

1 **BEFORE THE HEARING BOARD OF THE**
2 **BAY AREA AIR QUALITY MANAGEMENT DISTRICT**
3 **STATE OF CALIFORNIA**
4

5 In the Matter of the Application of
6 AMERESCO KELLER CANYON RNG LLC
7 For Short Variance from Regulation 8, Rule
8 34, Section 412; Regulation 2, Rule 1, Section
9 307; and Permit Conditions 27707.12 and
10 27708.12

Docket No. 3753

FINDINGS AND DECISION AND ORDER
GRANTING SHORT VARIANCE

FILED

SEP 24 2024

**HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

11 This application for a Short Variance was heard on September 17, 2024, pursuant to notice
12 and in accordance with the provisions of California Health and Safety Code Section 40826. Five
13 members of the Hearing Board participated: Chair Valerie J. Armento, Esq.; Vice-Chair Barbara
14 Toole O'Neil, QEP, Ch.E.; Dr. Peter Y. Chiu, M.D., P.E.; Amelia Timbers; and Rajiv Dabir, P.E.
15 The Applicant, Ameresco Keller Canyon RNG LLC, was represented by Andrew McClelland,
16 Environmental Compliance Specialist, of Ameresco Keller Canyon RNG LLC. Respondent, the Air
17 Pollution Control Officer ("APCO") of the Bay Area Air Quality Management District (District),
18 was represented by Misha Nishiki, Assistant Counsel.
19

20 The Hearing Board provided the public an opportunity to testify at the hearing as required
21 by the California Health and Safety Code, but no one did so. The Hearing Board heard evidence,
22 testimony and argument from the Applicant and the APCO. The APCO did not oppose the
23 granting of the short variance, so long as certain conditions set forth in a letter to the Hearing
24 Board dated September 16, 2024 were included. The Applicant stated a willingness to comply
25 with the conditions.
26
27
28

1 The Hearing Board declared the hearing closed after receiving evidence (8 exhibits),
2 presentations and argument. After consideration of the evidence, the Hearing Board voted to grant
3 the request for a short variance, as set forth in more detail below.

4 **Nature of Business and Location of Facility**

5 The Applicant operates a renewable natural gas (RNG) facility which processes landfill gas
6 (LFG) from the Keller Canyon Landfill into pipeline quality natural gas (process S-1.) The Facility
7 is located at 901 Bailey Road, Pittsburg, California, 94565 (Contra Costa County.) Waste gas
8 produced by this process is controlled by one Air Clear Thermal Oxidizer (A-1) rated at 25.3
9 MMBtu/hr and one John Zink Enclosed Flare (A-2) rated at 35.8 MMBtu/hr.
10

11 **Equipment Subject to the Variance Petition**

12 The equipment that is the subject of the petition consists of three main systems used to create
13 RNG from LFG: a temperature swing adsorption system, a CO2 membrane system, and an N2
14 pressure swing adsorption system. Waste gases from the systems contain carbon dioxide, methane,
15 oxygen, nitrogen, siloxanes, and hydrocarbons. These waste gases are sent to either the thermal
16 oxidizer or the enclosed flare for destruction. The thermal oxidizer is the primary control device.
17 The enclosed flare is used to control waste gases during transient or upset scenarios. The control
18 devices use preprocessed RNG (minimally processed LFG with hydrogen sulfide removed) and
19 natural gas as supplemental fuels to startup and/or maintain combustion temperature.
20

21 **Background**

22 The Facility received Authority to Construct notice dated June 29, 2022, for Application No.
23 39577, which included several conditions. The thermal oxidizer was subject to condition 27707 and
24 the enclosed flare was subject to condition 27708. Condition 27707 included a provision for
25 conducting an initial source test: "The first source test for A-1 shall be conducted within 1,440
26 operating hours, not to exceed 90 days from the date of initial operation of A-1." Similarly,
27 condition 27708 contained an initial source testing requirement for the enclosed flare: "The first
28

1 source test for A-2 shall be conducted within 1,440 operating hours, not to exceed 90 days from the
2 date of initial operation of A-2.” In April 2024, the District revised both conditions to require the
3 first source test to be conducted within 120 days, rather than 90 days, consistent with District Rule
4 8-34-412. This made the source test deadlines for both A-1 and A-2 August 22, 2024.

5
6 Before Ameresco can conduct an accurate source test of the thermal oxidizer and enclosed
7 flare, Ameresco must satisfy specific Pacific Gas & Electric (PG&E) pre-injection testing
8 requirements. PG&E pre-injection test requirements are governed by PG&E rules, and Ameresco
9 must comply with those requirements prior to injecting RNG into the commercial pipeline.
10 Ameresco began sampling for the PG&E gas testing program on June 19, 2024, and when it filed
11 its application on August 12, 2024 estimated that the PG&E gas test program would be completed
12 by September 1, 2024, which was beyond the August 22 deadline.

13
14 During the PG&E testing phase, Ameresco is destroying RNG product gas in the thermal
15 oxidizer and enclosed flare. If Ameresco is required to conduct source testing prior to injecting
16 product gas into the commercial pipeline, the source test will not be representative of normal
17 operations because the waste gas will contain a large volume of pipeline quality RNG which will
18 create a different and likely cleaner emissions profile when combusted.

19
20 Following the start of injection into the commercial pipeline, Ameresco will require several
21 weeks to tune the plant so that it can effectively process higher flows of landfill gas.

22
23 Ameresco expects that accurate source testing can be accomplished prior to November 22,
24 2024.

25
26 Ameresco proactively took steps to obtain a short variance until the initial source testing can
27 be completed. If Ameresco were required to comply with the current source test deadline, it would
28 expend over \$100,000 to conduct a test that would essentially be meaningless in terms of air

1 pollutant emissions measurements. A second test would need to be conducted after the plant begins
2 commercial operation, doubling the source testing cost.

3 **Findings of Fact and Conclusions**

4 THE HEARING BOARD FINDS as to those matters in which findings are required:

5 **(a)(1) That the Applicant for a variance is, or will be, in violation of Health and Safety Code**
6 **14 Section 41701 or of any rule, regulation or order of the District.**

7 1. The need for a variance exists because the Applicant is in violation of Regulation 8,
8 Rule 34, Section 412; Regulation 2, Rule 1, Section 307; and Permit Conditions 27707.12 and
9 27708.12 (Source Testing). Ameresco filed for the short variance before the regulatory deadline.

10 **(a)(2) That, due to conditions beyond the reasonable control of the Applicant, requiring**
11 **compliance would result in either (A) an arbitrary or unreasonable taking of property, or**
12 **(B) the practical closing and elimination of a lawful business.**

13 1. The Applicant is just commencing operations and must comply with PG&E
14 requirements before it can tune the plant to process additional landfill gas necessary to conduct a
15 valid source test. Applicant has no control over PG&E and cannot comply with District conditions
16 so there would be an unreasonable taking.

17 **(a)(3) That the closing or taking would be without a corresponding benefit in reducing air**
18 **contaminants.**

19 1. There are no current air contaminants, so a closing or taking would not reduce air
20 contamination. No unlawful emissions are anticipated during the variance period.

21 **(a)(4) That the Applicant for the variance has given consideration to curtailing operations of**
22 **the source in lieu of obtaining a variance.**

23 1. Since the issue is conducting source testing within a prescribed period, curtailing of
24 operations would not resolve the violation. By curtailing or terminating operations, Ameresco would
25 only worsen the compliance deviation by delaying the completion of pre-injection testing and
26 commercial operation which would prevent Ameresco from tuning the plant to process additional
27

28

1 landfill gas necessary to conduct a valid source test. Further, it would not be possible to conduct
2 source testing if the facility curtailed or terminated operations.

3 **(a)(5) During the period that the variance is in effect, the Applicant will reduce excess**
4 **emissions to the maximum extent feasible.**

- 5 1. Excess emissions are not anticipated during the short variance period.

6 **(a)(6) During the period the variance is in effect, the Applicant will monitor or otherwise**
7 **quantify emission levels from the source, if requested to do so by the District, and report these**
8 **emissions levels to the District pursuant to a schedule established by the District.**

- 9 1. During the short variance period, the Applicant will monitor and quantify emissions.

10 The Applicant has agreed to conditions requested by the District.

11 **ORDER**

12 THEREFORE, good cause appearing, THE HEARING BOARD ORDERS as follows:

13 1. The Applicant is granted a Short Variance from Regulation 8, Rule 34, Section 412;
14 Regulation 2, Rule 1, Section 307; and Permit Conditions 27707.12 and 27708.12 regarding the
15 timing of the source testing of A-1 and A-2, subject to the terms herein.

16 2. The Applicant shall comply with the Conditions attached to the September 16, 2024
17 letter, attached to this Order as Attachment A, as well as with all applicable District regulations
18 except to the extent explicitly subject to this Short Variance.

19 3. This Short Variance shall go into effect on the date upon which this Order is executed
20 retroactive to August 22, 2024 and shall expire upon the earlier of the satisfactory completion of the
21 source testing or November 20, 2024.

22
23 Moved by: Amelia Timbers

24 Seconded by: Rajiv Dabir, P.E.

25 AYES: Amelia Timbers, Rajiv Dabir, P.E., Dr. Peter Chiu, M.D., P.E.,
26 Vice Chair Barbara Toole O'Neil, QEP, Ch.E.,
27 Chair Valerie J. Armento, Esq.
28

1 NOES: None
2 ABSTAIN: None
3 ABSENT: None

4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Valerie J. Armento

9/24/2024

Valerie J. Armento, Esq., Chair

Date

1 **Attachment A**

2 **OPERATING CONDITIONS**

3 Definitions

- 4 1. Ameresco: Ameresco Keller Canyon RNG LLC
- 5 2. A-1: Thermal Oxidizer
- 6 3. A-2: Enclosed Flare
- 7 4. A-3: Carbon Scrubber
- 8 5. District: Bay Area Air Quality Management District
- 9 6. PPRNG: Pre-Processed Renewable Natural Gas
- 10 7. S-1: Equipment that processes and cleans landfill gas to renewable natural gas
- 11 8. TRS: Total Reduced Sulfur

12 Conditions

- 13 1. Ameresco shall provide the following measurements on a weekly basis:
- 14 a. Untreated landfill gas at inlet to S-1 expressed as kSCF/day and MMBtu/day;
- 15 b. Amount of renewable natural gas product expressed as MMBtu/day;
- 16 i. Ameresco should indicate the amount of renewable natural gas product
- 17 being injected into the PG&E pipeline, the amount flared, and the amount
- 18 of renewable natural gas product going to the thermal oxidizer.
- 19 c. Thermal Oxidizer (A-1): PPRNG and Waste Gas expressed as kSCF/day and
- 20 MMBtu/day;
- 21 d. Enclosed Flare (A-2): PPRNG and Waste Gas expressed as kSCF/day and
- 22 MMBtu/day; and
- 23 e. Carbon Scrubber (A-3): PPRNG expressed as kSCF/day and MMBtu/day
- 24 2. When reporting the information required by Sections 1.a. through 1.e. above,
- 25 Ameresco shall indicate the location and identification number of the flow rate
- 26 device where the sample reading was taken.
- 27 3. Ameresco shall provide an analysis of sulfur compounds in the gas of A-3 as
- 28 described in Authority to Construct condition No. 27707, Part 9.d. and condition No.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

27708, Part 9.d. on a weekly basis. The waste gas to be analyzed shall be measured at the outlet of A-3. If the portable hydrogen sulfide analysis method is used, the TRS concentration shall be calculated by multiplying the measured hydrogen sulfide (H2S) concentration by 1.2 where (TRS = 1.2 * H2S).

- 4. Ameresco shall send the District updates of the anticipated source test dates for sources A-1 and A-2 on a weekly basis.
- 5. Ameresco shall begin to provide the gas flow and heat input data, flow rate device information, sulfur analysis, and source test date updates (collectively, the “requested information”) listed in Sections 1 through 4 above to the District on September 27, 2024. Ameresco shall continue to provide the requested information listed in Sections 1 through 4 above on a weekly basis thereafter.
- 6. Ameresco shall submit the requested information listed in Sections 1 through 4 above to the District via email to the following email addresses: mkiffe@baaqmd.gov, akobayashi@baaqmd.gov, and mnishiki@baaqmd.gov.

BEFORE THE HEARING BOARD
OF THE
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
STATE OF CALIFORNIA

In the Matter of the Application of)
AMERESCO KELLER CANYON RNG LLC)
For Short-Term Variance from Regulation 8,)
Rule 34, Section 412; Regulation 2, Rule 1,)
Section 307; and Permit Conditions)
27707.12 and 27708.12)

Docket No.: 3753

CERTIFICATE OF SERVICE

FILED

SEP 24 2024

HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

STATE OF CALIFORNIA)
)
City and County of San Francisco) ss.

I, Marcy Hiratzka, do hereby certify under penalty of perjury as follows:
That I am a citizen of the United States, over the age of eighteen years and not a party to the
above-entitled action; that I served a true copy of the attached **Order Granting Short
Variance** on:

Andrew McClelland Ameresco Keller Canyon RNG LLC 111 Speen St., Ste. 410 Framingham, MA, 01701 amcclelland@ameresco.com	Richard Peary rpeary@ameresco.com (E-mail only)
---	--

by depositing same via email and in the United States certified mail, return receipt requested,
on September 24, 2024 and on:

Misha Nishiki, Esq., Assistant Counsel I
Bay Area Air Quality Management District
mnishiki@baaqmd.gov

via email September 24, 2024

DATED: September 24, 2024



Marcy Hiratzka
Clerk of the Boards