.31	CO ppm @15% O2 - 6		NOx lb/day - 233.95	CO lb/day - 172.13
NH3 Slip lb/hr - 6.27	NOx lb/Startup - 35	CO lb/Startup - 27	NH3 ppm @15% O2 - 10		NH3 Slip lb/day - 150.48	

Hour	O2%	NOx ppm	NOx ppm @15% O2	NOx lbs	CO ppm	CO ppm @15% O2	3-Hr Rlng CO ppm @15% O2	CO lbs	NH3 ppm @15% O2	3-Hr Rlng NH3 ppm @15% O2	NH3 Slip lbs	Nat Gas Flow kscf	Heat Input mmBtu	NH3 Flow lbs	Process Status	Turbine On-Time
00	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
01	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
02	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
03	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
04	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
05	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
06	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
07	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
08	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
09	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
10	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
11	Down	Down	Down	DCal	Down	Down	Down	DCal	Down	Down	DCal	Down	Down	Down	Down	0.00
12	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
13	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
14	17.68	13.39	24.53	0.38	2.72	4.98	NSD	0.05	Down	Down	0.02	4.07	4.2	Down	Startup	0.03
15	16.59	3.93	5.38	6.69	1.85	2.53	NSD	1.93	6.50	NSD	2.97	327.03	337.7	63.0	Startup	1.00
16	16.18	2.70	3.38	5.65	1.83	2.29	3.27	2.32	4.95	NSD	3.05	441.17	455.6	96.6	Normal	1.00
17	16.30	1.98	2.54	4.14	1.52	1.95	2.26	1.96	5.60	5.68	3.38	430.84	444.9	103.5	Normal	1.00
18	16.75	2.01	2.86	3.64	1.46	2.08	2.11	1.59	5.63	5.39	2.63	335.51	346.5	82.7	Normal	1.00
19	17.09	2.26	3.50	3.41	1.38	2.14	2.06	1.27	5.65	5.63	2.04	256.09	264.5	65.0	Shutdown	1.00
20	18.53	1.20	2.99	0.02	2.54	6.32	3.51	0.03	17.23	9.50	0.04	1.77	1.8	0.7	Shutdown	0.02
21	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
22	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
23	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	Down	0.00
Average	17.02	3.92	6.45	3.42	1.90	3.18		1.31	7.59		2.02	256.64	265.0	68.6		
Total				23.93				9.15			14.13	1796.48	1855.2	411.5		5.05
Maximum			24.53				3.51			9.50						

Gary Fuller

From:	Gary Fuller
Sent:	Wednesday, May 13, 2020 10:09 AM
To:	Leif Halvorson (LHalvorson@mbard.org); reports@mbard.org
Cc:	Teresa Sewell (tsewell@mbuapcd.org) (tsewell@mbuapcd.org); Kevin Karwick; Paul Mansfield; David Williams (David.Williams@calpine.com)
Subject:	Gilroy Energy Center, LLC for King City - Notification for Combustor Tuning Turbine LM6000PD - Scheduled for May 19th and 20th, 2020
Attachments:	Gilroy Energy Center for King City Turbine Combustor Scheduled Tuning_5-19 thru 5-20-2020.pdf

Hi Leif,

On May 19th and 20th of this month, combustor tuning of the Gilroy Energy Center, LLC for King City LM6000 natural gas fired turbine has been scheduled with General Electric Technicians. In accordance with TV00000-12A, condition #18 and PTO 15134, condition #7, attached is the Notification Letter for this combustor tuning that has been scheduled.

Please feel free to contact me if you have any questions or need addition information.

Thank You,
Gary

Gary M. Fuller
EHS Specialist
Calpine Corp.
King City Energy Center
Pastoria Energy Facility
(661) 282-4405 – Office
(661) 332-2046 – Cell
fullerg@calpine.com

Gilroy Energy Center, LLC

750 Metz Road
King City, CA 93930
Phone: (831) 385-4090
Fax: (831) 385-6683

May 13, 2020

Mrs. Teresa Sewell
MBUAPCD
24580 Silver Cloud Court
Monterey, CA 93940

RE: Gilroy Energy Center, LLC for King City
Notification for Combustor Tuning – Natural Gas Fired Turbine LM6000PD
Scheduled for May 19th and 20th, 2020

Dear Mrs. Sewell:

We have scheduled General Electric (GE) Technicians to conduct combustor tuning for the GE natural gas fired turbine, Model - GE LM6000PD on May 19 and 20, 2020. They have been contracted to work 12 hour days, starting at approximately 8:00am. This combustor tuning process is not anticipated to take more than one day, unless problems are encountered.

In accordance with Title V permit TV00000-12A, condition #18 and Permit to Operate PTO 15134, condition #7, in addition to this written notification to the Monterey Bay Air Resources District (District) prior to initiating this activity, Gilroy Energy Center, LLC for King City will monitor and record all periods of these activities in a log maintained on-site and shall submit a summary of this data to the District in the annual report.

Please do not hesitate to contact me (kevin.karwick@calpine.com - (408) 337-3429) or Gary Fuller (gary.fuller@calpine.com – (661) 332-2046) if you have any questions, concerns or need additional information.

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

Sincerely,

Kevin Karwick
General Plant Manager
Enclosures

cc: David Williams (Calpine Corp.)

Attachment 3

2020 Annual Facility Emission Summary

2020
December

Gilroy Energy Center 2020	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
NOx Emissions	1,932.76	260	709	905	3,806.49
CO Emissions	638.04	107	228	273	1,245.84
PM-10 Emissions	596.24	91	235	252	1,174.22
VOC Emissions	284.47	43	112	121	560.59
SOx Emissions	74.22	11	29	32	146.25
NH3 Emissions	779.73	142	346	269	1,536.71

King City Cogen 2020	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
NOx Emissions	18532.45	2,448	11,248	4,671	36,899.61
CO Emissions	4280.05	707	2,278	1,208	8,472.42
PM-10 Emissions	1187.93	141	747	295	2,370.91
VOC Emissions	153.16	18	97	38	305.78
SOx Emissions	78.70	9	50	19	157.13
NH3 Emissions	630.43	84	375	171	1,260.17

Total King City 2020	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
NOx Limit (lbs)	72,452	73,178	73,905	73,905	293,440
NOx Emissions	20,465	2,708	11,957	5,576	40,706
CO Limit (lbs)	58,445	59,095	59,744	59,744	237,028
CO Emissions	4,918	814	2,506	1,481	9,718
PM-10 Limit (lbs)	12,071	12,204	12,339	12,339	48,953
PM-10 Emissions	1,784	233	981	547	3,545
VOC Limit (lbs)	4,762	4,815	4,868	4,868	19,313
VOC Emissions	438	61	209	159	866
SOx Limit (lbs)	1,748	1,768	1,787	1,787	7,090
SOx Emissions	153	20	79	51	303
NH3 Emissions	1,410	226	721	440	2,797

Attachment 4

2020 Fire Marshall Inspection Record

CARMEL FIRE PROTECTION

INSPECTION RECORD

1. ADMINISTRATIVE INFORMATION

Business Name

CALPINE

Address

Mailing Address

ON FILE

Telephone

Owner/First Contact

Second Contact

PAUL

Website

2. INSPECTION FINDINGS

☑ NO FIRE HAZARDS FOUND! Thanks for keeping our community firesafe!

☐ Repair holes in ceilings/walls to maintain fire resistance.

☐ Remove combustible materials within 30" of gas fueled appliances.

☐ Maintain storage clearances from ceilings or sprinklers (18" minimum).

☐ Electrical extension cords and multi-tap adapters not permitted.

☐ Remove obstructions from exits, aisles, corridors and stairways.

☐ _____

☐ _____

☐ _____

☐ _____

3. FIRE PROTECTION SYSTEMS

Fire Extinguishers

A. C.

Automatic Fire Sprinklers

ALPHA

Standpipes

Fixed Fire Protection Systems

Fire Alarm and Detection Systems

ALPHA

Other Systems

Hazardous Materials?

4. NOTICES AND ORDERS

Please make all corrections by:

—

Failure to do so may result in a fee charged for each additional inspection, a citation into municipal court, or both.

Date 11/19/20 Inspector FRANK

5. OWNER ACKNOWLEDGEMENT

I acknowledge that I have received a copy of this inspection report and that the required corrections and reinspection date have been explained to me.

Signature [illegible]

Print Name: [illegible]

6. REINSPECTION RECORD

Date	Description	Actions

Attachment 5

02/26/2020 CEC Site Visit Closure Letter

CALIFORNIA
ENERGY COMMISSION

July 17, 2020

Mr. Kevin Karwick, General Manager
King City Cogeneration
51 Don Bates Way
King City, California 93930

KING CITY COGENERATION (85-AFC-05C) SITE VISIT – COMPLETED

Dear Mr. Karwick:

Thank you for taking the time to accommodate staff on their February 26, 2020 site visit.

The purpose of this site visit was to perform a site inspection and review selected documentation, procedures, and records related to worker safety, hazardous materials management, fire safety, security, waste management, storm water management, wastewater treatment, and air quality monitoring systems. Such inspections are periodically conducted to verify a facility's compliance with the conditions of certification in the facility's Energy Commission license.

As a follow-up to this site visit, you were sent a letter on March 30, 2020 listing action items for completion. Staff has reviewed all the information provided and no additional information is required.

Our limited inspection found that the documents, procedures and records reviewed did not identify any violations with King City Cogeneration's conditions of certification and this inspection is now complete and closed.

Should you have any questions or concerns, please contact Anwar Ali, Compliance Project Manager, at (916) 654-5020 or at anwar.ali@energy.ca.gov.

Sincerely,

Chris Davis

Chris Davis
Compliance Office Manager
Siting, Transmission, and Environmental Protection (STEP) Division