

Decision 25-05-003 May 15, 2025

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company for Approval of its Woody Biomass to Renewable Natural Gas Pilot Project (U39G).

Application 23-06-023

**DECISION DENYING PG&E'S WOODY BIOMASS PILOT PROJECT APPLICATION**

**Summary**

This decision denies Pacific Gas and Electric Company's application seeking approval of its woody biomass to renewable natural gas pilot project. This decision directs Pacific Gas and Electric Company to use the Tier 2 Annual Gas True-Up of Gas Transportation Balancing Accounts for Rates Effective January 1, 2026, advice letter to return \$16.936 million of Cap-and-Trade proceeds, including interest, to ratepayers through the California Climate Credit in 2026.

This proceeding is closed.

**1. Background**

**1.1. Procedural Background**

On June 30, 2023, Pacific Gas and Electric Company (PG&E) filed Application (A.) 23-06-023 (the Application) proposing approval of its woody biomass pilot project. On August 11, 2023, protests to the Application were filed

by the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) and jointly by the Center for Biological Diversity (CBD) and the Sierra Club (Sierra Club) (together, Environmental Parties). PG&E replied to the protests on August 21, 2023.

The assigned Administrative Law Judge (ALJ) held a prehearing conference on October 23, 2023, to discuss procedural matters. The assigned Commissioner issued a scoping memo and ruling to establish the issues and schedule on December 14, 2023. The schedule was modified by the assigned ALJ's April 2, 2024, ruling granting the unopposed joint motion of Sierra Club, CBD, and PG&E to modify the proceeding schedule. On April 8, 2024, the assigned ALJ issued a ruling denying Environmental Parties' March 22, 2024, motion for evidentiary hearing and directing parties to file and serve motions for the admission of testimony and documents into the evidentiary record. On May 3, 2024, the assigned ALJ issued a ruling entering exhibits into the evidentiary record.

Cal Advocates, PG&E, and Environmental Parties each filed opening briefs on May 8, 2024. PG&E, Cal Advocates, and Environmental Parties each filed reply briefs on May 29, 2024.

This matter was submitted on May 29, 2024, upon filing of reply briefs.

## **1.2. PG&E's Woody Biomass Pilot Project**

PG&E filed the Application pursuant to Commission Decision (D.) 22-02-025, which required PG&E to propose at least one woody biomass

gasification project focused on converting woody biomass to biomethane<sup>1</sup> to be funded using \$16.936 million of PG&E's Cap-and-Trade proceeds (the Proceeds) for eligible infrastructure costs.<sup>2</sup> In the Application, PG&E proposes to fund a woody biomass pilot project (the Project) that will be implemented by West Biofuels, LLC (West Biofuels).

If allowed, the proposed Project would include gasification and direct methanation using hydrogen, which PG&E claims would mitigate the need for carbon dioxide (CO<sub>2</sub>) removal. A methanation system would be added to West Biofuels' existing gasification facility (the Facility) to produce higher volumes of methane from the feedstock. West Biofuels intends to expand the Project to a commercial demonstration scale after successful demonstration and testing in the pilot phase proposed in the Application. PG&E claims that the interconnection of the Project to PG&E's pipeline system supports the development of novel biomass-to-renewable natural gas conversion technology with the potential to help reduce woody waste and short-lived climate pollutants (SLCPs) in California.

PG&E proposes to procure renewable natural gas from the Project, noting that this procurement will contribute to PG&E's procurement targets for 2025 and 2030 as established in D.22-02-025. PG&E also asserts that this procurement will count towards the Renewable Gas Standard 2030 target and that the

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<sup>1</sup> D.22-02-025, Ordering Paragraph 43, at 67 – 68.

<sup>2</sup> *Id.*, Ordering Paragraph 44, at 69.

renewable natural gas produced from diverted organic waste feedstock will also count towards PG&E's 2025 short-term procurement requirement.<sup>3</sup>

## **2. Jurisdiction**

Pursuant to Article XII, Sections 1 through 6 of the California Constitution, the Commission "has broad authority to regulate utilities."<sup>4</sup> The California Legislature enacted the Public Utilities Act which authorized the Commission to supervise and regulate every public utility in California and to do all things which are "necessary and convenient in the exercise of such power and jurisdiction."<sup>5</sup> Specifically, Article XII, Section 3 of the California Constitution provides that "the production, generation, transmission, or furnishing of heat, light, water, power" fall under the jurisdiction of the legislature.

## **3. Issues Before the Commission**

The issues before the Commission are:

1. Does the Project meet the requirements of D.22-02-025?
2. Does the Project support California state goals of decreasing greenhouse gas (GHG) emissions?
3. Should PG&E's request to reserve the \$16.936 million GHG Cap-and-Trade allowance be approved?
4. Are PG&E's offtake renewable natural gas (RNG) agreement commercial terms for the Project reasonable?
5. Should PG&E's cost recovery proposal be approved?

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<sup>3</sup> The Application at 2.

<sup>4</sup> *Ford v. Pacific Gas and Electric Company* (1997) 60 Cal. App. 4th 696, 700, citing to *San Diego Gas & Electric Company v. Superior Court*, (1996) 13 Cal. 4th 893, 914 – 915.

<sup>5</sup> Public Utilities Code Section 701. All references to "Section" herein are to the Public Utilities Code unless otherwise noted.

6. Does the Project comply with California Air Resources Board (CARB) regulations, such as 17 California Code of Regulations (CCR) §§ 95893(d)(3), (d)(5), and (d)(8)?
7. Should PG&E's review and reporting of methane leakage and emissions information from the Project be publicly available? Is any part of such information confidential?
8. What, if any, are the impacts on environmental and social justice communities, including the extent to which the Project impacts the achievement of any of the nine goals of the Commission's Environmental and Social Justice Action Plan?

Issues 1 and 6 are addressed together under the heading of Regulatory Compliance. As this decision denies the Application based on issues 1 and 6, it does not address issues 4, 7, and 8. Likewise, because issue 2 is more general than issues 1 or 6, and issues 1 and 6 are dispositive for the Commission's decision on the Application, this decision does not directly address issue 2.

#### **4. Regulatory Compliance**

##### **4.1. Requirements of D.22-02-025**

D.22-02-025 required PG&E to propose at least one woody biomass gasification project focused on conversion of woody biomass to biomethane. As stated in Ordering Paragraph 43 of D.22-02-025<sup>6</sup>, the proposed pilot must:

- Have its strategic placement coordinated with the pilot projects authorized for the Department of Conservation by Senate Bill 155 (Committee on Budget and Fiscal Review), Statutes 2021, Chapter 258;

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<sup>6</sup> D.22-02-025 at 67 – 68.

- Include pipeline extensions to the pilot facilities that facilitate future potential extensions for additional projects; and
- Study and report fugitive methane, pollutant, and particulate matter emissions and emissions reduction or elimination in the gasification or pyrolysis process, the methanation process, and pipeline infrastructure.

Additionally, the proposed pilot should:

- Propose methods for using CO<sub>2</sub> in carbon capture and storage or use projects rather than venting it to the atmosphere; and
- Test technologies that are capable of expansion and that have significant potential to increase the renewable natural gas supply in the long term.

D.22-02-025 directed PG&E to set aside \$16.936 million in Cap-and-Trade proceeds (i.e., the Proceeds) as funding to offset pipeline build-out costs and related expenses associated with the pilot project. The Commission specified that “this one-time redirect of allocated allowance auction proceeds must comply with all applicable CARB regulations.”<sup>7</sup>

#### **4.2. Relevant CARB Regulations**

As noted above, use of the Proceeds must comply with all applicable CARB regulations. The minimum set of applicable CARB regulations include 17 CCR §§ 95893(d)(3), 95893(d)(5), 95893(d)(8), 95893(e)(4)(A), and 95893(e)(4)(B). CARB regulation § 95893(d) sets limitations on the use of Cap-and-Trade auction proceeds (e.g., the Proceeds) while § 95893(e) provides reporting requirements on the use of auction proceeds.

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<sup>7</sup> *Id.* at 46.

Specifically, § 95893(d)(3) requires that Cap-and-Trade auction proceeds obtained by natural gas suppliers (e.g., PG&E) be used for the primary benefit of retail natural gas ratepayers. Additionally, § 95893(d)(3) requires that auction proceeds be used to reduce GHGs or be returned to ratepayers. Further, § 95893(d)(3)(B) allows for the use of auction proceeds for GHG emission reduction activities other than energy efficiency and includes funding projects or activities that reduce emissions of uncombusted natural gas that are not mandated by any federal, state, or local health and safety requirements.

§ 95893(d)(5) further requires that expected GHG emissions reductions resulting from the use of allocated auction proceeds by natural gas suppliers be demonstrated pursuant to the requirements of § 95893(e)(4)(B). § 95893(e) requires the natural gas supplier to annually submit a report to the CARB Executive Officer describing the disposition of allocated auction proceeds during the previous calendar year. § 95893(e)(4)(A) requires that this annual report describe the nature and purpose of each use of allocated auction proceeds, how this use of the allocated auction proceeds benefits ratepayers, and the amount of allocated allowance auctions proceeds spent on that use. § 95893(e)(4)(B) provides the method for estimating and reporting GHG emissions reductions attributable to the use of allocated auction proceeds, including specific calculations that must be reported. In particular, § 95893(e)(4)(B) requires that the total GHG emissions reductions attributable to the use of the auction proceeds be based on the percentage of total project costs covered by the use of the auction proceeds. § 95893(e)(4)(B) also requires that GHG emission

reductions be based on comparing the expected GHG emissions with and without the use of the auction proceeds.

The calculation for estimating GHG emissions reductions from the use of allocated auction proceeds described in § 95893(e)(4)(B) requires:

- Use-specific information on equipment efficiency, MMBtu of fuel saved, and vehicle miles traveled, as applicable;
- GHG emissions factors applicable to the fuel used or saved, vehicle miles traveled, or electricity saved;
- The expected time frame over which the emissions reductions will occur; and
- The percentage of total project costs covered by the use of allocated auction proceeds.

#### **4.3. Support for State Goal of Decreasing GHG Emissions**

If the Project does not comply with CARB regulations, it necessarily cannot comply with D.22-02-025. If the Project does not comply with D.22-02-025, it is irrelevant whether or not the Project supports California state goals of decreasing GHG emissions.

#### **4.4. Party Positions**

PG&E argues that it satisfies the requirements of D.22-02-025 summarized in § 4.1 above. Specifically, PG&E notes that it coordinated with the Department of Conservation on the strategic placement of the Project.<sup>8</sup> PG&E's proposed project also includes pipeline extensions to the pilot facility that facilitate future potential extensions for additional projects and proposes methods for using CO<sub>2</sub>

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<sup>8</sup> PG&E Opening Brief at 5.



instead of venting it to the atmosphere.<sup>9</sup> PG&E plans to study and report fugitive methane, pollutant, and particulate matter emissions and emissions reduction or elimination in the gasification or pyrolysis process, the methanation process, and pipeline infrastructure, through a life-cycle analysis (LCA) between years 1 and 3 of the Project producing biomethane.<sup>10</sup>

PG&E further argues that it satisfies the requirements of 17 CCR §§ 95893(d)(3), 95893(d)(5), and 95893(d)(8) by using the Proceeds for the primary benefit of retail natural gas ratepayers and demonstrating that use of the Proceeds is expected to reduce GHG emissions.<sup>11</sup> On GHG emissions reduction, PG&E argues that approval of the Project will result in an estimated emissions reduction from the Facility of approximately 1,990,152,000 grams of CO<sub>2</sub> equivalent per year based on the Facility producing 3,000 million British thermal units (MMBtu) per year and using a 16.8 grams of CO<sub>2</sub> equivalent per megajoule (gCO<sub>2</sub>e/MJ) carbon intensity (CI) estimate for the Facility.<sup>12</sup> PG&E further argues that GHG emissions from biomethane production should be compared with life cycle GHG emissions from conventional natural gas production. Because of its purported lower CI score, PG&E argues biomethane that offsets the use of conventional natural gas will result in carbon reduction benefits.<sup>13</sup> PG&E also

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<sup>9</sup> *Id.* at 6.

<sup>10</sup> PG&E-02 Exhibit at 6.

<sup>11</sup> PG&E Opening Brief at 10.

<sup>12</sup> *Id.* at 11.

<sup>13</sup> *Ibid.*

claims that the Project is expected to reduce GHG emissions through the use of all of the CO<sub>2</sub> in renewable natural gas (RNG) production.<sup>14</sup>

Cal Advocates argues that the Project does not satisfy D.22-02-025 because it does not comply with all applicable CARB regulations.<sup>15</sup> In particular, Cal Advocates argues that PG&E does not demonstrate that the Project will result in reduced GHG emissions as required by CARB regulations 17 CCR § 95893(d). Cal Advocates notes that PG&E has yet to conduct an LCA for the Project to calculate its CI score and is instead using a proxy CI score estimate from an unrelated facility of 16.8 gCO<sub>2</sub>e/MJ. Cal Advocates also notes that the study PG&E relies on for this proxy CI score estimate emphasizes the variability and complexity of quantifying the environmental impacts of a given project and stresses the need for a case-by-case evaluation of environmental impacts, questioning PG&E's use of the proxy CI score of 16.8 gCO<sub>2</sub>e/MJ. Together, according to Cal Advocates, these points undermine PG&E's claim of GHG reductions from the Project.<sup>16</sup> Additionally, Cal Advocates notes that PG&E has not demonstrated that the Project will be able to offset emissions from the commercial hydrogen used in the methanation process, 95% of which produced in the United States involves the use of fossil fuels, or the transportation of biomass associated with the Project.<sup>17</sup> Cal Advocates estimates that transportation of biomass to the Facility will result in 3.79 to 12.65 metric tons of

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<sup>14</sup> *Id.* at 12.

<sup>15</sup> Cal Advocates Opening Brief at 4.

<sup>16</sup> *Id.* at 8.

<sup>17</sup> *Id.* at 9 – 11.

CO<sub>2</sub> per year, which reduces the purported emissions reductions of the Project itself.<sup>18</sup>

Environmental Parties also argue that the Project does not satisfy the requirements of D.22-02-025 for many of the same reasons cited by Cal Advocates, including the lack of an LCA to date, the use of a proxy CI score estimate from another facility, lack of accounting for the GHG emissions associated with commercial hydrogen used in the methanation process, and lack of accounting for the GHG emissions associated with transporting biomass to the Facility.<sup>19</sup> Additionally, Environmental Parties note that GHG emissions estimates for the Project do not include GHG emissions from methane leakage from the transmission, storage, distribution, or production of biomethane at the Facility or biomass storage.<sup>20</sup> Environmental Parties argue that the investments made by PG&E at the Facility may increase GHG emissions, not reduce them, and draw attention to possible upstream and downstream GHG emissions increases resulting from PG&E's investment of the Proceeds in the Project. Specifically, by significantly expanding biomass processing at the Facility from less than 2 tons of biomass processed per year on average to more than 1,800 tons of biomass per year processed after investment of the Proceeds, GHG emissions from the Facility's open stack flare and exhaust vent, as well as fugitive methane leakage, will likely increase.<sup>21</sup> Of particular note, Environmental Parties claim

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<sup>18</sup> PAO-1 Exhibit at 5.

<sup>19</sup> Environmental Parties Opening Brief at 8 – 9.

<sup>20</sup> *Id.* at 10.

<sup>21</sup> *Id.* at 12 – 15.

that “[u]nless total system leakage is zero, methane intentionally produced from biomass when it would not have otherwise existed (as is the case [with the Project]) is always GHG positive, even if the underlying feedstock is presumed to be from climate-neutral CO<sub>2</sub> sources.”<sup>22</sup>

In response to Cal Advocates’ and Environmental Parties’ claims and arguments on the GHG emissions associated with the Project, PG&E clarifies that upstream and downstream emissions associated with the Project will be included in the LCA for the Project<sup>23</sup> planned sometime between years 1 and 3 of the Project being operational. In response to Environmental Parties’ claims and arguments on emissions monitoring and reporting, PG&E clarifies that leak monitoring currently exists at the Facility and will be expanded to cover the Project.<sup>24</sup>

#### **4.5. Discussion**

At minimum, the success of the Application hinges on the question of whether PG&E has demonstrated that the Project will reduce GHG emissions and provide ratepayer benefit, clear requirements of CARB regulation 17 CCR § 95893(d)(3)(B). We agree with Cal Advocates and Environmental Parties that PG&E has not satisfied the relevant CARB regulation requirements and consequently has not satisfied the requirements of D.22-02-025. As such, the Application is denied.

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<sup>22</sup> *Id.* at 15.

<sup>23</sup> PG&E-02 Exhibit at 6-7.

<sup>24</sup> *Id.* at 7.

For the estimation and assessment of GHG emissions reductions from the use of allocated allowance auction proceeds, CARB regulation 17 CCR § 95893(d)(3)(B) cites to § 95893(d)(5), which states that natural gas suppliers must demonstrate expected GHG emissions reductions pursuant to § 95893(e)(4)(B). As shown in section 4.2 above, § 95893(e)(4)(B) provides two requirements for demonstrating GHG emissions reductions as well as a methodology<sup>25</sup> on how GHG emissions are to be calculated which are all to be presented in an annual report describing the disposition of allocated allowance auction proceeds during the previous calendar year. While not a requirement for the Application, the calculations from § 95893(e)(4)(B) provide a useful benchmark for how GHG emissions reductions claims related to the Project can be assessed.

PG&E does not provide estimates of any of the calculations from § 95893(e)(4)(B), nor in fact any granular estimates of GHG emissions from the Project, instead relying on a crude proxy CI value from a separate and unrelated facility. PG&E provides no evidence to show that an LCA was performed to determine a CI score for the Project, only that an LCA will be performed between years 1 and 3 after the Project is operational. Cal Advocates and Environmental Parties provide unrefuted evidence that:

- Biomass processing at the Facility will be increased by about three orders of magnitude through the development and operation of the Project,
- PG&E does not account for fugitive methane emissions from the transmission, storage, distribution, or production of biomethane at the Facility or biomass storage,

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<sup>25</sup> CARB regulation 17 CCR § 95893(e)(4)(B)(1)-(4), detailed above in Section 4.2.

- PG&E has not shown how it will offset emissions associated with the production of commercial hydrogen used in the methanation process, and
- PG&E has not accounted for the GHG emissions associated with the transportation of biomass to the Facility.

Thus, PG&E has failed to meet its burden of demonstrating that the Project is expected to reduce GHG emissions.

PG&E has also failed to show a benefit to ratepayers from the Project, a requirement of § 95893(d)(3). No analysis has been provided by PG&E to demonstrate the estimated benefits to ratepayers from the Project in concrete terms.

PG&E is directed to use its existing Annual Gas True-Up of Gas Transportation Balancing Accounts for Rates Effective January 1, 2026, Tier 2 advice letter<sup>26</sup> filed by October 31, 2025, to return the Proceeds, including interest, to ratepayers.

## **5. Summary of Public Comment**

Rule 1.18 of the Rules of Practice and Procedure (Rules) allows any member of the public to submit written comment in any Commission proceeding using the “Public Comment” tab of the online Docket Card for that proceeding on the Commission’s website. Rule 1.18(b) requires that relevant written comment submitted in a proceeding be summarized in the final decision issued in that proceeding. There were no public comments in this proceeding.

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<sup>26</sup> This advice letter process was established in D.15-10-032 as the mechanism through which PG&E reconciles its natural gas GHG compliance costs and allowance proceeds.

## **6. Conclusion**

This decision denies Pacific Gas and Electric Company's application seeking approval of its woody biomass to renewable natural gas pilot project. This decision directs Pacific Gas and Electric Company to use the Tier 2 Annual Gas True-Up of Gas Transportation Balancing Accounts for Rates Effective January 1, 2026, advice letter to return \$16.936 million of Cap-and-Trade proceeds, including interest, to ratepayers through the California Climate Credit in 2026.

## **7. Procedural Matters**

This decision affirms all rulings made by the ALJ and assigned Commissioner in this proceeding. All motions not ruled on are deemed denied.

## **8. Comments on Proposed Decision**

The proposed decision of ALJ Jonathan Lakey in this matter was mailed to the parties in accordance with § 311 of the Public Utilities Code and comments were allowed under Rule 14.3. Comments were filed on April 9, 2025, and reply comments were filed on April 14, 2025, by PG&E, Cal Advocates, and jointly by Sierra Club and CBD.

## **9. Assignment of Proceeding**

Commissioner John Reynolds is the assigned Commissioner and Jonathan Lakey is the assigned ALJ in this proceeding.

## **Findings of Fact**

1. PG&E has not conducted an LCA for the Project to calculate the Project's CI score.

2. PG&E uses a proxy CI score for the Project of 16.8 gCO<sub>2</sub>e/MJ estimated from an LCA at a separate and unrelated facility.

3. The study PG&E relies on for its proxy CI score estimate emphasizes the variability and complexity of quantifying the environmental impacts of a given project and stresses the need for a case-by-case evaluation of environmental impacts.

4. PG&E does not provide a concrete estimate of the ratepayer benefits of the Project.

5. PG&E has not demonstrated that the Project will be able to offset emissions from the commercial hydrogen used in the methanation process.

6. PG&E has not demonstrated that the Project will be able to offset emissions from the transportation of biomass associated with the Project.

7. PG&E's GHG emissions estimates for the Project do not include GHG emissions from methane leakage from the transmission, storage, distribution, or production of biomethane at the Facility or biomass storage.

8. Biomass processing at the Facility will be increased by about three orders of magnitude through the development and operation of the Project.

9. PG&E does not provide any granular estimates of GHG emissions from the Project.

### **Conclusions of Law**

1. The Application should be denied.

2. PG&E should use the existing Annual Gas True-Up of Gas Transportation Balancing Accounts for Rates Effective January 1, 2026, Tier 2 advice letter to return the Proceeds, including interest, to ratepayers.



**O R D E R**

**IT IS ORDERED** that:

1. By October 31, 2025, Pacific Gas and Electric Company shall use the existing Annual Gas True-Up of Gas Transportation Balancing Accounts for Rates Effective January 1, 2026, Tier 2 advice letter to return the \$16.936 million of Cap-and-Trade proceeds, including interest, to ratepayers through the California Climate Credit.
2. Application 23-06-023 is denied.
3. Application 23-06-023 is closed.

This order is effective today.

Dated May 15, 2025, at Kings Beach, California

ALICE REYNOLDS  
President  
JOHN REYNOLDS  
KAREN DOUGLAS

Commissioners

Commissioner Darcie L. Houck being absent did not participate in the vote of this item.

Commissioner Matthew Baker recused himself from this agenda item and was not part of the quorum in its consideration.