ATTACHMENT 1

Draft Regular Variance Order 2022-03-R

May 4, 2022

Santa Barbara County Air Pollution Control District Hearing Board

> 260 San Antonio Road, Suite A Santa Barbara, California 93110



air pollution control district

| Case No / Date | 2022-03-R | 05/04/2022 | |
|-----------------------|--|------------|--|
| Petitioner | California Power Partners Santa Barbara | | |
| Permit # | 13862-R2 | | |
| Date Rec'd | 03/17/2022 | | |
| Time Rec'd | 1350 hours | | |
| FOR OFFICIAL USE ONLY | | | |

BEFORE THE HEARING BOARD OF THE SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT

| In the Matter of the Application of California Power Partners Santa |) H.B. Case No. 2022-03-R |
|---|------------------------------|
| Barbara for a Regular Variance from District Rule 206, and Conditions | VARIANCE FINDINGS |
| 1.a, 6, 7.a, 7.c. of Permit to Operate 13862-R2. | AND ORDER |

California Power Partners Santa Barbara filed a Petition for a Regular and Interim Variance on March 17, 2022. The Interim Variance Petition 2022-02-I was granted on April 21, 2022, by Hearing Board Member Terence Dressler. The Interim Variance order is in effect from March 17, 2022 through June 14, 2022, or the date compliance is achieved, or the date a decision is made on the Regular Variance, whichever occurs first.

A hearing of the Regular Variance Petition was held on May 4, 2022 in accordance with Health and Safety Code §40808. Joe Silva represented the Petitioner and Aimee Long represented the Santa Barbara County Air Pollution Control District (District).

This matter having been fully presented and duly considered, the Hearing Board makes the following findings and gives the following reasons for its decision.

HEARING

- 1. Notice of the Hearing was duly given in the manner and for the time required by law.
- 2. Sworn testimony and argument on behalf of the Petitioner and the Air Pollution Control Officer were made, received, and considered.
- 3. A nuisance as defined in District Rule 303 is not expected to occur as a result of this Variance.

4. If, due to reasons beyond the control of the Petitioner, compliance is not achieved during this Variance period, additional relief will be sought.

<u>CASE</u>: 2022-03-R <u>DATE</u>: 05/04/2022

5. District staff supports the Petition as conditioned below.

A. BACKGROUND

- 1. The Petitioner, California Power Partners Santa Barbara, operates the equipment described in the Petition at the City of Santa Barbara El Estero Wastewater Treatment Plant (WWTP) located at 520 E. Yanonali Street in Santa Barbara, California.
- 2. The equipment is owned and operated by the Petitioner under contract with the City of Santa Barbara El Estero Wastewater Treatment Plant.
- 3. The WWTP receives wastewater from the City of Santa Barbara where it is processed for disposal. One of the bioproducts of the wastewater treatment process is biogas. The biogas is routed to the WWTP digester heaters and flare or the Petitioner's plant where the biogas is further treated prior to converting the biogas to electricity. The Petitioner converts the biogas using an 896.00 bhp Gauscor cogeneration engine.
- 4. The equipment subject to this Variance request is the 896.00 bhp Gauscor cogeneration (cogen) engine (APCD Device ID 115220).
- 5. The volume of biogas generated is dependent upon the volume of wastewater and fats, oils and grease (FOG) received at the WWTP.
- 6. The Petitioner is permitted to supplement the biogas fuel with up to 25% natural gas. Because the biogas is considered a renewable energy source, the supplemental fuel may not exceed 25%.
- 7. At the beginning of the COVID-19 pandemic, the Petitioner observed a decrease in the influent at the WWTP, thus decreasing the effluent digester gas production and the digester gas production has not yet returned to pre-pandemic levels.
- 8. On January 27, 2022, the annual source testing was conducted. On March 2, 2022, the District received the source test report indicating a failure of the emission rates (lb/MMBtu) for NOx and CO; and passing results for all other parameters. The Petitioner has stated that conducting future source testing would have similar results, until the digester gas production increases.
- 9. The Petitioner identified the following pre-pandemic parameters required to achieve passing emission rates for NOx and CO (lb/MMBtu): the cogen engine must operate at 425 kW with

140 scfm at least 61% methane content digester gas with a higher heating value of 615 BTU/ft³ to achieve passing results. Until the biogas production increases, the engine cannot operate within this range due to insufficient gas production. Review of the 2018 through 2021 Annual Reports for the WWTP, indicated biogas production routed to the cogen engine decreased by approximately 1,000,000 ft³ on a monthly average. The average higher heating value for this date range was 617 BTU/ft³. As such, the Petitioner has applied for Interim and Regular Variances.

<u>CASE</u>: 2022-03-R <u>DATE</u>: 05/04/2022

B. FINDINGS

- 1. Without Variance coverage, the Petitioner will be in violation of District Rule 206, and Conditions 1.a, 6, 7.a and 7.c of Permit to Operate 13862-R2.
- 2. Due to conditions beyond the reasonable control of the Petitioner, requiring compliance would result in either (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and elimination of a lawful business. The decreased biogas flow to the cogen engine is attributed to the COVID-19 pandemic and the Governor's Emergency Order to stay home. With the decline in tourism and the temporary closure of the University of California Santa Barbara, there was a significant decrease in the influent volume received at the WWTP, therefore causing a reduction in the biogas generation. This is outside the control of the Petitioner and immediate compliance would require the Petitioner to close a lawful business.
- 3. The decline of gas production required for the cogen engine is beyond the reasonable control of the Petitioner. Immediate compliance would put the facility in breach of contract with the City of Santa Barbara El Estero Wastewater Treatment Plant. In addition, if the cogen engine was required to shut down, digester gas would have to be combusted in the WWTP flare. The WWTP relies on the electricity produced at the Petitioner's facility. Shutting down the equipment would require the WWTP to obtain grid power at an increased rate. In addition, shutting down the cogen engine would result in a loss of \$30,000/month and closure of the business.
- 4. The closing or taking would be without a corresponding benefit in reducing air contaminants. If the Petitioner were to shut down the cogen engine, the digester gas would have to be combusted at the WWTP flare. Sending the biogas to the WWTP flare, may cause the WWTP to exceed their permit limits.
- 5. The Petitioner has given consideration to curtailing operations of the source in lieu of obtaining a variance; however, the Petitioner is under contract with the City of Santa Barbara El Estero WWTP to provide electricity to the plant. In addition, curtailment would result in the closing of a business.
- 6. During the period the Variance is in effect, the Petitioner will reduce excess emissions to the

maximum extent feasible by running the cogen engine as efficiently as possibly by supplementing the biogas with up to 25% natural gas.

<u>CASE</u>: 2022-03-R <u>DATE</u>: 05/04/2022

7. During the period the Variance is in effect, the Petitioner will monitor and record the operating hours on each day the engine is operated and the cumulative total, fuel usage (biogas and natural gas, separately), methane content of the biogas, and power generation in kW.

THEREFORE, THE HEARING BOARD ORDERS, as follows:

That a Regular Variance be granted for continued operations of the cogeneration engine in violation of the emission rates (lb/MMBTU) for NOx and CO in violation of District 206, and Conditions 1.a, 6, 7.a and 7.c of Permit to Operate 13862-R2 from May 4, 2022 through March 16, 2023, or the date compliance is achieved, whichever occurs first, with the following conditions:

- 1. Petitioner shall submit monthly written reports to the Hearing Board and District, to variance@sbcapcd.org, starting June 15, 2022 and shall continue on the 15th day of every month for the duration of variance coverage. The report shall include operating hours on each day the engine is operated and the cumulative total, monthly and cumulative total fuel usage (biogas and natural gas, separately), monthly and cumulative methane content of the biogas once the flow to the engine increase to 120 scfm, monthly and cumulative total power generation in kW, and any excess emissions associated with the granting of this Variance.
- 2. Petitioner shall submit a written report to the Hearing Board and District, to variance@sbcapcd.org, by April 15, 2023. The report shall include operating hours on each day the engine is operated and the cumulative total, monthly and cumulative total fuel usage (biogas and natural gas, separately), monthly and cumulative methane content of the biogas once the flow to the engine increase to 120 scfm, monthly and cumulative total power generation in kW, and any excess emissions associated with the granting of this Variance.
- 3. Petitioner shall notify the Hearing Board and District (<u>variance@sbcapcd.org</u>), within 14 days of determining the cogeneration engine (APCD Device ID 115220) meets the pre-pandemic parameters required to achieve passing emission rates for NOx and CO (lb/MMBtu).
- 4. Petitioner shall initiate the source testing provisions specified in Condition 7 of Permit to Operate 13862-R2, within 45 days of consistent pre-pandemic parameters, within 5% fluctuation.
- 5. Petitioner shall retain the obligation to comply with all other local, state, and federal regulations not specifically referenced in the Order.
- 6. Failure to abide by all conditions of this Order shall subject the Petitioner to receiving the variance penalties set forth in Health and Safety Code section 42402.

result of the issuance of this Variance.

7. In accordance with District Fees Rule 210, Schedule F.12.e, the Petitioner shall pay excess emission fees for each additional ton of pollutant emissions or portion thereof allowed as the

- 8. Each day during any portion of which a violation occurs is a separate offense.
- 9. The Environmental Protection Agency does not recognize California's Variance Program; therefore, this Variance does not protect the Petitioner from Federal Enforcement actions.

Terence Dressler, Chair Santa Barbara County Air Pollution Control District Hearing Board

CASE: 2022-03-R

DATE: 05/04/2022