

PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 7071E; 7071E-A
As of February 18, 2025

Subject: PG&E's 2023 Low Carbon Fuel Standard Implementation Plan

Division Assigned: Energy

Date Filed: 11-17-2023

Date to Calendar: 11-29-2023

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Authorizing Documents: D1412083

Disposition:

Signed

Effective Date:

01-30-2025

Resolution Required: Yes

Resolution Number: E-5361

Commission Meeting Date: 01-30-2025

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PUBLIC UTILITIES COMMISSION
505 Van Ness Avenue
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

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November 17, 2023

Advice 7071-E

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

Subject: PG&E's 2023 Low Carbon Fuel Standard Implementation Plan

I. Purpose

In compliance with the requirements of Commission Decision No. (D.) 20-12-027, Pacific Gas and Electric Company (PG&E) hereby submits this Tier 2 advice letter detailing its 2023 Low Carbon Fuel Standard (LCFS) Implementation Plan.

II. Background

In February 2020, the Commission issued a ruling with the draft Transportation Electrification Framework, which covered a variety of topics related to the utilities and transportation electrification including policies to support and ensure efficient implementation of the LCFS program. The Commission issued D.20-12-027 on the LCFS electric credit holdback revenue utilization by the Investor-Owned Utilities (IOU) on December 17, 2020, which created requirements for the use of the LCFS holdback revenue and directed each IOU to file an Implementation Plan via a Tier 2 Advice Letter with at least one program proposal within 180 days of the decision.

In accordance with D.20-12-027, PG&E submitted AL 6226-E¹ with the 2021 LCFS Implementation Plan which included five program proposals in June 2021, and received CPUC approval in December 2021.

III. Discussion

Pursuant to D. 20-12-027, Section 3.11, and Ordering Paragraphs 2 and 3, PG&E submits this Tier 2 advice letter with its 2023 LCFS Implementation Plan, attached as Attachment A (Confidential) and Attachment B (Public). The 2023 Implementation Plan details four

¹ Advice Letter (AL) 6226-E, PG&E's 2021 Low Carbon Fuel Standard Implementation Plan, submitted June 15, 2021, and AL 6336-E-A, submitted October 6, 2021. The public versions with Energy Division's December 24, 2021, disposition letter approving the Implementation Plan can be found at: https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E.pdf and https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E-A.pdf.

holdback program proposals for the return of electric credit revenue to benefit current and future LCFS drivers. The Implementation Plan makes no changes to the return of gas credit revenue to customers from the 2021 Implementation Plan. For further details of PG&E's proposals, and how other requirements in D.20-12-027 and other Decisions related to LCFS are met, please see the 2023 LCFS Implementation Plan.

In addition to the programs approved in the 2021 Implementation Plan, these new proposals will target additional barriers to transportation electrification and allow PG&E to meet its CPUC and California Air Resources Board (CARB) requirements for the use of LCFS funding.

IV. Protests

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than December 7, 2023, which is 20 days after the date of this submittal. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
E-mail: EDTariffUnit@cpuc.ca.gov

The protest shall also be electronically sent to PG&E via E-mail at the address shown below on the same date it is electronically delivered to the Commission:

Sidney Bob Dietz II
Director, Regulatory Relations
c/o Megan Lawson
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name and e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11)

V. Confidentiality

In support of this Advice Letter, PG&E submits Confidential Attachment A in the manner directed by D.14-10-033, D. 06-06-066, and D.08-04-023 to demonstrate the confidentiality of the material and to invoke the protection of confidential utility information provided under Protected under Civ. Code §§3426 et seq.; Govt. Code §§ 6254, et seq., e.g., 6254(e), 6254(k), 6254.15; Govt. Code § 6276.44; Evid. Code §1060; D.11-01-036. A separate Declaration Seeking Confidential Treatment is submitted as Attachment C with this Advice Letter. In accordance with GO 96-B, a copy of PG&E's Proposed Protective Order is attached as Attachment D. The confidential version of this Advice

Letter will be made available to appropriate parties upon execution of a standard non-disclosure agreement, or, to the extent the Commission adopts the Proposed Protective Order, the execution of the non-disclosure certificate attached to the Proposed Protective Order. Parties wishing to obtain access to the confidential version of this Advice Letter may contact Yvonne Yang at qxy1@pge.com to obtain the relevant agreement.

VI. Attachments

| | |
|----------------------------|---|
| Confidential Attachment A: | PG&E's 2023 Low Carbon Fuel Standard Implementation Plan (Confidential Version) |
| Public Attachment B: | PG&E's 2023 Low Carbon Fuel Standard Implementation Plan (Public Version) |
| Public Attachment C: | Declaration of Lydia Krefta Seeking Confidential Treatment |
| Public Attachment D: | Proposed Protective Order |

VII. Tier Designation

Pursuant to D.14-12-083 and D. 20-12-027, this advice letter is submitted with a Tier 2 designation.

VIII. Effective Date

PG&E requests that this Tier 2 advice submittal become effective upon December 17, 2023, which is 30 calendar days from the submittal date.

IX. Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically to parties shown on the attached list and the parties on the service list for R.18-12-006. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Sidney Bob Dietz II
Director, Regulatory Relations
CPUC Communications

cc: Service List R. 18-12-006



ADVICE LETTER SUMMARY

ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39 E)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Kimberly Loo

Phone #: (279)789-6209

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: KELM@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 7071-E

Tier Designation: 2

Subject of AL: PG&E's 2023 Low Carbon Fuel Standard Implementation Plan

Keywords (choose from CPUC listing): Compliance

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.20-12-027, D.14-12-083

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested? Yes No

If yes, specification of confidential information: See Attachment C

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information: Lydia Krefta, Lydia.Krefta@pge.com

Resolution required? Yes No

Requested effective date: 12/17/23

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed¹: N/A

Pending advice letters that revise the same tariff sheets: N/A

¹Discuss in AL if more space is needed.

Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division Tariff Unit Email:
EDTariffUnit@cpuc.ca.gov

Contact Name: Sidnev Bob Dietz II. c/o Megan Lawson
Title: Director, Regulatory Relations
Utility/Entity Name: Pacific Gas and Electric Company

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email: PGETariffs@pge.com

Contact Name:
Title:
Utility/Entity Name:

Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

CPUC
Energy Division Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Clear Form

ATTACHMENT A

PG&E's 2023 Low Carbon Fuel Standard Implementation Plan

Confidential Version

ATTACHMENT B

2023 Low Carbon Fuel Standard Implementation Plan

Public Version

November 17, 2023

2023 LCFS IMPLEMENTATION PLAN

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EXECUTIVE SUMMARY

Pursuant to Ordering Paragraph (OP) 3 of Decision (D.) 20-12-027 (LCFS Holdback Decision), Pacific Gas and Electric Company (PG&E) hereby submits its 2023 Low Carbon Fuel Standard (LCFS) Implementation Plan.

A. Background

PG&E generates credits in the LCFS program for supplying low carbon transportation fuels, including electricity and compressed natural gas (CNG). The revenue from the sales of these credits must be returned to PG&E customers, subject to requirements on the use of LCFS proceeds from the California Air Resources Board (CARB) and California Public Utilities Commission (CPUC). The LCFS proceeds represent a unique opportunity to support transportation electrification and other low carbon fuels without using ratepayer funding, and PG&E's proposed programs are designed to fill gaps in the market while meeting both CARB and CPUC requirements.

B. Electric Revenue Program Portfolio

PG&E is proposing four electric LCFS programs, in addition to its existing portfolio of LCFS programs proposed in the 2021 LCFS Implementation Plan and approved by the CPUC in December 2021.¹ All four of these are "holdback programs," funded by the 33% of remaining residential base credit proceeds after funding the California Clean Fuel Reward (CCFR) program, plus credits generated by forklift charging. These programs must support an increasing focus on equity communities as well as provide support, up to a cap, for resiliency efforts. PG&E's four new holdback programs for this 2023 implementation plan are shown in Table 1.

¹ Advice Letter (AL) 6226-E, PG&E's 2021 Low Carbon Fuel Standard Implementation Plan, filed June 15, 2021, and AL 6336-E-A, filed October 6, 2021. The public versions with Energy Division's December 24, 2021, disposition letter approving the Implementation Plan can be found at:

https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E.pdf and
https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E-A.pdf

Table 1: Summary of PG&E Electric Holdback Programs

| Proposed Program | Description | Program Duration | Total Cost |
|---|--|------------------|------------|
| Affordable Public Charging | Provide a weekly public EV charging credit to income-qualified customers via a prepaid debit card that can be used at physical payment terminals and through network apps | 2024-2028 | \$28.8M |
| Residential Charging Solutions Expansion (Panel & Flexible Electrification Support) | Expansion to existing program offering upfront cost reductions through contractors or after-the-fact rebates for panel upgrades and circuit extensions, and customer/contractor education promoting panel optimization | 2024-2027 | \$19.3M |
| Resilient Fleets | Provide an online playbook on resilient charging solutions, targeted at critical customers looking to electrify their fleets | 2024-2028 | \$2.5M |
| Capacity | Fund grid capacity upgrades related to electric vehicle charging in equity communities | 2024-2026 | \$20.0M |

C. Gas Revenue Program

PG&E plans to continue its CNG revenue return program, which was described in PG&E’s 2015 and 2021 LCFS Implementation Plans, without any changes. This program is funded from the proceeds of credits generated by fleet and residential customers fueling vehicles at PG&E-owned CNG stations on a rolling basis. As part of a pilot started in late 2019, all PG&E CNG stations are being supplied with 100% renewable natural gas (RNG).

I. LCFS CREDIT GENERATION, SALES, ACCOUNTING, AND FORECASTING

This section discusses PG&E’s requirements and processes related to the CARB LCFS program. PG&E generates credits from several electric and gas sources, sells those credits, holds the proceeds within designated balancing accounts, and then returns the revenue to customers. Each of these is described in more detail below.

A. Credit Generation

PG&E has voluntarily opted-in to the LCFS program on behalf of its customers who use transportation fuels with carbon intensities below CARB’s targets.² Under the current LCFS regulation, PG&E receives

² 17 CCR § 95480 et seq.; D.14-12-083, p.6.

LCFS credits from CARB based on those customers' usage of low carbon fuels. PG&E generates credits from the use of electricity and CNG as a transportation fuel as described in more detail in the following sections.

1. Electric Credits

As an electric distribution utility in California, PG&E has been receiving LCFS credits since 2011 for customers who charge their electric vehicles (EVs) in its service territory. Currently, PG&E generates electric credits from two main sources of EV charging that occurs within the service territory:

- Residential EV charging – including separately-metered EV charging and estimated residential EV charging; and
- Non-residential EV charging – including PG&E workplace EV charging and EV charging at certain sites in the Electric Vehicle Charge Network (EVCN) Program.

CARB calculates the number of LCFS credits generated for a given quantity of electricity consumed as a transportation fuel and deposits those credits into PG&E's LCFS account. On a quarterly basis, PG&E submits EV energy consumption information to CARB for the purpose of calculating and generating LCFS credits. For residential EV charging, PG&E has historically submitted actual EV energy consumption for separately-metered EV charging in PG&E's service territory to estimate total residential EV charging, but as of January 2023 CARB now uses telematics data to do this.

In addition to the credits generated through residential EV charging, PG&E also generates electric credits through the non-residential metered charging. This includes PG&E workplace EV charging that occurs on EV charging equipment that PG&E owns for its fleet vehicles and employee charging, as well as EV charging at stations that PG&E owns in the EVCN Program ("Charge Sponsor sites") and the EV Schools Program. On a quarterly basis, PG&E submits actual EV energy consumption for non-residential metered EV charging in PG&E's service area, based on metered data for the chargers.

PG&E has historically received credits for the estimated electric forklift charging that occurs in its service territory, but does not anymore due to an adjustment in CARB's methodology.³ PG&E also receives credits for estimated residential EV charging in service territories of "non-opt-in" utilities to the LCFS program; however, all of the revenue from these credits must go to the CCFR program.⁴ Both are calculated by CARB and deposited into PG&E's account.

³ Utilities historically received forklift credits that are not claimed by other entities, such as the forklift owners. CARB's methodology is based on an estimated number of forklifts and energy usage, and due to higher-than-forecasted electric forklift adoption and credit claiming, there are no forklift credits left over for the utilities. See "Methodology for Electric Forklift Charging Claimed by Electrical Distribution Utilities," updated Sept. 2021 and available at https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/guidance/eforkliftcharging_claimedby_edufaq.pdf. (accessed Oct. 9, 2023).

⁴ Non-opt-in credits are credits associated with EV residential charging in areas served by utilities not participating in the LCFS program. CARB estimates the total credits and deposits a percentage to each IOU. IOUs are tasked with monetizing these credits and transferring the revenue to the statewide point-of-purchase program, the California Clean Fuel Reward (CCFR).

A forecast of PG&E’s electric credit generation can be found in the annual LCFS Forecast Advice Letter, most recently submitted in September 2023.

In addition, PG&E is exploring generating incremental LCFS credits to increase the amount of revenue available to support transportation electrification projects. These credits represent the emissions reduction caused by charging an EV with 100% renewable energy rather than the grid average electricity and require the retirement of Renewable Energy Credits (RECs). On July 17, 2023, PG&E submitted its 2023 Renewable Portfolio Standard (RPS) Plan in CPUC Rulemaking (R.) 18-07-003. In it, PG&E seeks “authorization to claim incremental LCFS Credits through the retirement of RECs.”⁵ If approved, PG&E will have the option to start generating and selling incremental LCFS credits. PG&E will propose how to use the incremental LCFS credit revenues through the submission of an advice letter.

2. Gas Credits

From 2011-2019, PG&E generated gas credits for CNG fuel sold to the public and used by PG&E’s own fleet at PG&E’s CNG stations. PG&E submitted CNG fuel consumption information to CARB quarterly for the purposes of generating gas credits.

In December 2019, PG&E began contracting with a RNG vendor to supply RNG to PG&E’s CNG stations. Under the contract, the vendor supplies RNG to the stations, handles the reporting of RNG consumption to CARB for LCFS credits, sells the credits, and shares the revenue with PG&E.

A forecast of PG&E’s RNG credit generation can be found in the annual LCFS Forecast Advice Letter, most recently submitted in September 2023.⁶

B. Credit Sales Procedures

The Commission authorized electric and natural gas utilities that voluntarily participate in the LCFS regulation to sell LCFS credits according to the parameters and restrictions set forth in D.14-05-021, beginning upon the Commission’s approval of Advice Letter 3575-G/4604-E on August 7, 2015.⁷

PG&E provides the following information regarding its plans for the sale of LCFS credits pursuant to Items 1 through 3 of Appendix A: Tier 2 Advice Letter Filing Requirements in D.14-12-083, as well as information requested in the discussion sections of D.14-12-083.

1. Limits and Timing of LCFS Credit Sales

The CPUC has established two restrictions for the sales of LCFS credits per D.14-05-021. First, the Utility may sell no more than the credits that have been provided by CARB. Second, the credits may only

⁵ Pacific Gas and Electric Company, Renewable Portfolio Standard, Draft 2023 Renewable Energy Procurement Plan, dated July 17, 2023, Section XVII, p. 135. Filed in R.18-07-003.

⁶ AL 7035-E, submitted on September 29, 2023.

⁷ D.14-05-021, Ordering Paragraph 1; Implementation Plan for the Sale of Low Carbon Fuel Standard Credits and Return of Revenue, pursuant to OPs 2 and 3 of D.14-12-083 and OPs 2 and 3 of D.14-05-021.

be sold through competitive solicitations or bilateral transactions presented by a broker. PG&E proposed and the CPUC approved the following additional limits in Advice Letter 3575-G/4604-E:

- The Utility will sell credits over time at market prices to avoid trying to time the market;
- The Utility will sell credits at market prices and these transactions will be deemed per se reasonable;
- The Utility will only consider brokers registered with the Commodity Futures Trading Commission; and
- The Utility will follow its standard credit and collateral processes.

2. Compliance with the California Clean Fuel Reward Governance Agreement Requirements

In 2018, CARB approved amendments to the LCFS regulation, effective January 4, 2019, which created the framework for the statewide point-of-purchase program, the California Clean Fuel Reward (CCFR), and requires large Investor-Owned Utilities (IOUs) to contribute 67% of residential credits to the program.⁸ PG&E opted into the CCFR with the signing of the CCFR Governance Agreement in February 2020.⁹

PG&E implemented changes to its credit revenue tracking in preparation for the launch of the statewide program in November 2020. Upon program launch, PG&E contributed 67% of the revenue generated from the sale of electric credits generated from residential EV charging to the program and continues to make quarterly payments to the program in compliance with CARB’s LCFS regulation. PG&E is also required to contribute 100% of the credits and revenue from the non-opt-in utilities to the program. The remaining 33% of residential credits, referred to as “holdback credits,” serve as one of the funding sources for the LCFS revenue return programs discussed in later sections, along with credits received prior to the CCFR/holdback revision. PG&E tracks the revenue amount for each category by applying a percentage split to the revenue generated from each credit sale transaction. A summary of PG&E’s electric credit generation and current CCFR contribution requirement is shown in Table 2.

Table 2: Electric Credit Generation

| Fuel Type | Credit Source | Percentage of Credit Revenues Sent to the CCFR |
|-------------|---|--|
| Electricity | Residential EV fueling | 67% |
| Electricity | “Non-opt-in” estimated residential EV fueling | 100% |
| Electricity | PG&E workplace EV fueling | 0% |
| Electricity | EVCN Charge Sponsor sites EV fueling | 0% |
| Electricity | Electric Forklifts | 0% |

CARB has opened a rulemaking to propose amendments to the LCFS regulation, and PG&E expects that changes to the CCFR will be part of the draft language released, likely in Q4 2023. PG&E will comply with all regulation amendments once approved.

⁸ 17 CCR § 95483 (c)(1)(A).

⁹ PG&E AL 5526-E, available at https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_5526-E.pdf.

C. Balancing Accounts

The CPUC authorized electric and natural gas utilities selling LCFS credits to establish balancing accounts to track LCFS credit revenue¹⁰ and approved PG&E's proposal to create electric and natural gas LCFS revenues subaccounts in its existing Greenhouse Gas Revenue Balancing Account (GHGRBA) and Gas Programs Balancing Account (GPBA), respectively.¹¹ The purpose of these subaccounts is to track and record the proceeds from the sale of consigned LCFS credits, any approved program costs, and the LCFS revenues returned to customers.

Each LCFS Holdback and Non-Holdback Program will have separate order numbers within the GHGRBA account to track program spend. Specific costs for each program (e.g., administration, incentive payments) will also be recorded separately to track contribution toward compliance requirements.

D. Revenue Return Forecast

Per Ordering Paragraph 5 of D.14-12-083, PG&E submits annual Advice Letters providing a forecast of LCFS revenue return program activities for the following year for approval by the Commission (Annual LCFS Forecast Advice Letter). In September 2023, PG&E submitted its forecast of revenue return for PG&E's existing LCFS programs for calendar year 2024 in AL 7035-E. The forecast did not include estimates for the new programs and expansions proposed below, but the current program budgets are included in this implementation plan to demonstrate compliance across the portfolio.

PG&E will continue to report historical LCFS program spend to the CPUC in the Annual Report submitted in April of each year. PG&E will submit its forecast for calendar year 2025 in September 2024, which will include the forecast for the new programs proposed here once approved.

For the most updated forecast of revenue return for PG&E's LCFS programs, please refer to PG&E's AL 7035-E.

II. REVENUE RETURN TO ELECTRIC CUSTOMERS

PG&E provides the following information regarding its plans for the return of revenue to eligible electric customers pursuant to Item 6.a through 6.i of Appendix A:

- Tier 2 Advice Letter Filing Requirements in D.14-12-083;
- Information requested in the discussion sections of D.14-12-083; and
- Information required in D. 20-12-027.

¹⁰ D.14-05-021, Ordering Paragraph 7.

¹¹ Implementation Plan for the Sale of Low Carbon Fuel Standard Credits and Return of Revenue, pursuant to OPs 2 and 3 of D.14-12-083 and OPs 2 and 3 of D.14-05-021.

A. Revenue Return Requirements

In addition to amendments to create the statewide CCFR, CARB approved amendments to the LCFS regulation in 2019, effective July 1, 2020,¹² which established restrictions on the use of revenue from the sale of holdback credits, including:

- An increasing annual percentage of holdback credit proceeds¹³ required to be used to support specifically defined equity customers and communities,¹⁴
- A specified list of projects that may contribute toward the equity proceed requirements,¹⁵ and
- A cap on the administrative costs to support the development and implementation of equity projects not to exceed 10 percent of total spending on equity projects.

The LCFS Holdback Decision that requires the development of this Implementation Plan also established additional requirements for the holdback credit revenue including, most notably:

- An increasing annual percentage of holdback credit expenditures¹⁶ required to be used to support specifically defined equity customers and communities,¹⁷
- A set annual maximum percentage of holdback credit proceeds to be spent on specifically defined resiliency projects,
- The pooling of forklift credit revenue with holdback credit revenue, and

¹² 17 CCR § 95483 (c)(1)(A)(6), pp 34.

¹³ Credit proceeds are defined as the revenue generated from the sale of any holdback credits. Subsequent guidance from CARB staff has clarified that proceeds earned in a calendar year must be encumbered to projects that calendar year, as reported on in the April annual reports. Based on the PG&E LCFS budgeting cycle, with the annual Forecast advice letter due September 30 for the following year, PG&E budgets the following year's programs based on the current year's proceeds, meeting CARB's encumbrance requirement. This follows how PG&E has budgeted for its CNG program and ensures that speculation on proceeds does not result in programs having to make drastic changes to account for under- or over-spending when credit sales are completed. See Guidance 20-03, Electricity Credit Proceeds Spending Requirements, at https://ww2.arb.ca.gov/sites/default/files/2022-03/lcfsguidance_20-03_2022-01-13_ADA.pdf.

¹⁴ 17 CCR § 95483 (c)(1)(A)(6)(a), pp 35, states that "Effective January 1, 2022, at least 30 percent in year one, 40 percent in year two, and 50 percent in subsequent years of holdback credit proceeds must be used to support transportation electrification for the primary benefit of or primarily serving disadvantaged communities and/or low-income communities and/or rural areas or low-income individuals eligible under California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance Program (FERA) or the definition of low-income in Health and Safety code section 50093 or the definition of low-income established by a POU's governing body."

¹⁵ 17 CCR § 95483 (c)(1)(A)(6)(a), pp 35, provides descriptions of six possible equity projects, such as "investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences," "multilingual Marketing, Education, and Outreach," or "additional rebates and incentives for low-income individuals beyond existing local, federal and State rebates and incentives." Projects can be developed with local environmental justice advocates, community-based organizations, and local municipalities that are not on the specified list but require approval by CARB's Executive Officer.

¹⁶ For the purposes of this Implementation Plan, expenditures are defined as any holdback credit revenue that is spent as part of a holdback program in the calendar year.

¹⁷ In addition to the equity communities defined as part of CARB's LCFS regulation, D.20-12-027 includes "a community with median household income less than 80% of the statewide average, a community in which at least 75% of public schools students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program, and a community located on lands belonging to a federally recognized CA Indian tribe" as eligible for LCFS holdback expenditure on equity projects (pp. 12-13).

- Additional informational and operational questions about the LCFS programs to be answered in the Implementation Plan.

The annual holdback credit revenue percentage requirements for CARB and CPUC are summarized in the table below:

Table 3: Holdback Credit Revenue Requirements

| Requirement | 2021 | 2022 | 2023 | 2024-onwards |
|--|------|------|------|--------------|
| CARB Equity % (based on proceeds) | N/A | 30% | 40% | 50% |
| CPUC Equity % (based on expenditure) | 35% | 45% | 55% | 75% |
| CPUC Resiliency % (based on proceeds) | <20% | <20% | <20% | <20% |

Per D.20-12-027, PG&E must develop and propose programs for the use of the LCFS holdback credit revenue to comply with the annual requirements in both CARB’s LCFS regulation as well as the requirements in that decision. In this 2023 LCFS Implementation Plan, PG&E proposes programs in addition to the 2021 LCFS Implementation Plan’s approved programs in order to comply with the 2024-2025 annual requirements. PG&E will continue to develop and propose additional programs, as well as adjust current ones, to comply with future annual requirements.

CARB has opened a rulemaking to propose amendments to the LCFS regulation, which may involve changes to the utility requirements.¹⁸ PG&E will comply with all regulation amendments once approved and make any adjustments to current or proposed programs as needed to meet the requirements.

B. Summary of PG&E’s 2021 LCFS Implementation Plan

PG&E proposed four holdback programs and one non-holdback program as part of its 2021 LCFS Implementation Plan.¹⁹ The CPUC approved all five programs in December 2021, and PG&E began the solicitation and setup process for these programs in 2022. The 2021 Implementation Plan focused on immediate compliance with spending requirements (which started in 2022 and ramped up in future years) and the PG&E team anticipated that additional programs would be needed to reach compliance in 2024 and after. It also allowed the PG&E team to test assumptions about program performance and participation with the first round of programs and develop the second round with setup/launch experience and two more years of understanding how the market has evolved.

¹⁸ CARB, Low Carbon Fuel Standard 2023 Amendments Standardized Regulatory Impact Assessment, Sept. 8, 2023, available at: https://ww2.arb.ca.gov/sites/default/files/2023-09/lcfs_sria_2023_0.pdf (accessed Oct. 19, 2023).

¹⁹ Advice Letter (AL) 6226-E, PG&E’s 2021 Low Carbon Fuel Standard Implementation Plan, filed June 15, 2021, and AL 6336-E-A, filed October 6, 2021. The public versions with Energy Division’s December 24, 2021, disposition letter approving the Implementation Plan can be found at: https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E.pdf and https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6226-E-A.pdf.

PG&E received approval to launch four holdback programs from its 2021 LCFS Implementation Plan:

- **Pre-Owned EV Rebate:** Launched in February 2023, this program provides a post-purchase rebate for pre-owned EVs, with a \$1,000 base rebate and a \$4,000 rebate for income-qualified customers. As proposed, the program will accept applications through the end of 2024 and then close out in 2025. Given slower-than-expected uptake of used EVs, the program will have plenty of budget remaining, and PG&E requested to extend the program two years in Advice Letter 7064-E, filed with the CPUC on November 10, 2023.
- **Multi-Family Housing (MFH) and Small Business Direct Install:** Launched in June 2023, this pilot installs lower-power chargers (Level 1 or Level 2) at MFH and small business sites that have excess capacity on their electric panel. The installation is done at no cost to the host for sites in equity communities (which the pilot will exclusively focus on in its first phase), and with a cost share for other sites. PG&E is complementing the infrastructure investment with an education campaign for the residents/tenants of each site. The pilot will complete installations through mid-2025.
- **Resilient Charging (known publicly as “evPulse for PG&E”):** Launched in August 2022 and closing at the end of 2023, this pilot provides third-party software to communicate with customers and/or actively manage EV charging for the customer prior to a Public Safety Power Shutoff (PSPS) event to ensure they are fully charged during an emergency. There were no PSPS events called in 2022, so the pilot was extended by one year to run for a second fire season and test other managed charging techniques that could be used to support other kinds of grid resiliency (for example, responding to CAISO Flex Alerts).
- **Residential Charging Solutions:** Launching in Q4 2023, this pilot will provide a \$700 rebate for customers that purchase a qualified outlet splitter or load-limiting smart charger, both of which can help customers electrify while avoiding an electric panel upgrade. PG&E revised this pilot to focus exclusively on income-qualified customers after approval, which required rescoping some of the pilot’s administration and delayed its launch. As a result, PG&E requested to extend the pilot until the budget runs out in Advice Letter 7064-E, filed with the CPUC on November 10, 2023.

These programs will overlap with the new programs proposed below, and compliance will be managed on a portfolio level.

Resilient Charging will close at the end of 2023, with closeout occurring in 2024. The MFH & Small Business Direct Install pilot will close to applications at the end of 2024 and complete installations in 2025. If the extensions are approved, the Pre-Owned EV Rebate and Residential Charging Solutions pilots will close when they run out of budget, estimated at the end of 2026 and 2025, respectively. Closeout activities will occur for about six months after the programs close to new applications.

PG&E also proposed one program funded by the credit proceeds from workplace charging at PG&E offices and EV Charge Network (EVCN)/EV Schools and Parks charging stations that PG&E owns:

- **Research and Innovation (R&I) Fund:** Launching in Q4 2023, this fund will support small proof-of-concept pilots for nascent technologies and research studies to fill in data gaps in support of accelerating widespread transportation electrification. Potential project categories that would

be funded by the R&I fund could include data & analysis (e.g., market trends and customer needs), hardware (e.g., safety testing of a streetlight-mounted charger), or software (e.g., discrete testing of automated load management technology).

The R&I Fund is rolling, with the revenue earned the prior year(s) setting the available budget for projects in the following year. The budget for the following year is included in the LCFS Forecast Advice Letter filed in September.

C. Electric Revenue Program Portfolio Strategy

PG&E's LCFS electric credit revenues offer a unique opportunity to implement programs addressing barriers to EV adoption in support of California's ambitious and broad zero-emission vehicle goals without requiring utility ratepayer funding.²⁰ Per the requirements in Section 3.11 of D. 20-12-027, PG&E has developed guiding principles and a program development process to form a holistic strategy for the use of LCFS revenue, to be complementary with the Utility's existing and planned transportation electrification (TE) efforts including, but not limited to: customer TE infrastructure and non-infrastructure program and pilot offerings; EV-specific rates; Marketing, Education, and Outreach (ME&O); stakeholder engagement; and the Transportation Electrification Framework (TEF). The following subsections describe the general LCFS program development process and the overarching structure of PG&E's LCFS Electric Revenue Program Portfolio.

1. Guiding Principles

All customer segments continue to face the well-known barriers to EV adoption: lack of access to charging infrastructure, availability and affordability of suitable vehicles, and insufficient education and awareness. LCFS offers a unique opportunity to use the revenue generated by users of clean transportation fuel to continue to address those barriers in innovative and strategic ways, especially as the market continues to change. PG&E intends to use the LCFS revenue to fund programs and pilots that are shorter in duration (five years or fewer). This approach allows PG&E to focus on generating lessons learned that can be quickly leveraged for larger-scale programs and to refine future pilot proposals.

PG&E's overarching goal is that LCFS-funded program design is nimble and flexible, enabling PG&E to quickly incorporate lessons learned into existing and future programs, and pivot to address emerging EV market needs. Under this overarching goal, PG&E has developed four principles that guide program design and evaluation:

- Maximize Benefits to Utility Customers
- Support EV Awareness & Adoption
- Advance the State's Equity, Resiliency, and Climate Goals
- Efficiently Use Funding

²⁰ Governor Newsom's Executive Order N-79-20, available at <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

Together, these guiding principles ensure programs are supporting customers, advancing transportation electrification, and fulfilling the intent and requirements of CARB and CPUC regulations for the use of the revenue. Some examples of how the principles support specific decision requirements are shown in the table below:

Table 4: Guiding Principles for LCFS Program

| Guiding Principles | Provide flexibility, incorporate lessons learned and pivot to address EV Market Needs | | | |
|---|---|---|---|---|
| | Maximize Benefits to Utility Customers | Support EV Awareness & Adoption | Advance State's Equity, Resiliency and Climate Goals | Efficiently Use Funding |
| Program Criteria from LCFS Decision 20-12-027 | Benefit only current and future EV drivers (3.11) | Address barrier to TE/equity/resiliency (3.11) | Demonstrate input from Environmental Justice (EJ) and Community Based Organizations (CBOs) (3.11) | Collect data to evaluate program effectiveness (3.11) |
| | Address gaps in utility program offerings (3.11) | Coordination with IOUs on second-hand vehicle rebate program (3.11) | Demonstrate how equity projects will benefit equity communities (3.11) | Demonstrate cost-effectiveness for battery swap program (3.11) |
| | Demonstrate coordination with local entities for resiliency projects (3.10) | | Demonstrate how expenditure supports resiliency (3.11) | Align resiliency projects with other resiliency/Vehicle Grid Integration (VGI) efforts (3.10) |

Note: The specific section in D.20-12-027 where the criteria can be found is included in parentheses

PG&E will use these guiding principles in the prioritization and design of programs that effectively support EV adoption and address market needs. PG&E will also use the principles to develop a portfolio of programs that is diverse in the barriers it addresses, and the customer segments it serves.

2. Program Development Process

PG&E created a framework for ongoing LCFS program development that incorporates internal and external stakeholder feedback at various stages of the process. Stakeholder engagement is critical to understanding the needs of the customers to be served by the programs, especially those in equity communities. PG&E utilized the following process in the development of the program proposals in this Implementation Plan:

- **Ideation:** PG&E works with internal and external stakeholders to identify additional barriers to TE, perform gap analyses, and solicit program ideas to address specific market and customer needs. This involves engagement with community-based organizations (CBOs), environmental justice (EJ) groups, market vendors, state agencies, local entities, utilities, and others.

- **Prioritization:** PG&E’s Clean Energy Transportation (CET) team develops program sketches and presents them to a diverse internal Steering Committee, with members from the Clean Energy Transportation, Grid Planning, Customer Resiliency, Vehicle Grid Integration (VGI), and Income Qualified and Disadvantaged Community Programs teams, to assess program sketches based on guiding principles and evaluation criteria and prioritize programs for development.
- **Development:** PG&E’s CET team develops full program proposals, designing the goals, scope, and budget with input from key internal and external stakeholders, including similar external stakeholders as identified in the ideation stage.
- **Finalization and Filing:** Final program design is refined with continued stakeholder input and finalized with PG&E executive approval. PG&E’s CET and Regulatory Affairs teams develop the Tier 2 Advice Letter for filing of new program proposals to update the Implementation Plan.

PG&E will continue to leverage this process for future program proposals.

3. Portfolio Structure

PG&E’s LCFS Electric Program Portfolio will consist of LCFS overhead operations, pilots and programs, and Marketing, Education, and Outreach (ME&O) coordinated with the Utility’s overall TE ME&O. Each of these elements are described in more detail in the sections below.

Overhead Operations

The Utility must maintain ongoing business operations, like program management and credit reporting and sales, to generate revenue from LCFS credits. A brief description of each type of overhead cost is provided:

- **Program Management:** Personnel to manage PG&E’s LCFS program participation, including LCFS reporting to CARB for credit generation, LCFS reporting to the CPUC for forecasted and historical revenue and expenditures, development of the CPUC LCFS Implementation Plan, support for the statewide California Clean Fuel Reward, and LCFS regulatory coordination.
- **Credit Sales:** Personnel to implement PG&E’s sale of electric credits.

PG&E must maintain these essential functions to generate LCFS revenue to return to customers via the CCFR and approved programs. Therefore, PG&E will track and report these activities separate from any specific program administrative cost. More detail on cost of overhead operations is included in the Annual LCFS Forecast Advice Letter and annual revenue report. There are no changes to this category of costs from the 2021 Implementation Plan.

Programs

LCFS revenue is an important tool to support the State’s ambitious goals and benefit customers in concert with the Utility’s ratepayer TE programs and activities. As a result, the LCFS programs are designed to be closely aligned with the utility’s overarching TE strategy to support all customer segments.

The programs will fall into one of two categories depending on the source of credit revenue used to fund the program:

- **Holdback Programs** – funded with holdback credit revenue and previously generated electric forklift credit revenue. These are subject to the revenue requirements listed in Table 2 and

other specific holdback program requirements listed in D.20-12-027 and in CARB’s LCFS regulation.

- **Non-Holdback Programs** – funded with revenue from non-residential EV charging credits including those from PG&E workplaces, PG&E-owned chargers in the EVCN Program, and other credit sources that may be generated in the future. These are subject to the LCFS revenue requirements in CARB’s LCFS regulation.

The 2021 Implementation Plan proposed four holdback programs and one non-holdback program. This 2023 Implementation Plan proposes four additional holdback programs. The existing non-holdback program will continue without changes from the original implementation plan.

The programs may be of varying lengths and the Utility will continue to propose new programs for the portfolio, via a Tier 2 advice letter, to address emerging customer needs and meet the LCFS Holdback Decision requirements.

Marketing Education & Outreach

Per Section 3.15 of the LCFS Holdback Decision, the utilities are to describe how their LCFS-related ME&O efforts are leveraged across their TE portfolios and demonstrate that there are no duplicative efforts. As described in each program proposal in the section below, PG&E plans to utilize a variety of ME&O approaches to effectively reach the customers each program aims to serve. The ME&O strategies may be executed by PG&E, the third-party program implementer, a CBO, or a combination of all three.

PG&E’s existing portfolio of LCFS-funded and ratepayer-funded TE programs represent an excellent opportunity to cost-effectively and efficiently educate customers about the multiple offerings open to them. With the approval of the programs in this Implementation Plan, income-qualified customers will have access to three programs reducing the cost of purchasing a used EV, installing home charging, and using public charging – plus already-available home EV rates – all of which are major components of the total cost of owning an EV. As a result, this suite of programs may be marketed together, and a participant in one will receive follow-up information on the others (including using participation in one program as proof of income qualification for another wherever possible).

Some examples of ME&O activities that may be conducted by PG&E, a third-party implementer, or a CBO include:

- **Email:** Multi-touch email campaigns to engage target audiences on key program details, identify key decision makers, and drive customer acquisition online. Emails are low-cost and have been highly effective in driving awareness of and participation in current LCFS programs.
- **Digital Newsletters:** PG&E has ongoing digital outreach to residential and non-residential customers through quarterly newsletters and packaged content by industry segment when applicable, enabling LCFS program promotion opportunities.
- **Social Media:** PG&E and partner posts about programs which may include targeted paid posts to key customer segments helping to promote program participation.
- **Events:** PG&E and its CBO partners may attend local events, especially EV-focused ones, to provide timely information to customers via flyers and in-person discussions
- **Other Messaging:** Integrated messaging with other utility programs, resources, and tools.

Where possible, PG&E will produce materials in multiple languages (may include English, Spanish, and Simplified Chinese, as well as other languages, as appropriate).

All ME&O will be in support of a specific LCFS program and will not be used for general EV customer education. Messaging and outreach strategies will be focused to all customers eligible for a particular program, regardless of their load serving entity. More detail on the general ME&O plan for each program is included in Section D below.

ME&O by Community-Based Organizations

PG&E is committed to increasing awareness of and participation in the LCFS programs by equity customers who may not be reached through traditional channels, like those listed above. To that end, in addition to the targeted outreach to the hard-to-reach customers done by the utility and/or implementer, PG&E will continue to work with CBOs for conducting outreach and marketing to equity customers and communities about the specific LCFS programs.

PG&E used a Request for Proposal (RFP) to contract with four CBOs in the San Joaquin Valley, the Central Coast, and the Bay Area to support outreach to equity customers and communities about all the holdback programs that are applicable to them. The contracts with the CBOs are at a portfolio level instead of an individual program level, in response to CBO concerns that it is ineffective to educate customers about a single program or support only one aspect of the TE journey for customers. The four CBOs each put together a Community Engagement Plan that laid out the activities they would undertake to raise awareness of the programs, based on the unique strengths of each organization. These activities include organization newsletter posts, social media, presentations and webinars, in-person events like attendance at ride-and-drives, dealership outreach, and cross-marketing with other non-PG&E programs the organization is involved in.

In addition, some CBOs do “case management” with customers, which is one-on-one support to help customers collect needed documentation, apply for programs, or even research EVs or charging needs. Case management can be a very effective way to help customers that need extra support to navigate a program, especially if there is a language barrier. It also can greatly simplify the participation experience for a customer if a trusted partner that understands the requirements can help them through each step of the process. While not all customers require this level of support, having these community partners available as resources can make a difference for many.

PG&E intends to continue its partnership with CBOs for this 2023 Implementation Plan. The LCFS team will mine the current CBO pilot for learnings on the solicitation/contracting structure, outreach activity effectiveness, metrics, reporting, and more. The team will use the findings to design and run another solicitation to expand the work with CBOs to a new set of programs and regions of the service territory.

Evaluation

The ability to constantly assess program impacts and adjust approaches based on market realities is a hallmark of how PG&E will implement these programs. To this end, PG&E has included a 1.5% evaluation budget for each customer program. This will be used to regularly collect and analyze data to assess each program's performance, barriers, customer pain points, and opportunities. In addition, PG&E will be strategic with this funding based on the specific needs and challenges of each program. For

example, PG&E might consider a process evaluation above and beyond what is conducted internally to learn about what program procedures and requirements could be improved or conduct a study that explores why enrollment among a particular customer segment was poor.

Each pilot program described below includes a short discussion on the types of data that will be collected to aid in evaluation efforts. PG&E will determine the specific evaluation needs of each program once the programs have been launched and the program team can observe opportunities for study.

4. Portfolio Budget

The LCFS portfolio budget will consist of the annual total budget for each program in the portfolio for the number of years that each program is proposed to have expenditures. The portfolio budget is based on PG&E's internal LCFS revenue forecast for the program implementation years. The revenue forecast uses the same methodology for LCFS credit prices and residential and non-residential EV charging assumptions as what is used for PG&E's Annual LCFS Forecast Advice Letter.²¹

The portfolio budget is subject to change based on adjustments to individual program design during the program set-up phase or implementation as explained in the program proposals. Changes to the LCFS market, including the LCFS credit price, may also impact the budget. PG&E will not spend any LCFS revenue that has not already been generated and deposited in the balancing account and therefore the program budgets may need to be adjusted if the forecasted revenue is impacted.

PG&E will continue reporting on the LCFS revenue expenditures from the LCFS portfolio in the Annual LCFS Forecast Advice Letter and the annual LCFS Revenue Report per the reporting obligations established by D.14-05-021, D.14-12-083, and Resolution E-5015. PG&E will also update the portfolio budget in the Implementation Plan any time new programs are proposed and the Plan is updated via a Tier 2 AL.

D. 2023 LCFS Electric Program Portfolio

PG&E provides information regarding its plans for the return of revenue to eligible electric customers pursuant to Item 6.a through 6.i of Appendix A:

- Tier 2 Advice Letter Filing Requirements in D.14-12-083,
- Discussion sections of D.14-12-083, and
- Information requested in the discussion sections of D.20-12-027.

²¹ Details on the assumptions for the forecast can be found in PG&E's Annual LCFS Forecast AL.

1. Overview of Programs

Pursuant to Section 3.11 of D. 20-12-027, PG&E proposes four LCFS Holdback programs to benefit current and future EV drivers. PG&E provides a summary of the program proposals, each of which are detailed in the sections below.

Table 5: PG&E 2023 LCFS Holdback Program Proposals

| Proposed Program/Pilots | Barrier(s) Addressed | Focus | Estimated Program Duration | Estimated Total Budget |
|---|--|------------|----------------------------|------------------------|
| Affordable Public Charging | Total Cost of Ownership | Equity | 2024-2028 | \$28.8M |
| Residential Charging Solutions Expansion (Panel & Flexible Electrification Support) | Access to Infrastructure, Total Cost of Ownership, and Education and Awareness | Equity | 2024-2027 | \$19.3M |
| Resilient Fleets | Access to Infrastructure, and Education and Awareness | Resiliency | 2024-2028 | \$2.5M |
| Capacity | Access to Infrastructure | Equity | 2024-2026 | \$20.0M |

Note: program duration timeframe is dependent on CPUC approval of the 2023 LCFS Implementation Plan. The timeframes also include setup and closeout periods where the program will have expenditures but will not be open to customers.

The 2023 proposed Holdback programs/pilots are designed to complement current LCFS and ratepayer programs and provide a multi-faceted set of solutions to support various aspects of transportation electrification. All three equity programs/pilots proposed are for the sole benefit of income-qualified customers (Affordable Public Charging, Residential Charging Solutions) and priority communities (Capacity). The Resilient Fleets pilot may benefit customers in priority communities, but as it is not the primary focus, none of the program spend for this pilot will be counted towards equity requirements.

PG&E will propose additional LCFS programs as existing LCFS programs sunset, customer needs emerge, and changes to the LCFS regulation are made.

2. Proposed 2023 LCFS Portfolio Budget

PG&E has developed an approximate budget for the 2023 LCFS Portfolio pursuant section 3.11 in D. 20-12-027. As mentioned previously, any LCFS revenue that has not already been generated and deposited in the balancing account, and therefore the program budgets, may need to be adjusted if the forecasted revenue is impacted.

PG&E has developed these programs and budgets based on market analysis, program design best practices, and stakeholder engagement. However, PG&E is aware that it can only offer these programs to customers and encourage their participation through effective ME&O – it cannot control customer interest, participation, or other market factors that may influence participation (e.g., economic downturns). Therefore, the budgets of the individual programs may be adjusted within the overall

portfolio budget to meet customer demand and market needs. Table 6 below shows PG&E’s current and proposed portfolio of LCFS Holdback-funded programs.

Table 6: Estimated LCFS Holdback Portfolio Budget (\$M)

| | Program/Pilot | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
|--------------------------------|---|----------------|----------------|----------------|----------------|---------------|-----------------|
| New Programs | Affordable Public Charging* | \$0.20 | \$5.30 | \$11.39 | \$8.87 | \$3.08 | \$28.84 |
| | Residential Charging Solutions Expansion* | \$1.95 | \$8.42 | \$8.58 | \$0.32 | \$0 | \$19.27 |
| | Resilient Fleets*** | \$0.40 | \$1.59 | \$0.17 | \$0.17 | \$0.17 | \$2.50 |
| | Capacity* | \$8.14 | \$10.59 | \$1.31 | \$0 | \$0 | \$20.04 |
| New Programs Total | | \$10.68 | \$25.90 | \$21.45 | \$9.36 | \$3.25 | \$70.64 |
| Existing Programs | Pre-Owned EV Rebate** | \$17.08 | \$26.90 | \$30.66 | \$3.76 | \$0 | \$78.40 |
| | MFH/Small Business Direct Install** | \$17.04 | \$4.07 | \$0 | \$0 | \$0 | \$21.11 |
| | Residential Charging Solutions* | \$0.50 | \$0 | \$0 | \$0 | \$0 | \$0.50 |
| | Resilient Charging*** | \$2.56 | \$3.06 | \$0.85 | \$0 | \$0 | \$6.47 |
| Existing Programs Total | | \$37.18 | \$34.02 | \$31.51 | \$3.76 | \$0 | \$106.48 |
| Portfolio Total | | \$47.87 | \$59.93 | \$52.96 | \$13.12 | \$3.25 | \$177.12 |

Note: numbers may not add up due to rounding. The Existing Programs total only includes remaining spend on these programs.

* Denotes a program/pilot with 100% of its spend focused on equity (income-qualified customers or priority communities)

** Denotes a program/pilot with a portion of its spend focused on equity (income-qualified customers or priority communities) through a higher incentive available to these groups

*** Denotes a pilot focusing on resiliency. Though the pilots may support income-qualified customers or priority communities, none of the spend is counted towards equity requirements.

While this implementation plan only covers new programs, annual compliance is determined by the overall spend across PG&E’s LCFS Holdback portfolio.

Table 7 below shows total expenditures for the currently running LCFS programs, plus the four new programs, and the impact on the four compliance requirements from the CPUC and CARB. PG&E will shift funding in the portfolio between programs to meet CPUC and CARB compliance requirements and better serve customers based on participation and needs. Compliance is shown for 2024 through 2026. PG&E will propose additional programs through a future implementation plan to demonstration in compliance in 2027 and beyond.

Table 7: Estimated Holdback Portfolio Budgets by Expenditure Category and Compliance Target (\$M)

| Category | 2024 | 2025 | 2026 |
|---|----------------|----------------|----------------|
| Value to the Customer ²² | \$42.48 | \$52.88 | \$47.54 |
| Program Administration | \$3.66 | \$4.53 | \$3.33 |
| Program ME&O | \$1.24 | \$1.73 | \$1.48 |
| Program Evaluation | \$0.49 | \$0.79 | \$0.61 |
| Total Expenditure | \$47.87 | \$59.93 | \$52.96 |
| Total Equity Expenditure | \$35.91 | \$45.65 | \$39.76 |
| CPUC Equity Expenditure Target (%) | 75% | 75% | 75% |
| PG&E Equity Expenditure to CPUC Target (%) | 75% | 76% | 75% |
| CARB Equity Proceeds Target (%) | 50% | 50% | 50% |
| PG&E Equity Proceeds to CARB Target (%) ²³ | █ | █ | █ |
| CPUC Resiliency Proceeds Target (%) ²⁴ | ≤20% | ≤20% | ≤20% |
| PG&E Resiliency Proceeds to CPUC Target (%) ²⁵ | █ | █ | █ |
| CARB Equity Admin Expenditure Target ²⁶ | ≤10% | ≤10% | ≤10% |
| PG&E Equity Admin Expenditure to Total Equity Expenditure | 9% | 9% | 7% |

²² Depending on the program, this may include direct customer incentives, installation costs, tool development, and capital expenditures.

²³ CARB’s equity compliance expenditure is determined by dividing the equity expenditure by the proceeds earned for the prior year. If PG&E spends more than it earns that year (i.e., by using banked funds), then the compliance rate for CARB’s equity target will be higher than the compliance rate for the CPUC’s equity target.

²⁴ D.20-12-027, Ordering Paragraph 1 requires that a portion of LCFS holdback expenditures must be expended on resiliency projects in an amount up to 20 percent of that year’s LCFS holdback proceeds unless the utility demonstrates why it is unable to do so.

²⁵ PG&E’s explanation for these expenditure levels is provided on p. 57 of this Implementation Plan.

²⁶ 17 CCR § 95483 (c)(1)(A)(6)(c), pp 36, states “Administrative costs to support the development and implementation of holdback credit equity projects must not exceed 10 percent of total spending on holdback credit equity projects annually unless the EDU contracts with a community-based organization, and the exceedance is approved in advance by the Executive Officer”.

Detailed budgets for the four new/expanded programs are provided in Table 8 below.

Table 8: Detailed 2023 LCFS Program Budgets (\$M)

| Category | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
|---|---------------|----------------|----------------|---------------|---------------|----------------|
| Affordable Public Charging | | | | | | |
| Incentives | \$0 | \$3.76 | \$9.64 | \$8.14 | \$2.46 | \$24 |
| Administration | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| TOTAL | \$0.20 | \$5.30 | \$11.39 | \$8.87 | \$3.08 | \$28.84 |
| Residential Charging Solutions Expansion | | | | | | |
| Incentives | \$1.55 | \$7.45 | \$7.45 | \$0 | \$0 | \$16.45 |
| Administration | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| TOTAL | \$1.95 | \$8.42 | \$8.58 | \$0.32 | \$0 | \$19.27 |
| Resilient Fleets | | | | | | |
| Playbook Development | | | | | | |
| Administration | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| TOTAL | \$0.40 | \$1.59 | \$0.17 | \$0.17 | \$0.17 | \$2.50 |
| Capacity Pilot | | | | | | |
| Capital Expenditures | \$7.98 | \$10.26 | \$1.14 | \$0 | \$0 | \$19.38 |
| Administration | \$0.16 | \$0.33 | \$0.17 | \$0 | \$0 | \$0.66 |
| TOTAL | \$8.14 | \$10.59 | \$1.31 | \$0 | \$0 | \$20.04 |

Note: numbers may not add up due to rounding.

3. Stakeholder Engagement

Per requirement 4a in Section 3.11 of D.12-20-027 and as described in Section B.2 “Program Development” of this Implementation Plan, PG&E engaged a multitude of internal and external stakeholders in the development of the LCFS programs for the 2023 LCFS Implementation Plan. Stakeholder engagement is critical to the development of successful and effective programs, particularly for programs serving equity customers. Over the past year, the CET team engaged over forty different stakeholders through individual and group meetings to identify specific gaps in PG&E’s support for customers, brainstorm potential program solution ideas, and then develop the ideas into the full-scale program proposals included in the Implementation Plan.

The internal PG&E stakeholders engaged include representatives from teams across the company, including Income-Qualified Programs, Decarbonization, Service Planning, Resiliency, Tribal Communities, Environmental and Social Justice, and Local Public Affairs. Nearly fifty PG&E employees contributed to the development of these programs.

External stakeholders engaged include Valley Clean Air Now (Valley CAN), Ecology Action, the San Joaquin Valley Clean Energy Organization (SJVCEO), Breathe California, GRID Alternatives, Natural Resources Defense Council, Center for Sustainable Energy, California Integrated Transit Project (Cal-ITP), Rebel Group, Tesla, Central Coast Community Energy, the Utility Reform Network (TURN), CalAdvocates, CARB, Energy Division, and more. PG&E also presented the program ideas to 28 other organizations, Community Choice Aggregators (CCAs), and city/county governments as part of four PG&E advisory groups: the Community Perspectives Advisory Council, Communities of Color Advisory Group, the Transportation Electrification Stakeholder Advisory Group, and a standing bimonthly call with the CCAs. PG&E also meets monthly with Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDGE) to coordinate on general LCFS program approaches, and on an ad hoc basis to align on specific program design when needed.

Stakeholders provided invaluable feedback and recommendations for specific aspects of the programs and PG&E adjusted the design, scope, target customers, and ME&O approach, among other things, of the programs in response. Specific feedback from stakeholders on each program and how PG&E incorporated it into the program design is included in each program proposal.

4. Holdback Program Proposals

There are four proposed Holdback Programs funded by PG&E's holdback credit revenue: an Affordable Public Charging Program, an expansion to the Residential Charging Solutions Program (for Panel & Flexible Electrification Support), a Resilient Fleet Charging Playbook, and a Capacity Pilot. Each of these are described in more detail in the subsequent sections.

Program #1: Affordable Public Charging

PG&E and SCE propose to jointly fund and operate a program that provides subsidized public EV charging through preloaded debit cards to their income-qualified EV customers. This will enable a common customer experience across a large portion of the state, a reduction in overall administrative costs, and will serve as a demonstration that could eventually be scaled to cover all income-qualified EV drivers in the state. Pending CPUC approval of the program, PG&E and SCE plan to set up the program in Q3 2024 – Q2 2025 and launch the program in Q2 2025.

| Affordable Public Charging Program | |
|------------------------------------|---|
| Customer Segment | Residential income-qualified customers |
| Program Design | Provide a weekly public EV charging credit to income-qualified customers via a prepaid debit card that can be used at physical payment terminals and network apps |
| Implementation Structure | Third-party implemented – implementer responsible for application processing and issuing rebates across both utilities |
| Program Goals | <ul style="list-style-type: none"> • Reduce the operating cost of an EV to make them more affordable for low-income customers • Decrease the fueling cost disparity between EV owners at single-family homes that can take advantage of EV rates and multifamily residents/renters that may not be able to • Support near-term EV adoption |
| Timeframe & Launch Date | 2024-2028; Q2 2025 (anticipated) |
| Total budget | \$28.84 million (PG&E share of program funding) |
| Funding source | Residential holdback revenue |
| Focus | Equity |

Policy and Market Support

Barriers Addressed

One of the largest benefits of driving an EV is that the cost of fueling with electricity can be significantly lower than purchasing gasoline, leading to ongoing savings for EV drivers. A customer on PG&E's EV-2A rate that charges exclusively off-peak enjoys a stable eGallon rate of \$2.21²⁷ – compared to an average of \$5.31²⁸ for gasoline, which can also fluctuate widely depending on time of year, geopolitical events, and other factors. In addition to EV rates, income-qualified customers can also take advantage of the California Alternative Rates for Energy (CARE) or Family Electric Rate Assistance (FERA) program, which provide substantial discounts on the cost of home electricity usage, including at-home EV

²⁷ See PG&E Electric Vehicle Rate Plans, available at https://www.pge.com/en_US/residential/rate-plans/rate-plan-options/electric-vehicle-base-plan/electric-vehicle-base-plan.page. (accessed Oct. 9, 2023).

²⁸ Average 2022 cost for regular gasoline in California. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, https://www.eia.gov/dnav/pet/PET_PRI_GND_DCUS_SCA_M.htm. (accessed Oct. 9, 2023).

charging. A customer on CARE and the EV-2A rate charging off-peak would pay just \$1.44 per eGallon.²⁹

However, some customers that are not able to charge their EV at home and instead rely on public charging. As a result, these customers are not able to take advantage of the rate structures and savings. Residents of multifamily housing, renters where landlords will not allow for upgrades like EV charging station installation, or single-family homeowners that must use street parking all face challenges finding affordable and reliable public charging stations. There are over 2 million renter-occupied dwellings in counties across PG&E's service territory – 40% of all the housing here – indicating a significant number of customers that are less likely to have access to affordable charging.³⁰

Low-income customers are more likely to be renters – 60% of people in the lowest income quartile are renters, compared to just 10% at the highest quartile.³¹ Black and Hispanic households are twice as likely to rent as White households.³² As a result, the people that most need low-cost electricity rates to be able to afford an EV are the ones least likely to have access to it. Instead, they often must use more expensive public charging. If a driver must rely solely on public direct current fast charging (DCFC), their annual fueling costs may be over twice as much than someone with access to home charging (see Table 9 below), dramatically decreasing the total cost of ownership benefits over a gas-powered vehicle.

Public charging is more expensive than at-home charging for several reasons. For at-home charging, the cost for charging is the cost of electricity via CPUC-approved rates. However, public charging rates are set by the station owner or EV Service Provider (EVSP) to cover the cost of electricity, the station's installation, connectivity and networking, maintenance, overhead, and profit, among other potential costs and variables. Some businesses and EVSPs offer free or discounted level 2 charging to their customers, where the business or advertising revenue covers the cost of the electricity, but they often have dwell-time restrictions to serve more customers and therefore generally cannot be used for a full charge and are not intended to serve as a driver's primary charging source. On the opposite end of the spectrum, DCFC can provide about 80% of a vehicle's battery charge in 30 minutes, but DCFC stations are usually more expensive and can be less convenient if the customer must drive out of the way to one or wait for a station to free up.

In addition, people with access to home charging or dedicated multifamily charging are most able to take advantage of time-of-use rates, which are cheapest overnight. Drivers reliant on public charging may have to charge opportunistically during the day, even if this subjects them to much higher on-peak rates. Some public charging may not even be available, practical, or safe during those cheapest off-peak hours if the businesses nearby are closed (i.e., customers generally do not leave their vehicle at a grocery store

²⁹ See PG&E Electric Vehicle Rate Plans, available at https://www.pge.com/en_US/residential/rate-plans/rate-plan-options/electric-vehicle-base-plan/electric-vehicle-base-plan.page. (accessed Oct. 9, 2023).

³⁰ See “Total Number of Housing” field in the interactive tool. PG&E, “Demographics,” available at https://www.pge.com/en_US/large-business/services/economic-development/opportunities/resources-and-data/demographics.page (accessed Oct. 20, 2023).

³¹ Pew Research Center, “As national eviction ban expires, a look at who rents and who owns in the U.S.” Drew DeSilver, August 2021. <https://www.pewresearch.org/short-reads/2021/08/02/as-national-eviction-ban-expires-a-look-at-who-rents-and-who-owns-in-the-u-s> (accessed Oct. 4, 2023).

³² Ibid.

overnight). Entities may also choose to use more restrictive time-of-use rates than PG&E to minimize congestion of their stations. For example, PG&E’s off-peak hours are from midnight to 3pm, whereas EVGo’s off-peak hours are from midnight to 8am.³³

Simply put, average public charging rates are often more expensive than average home electric rates, and customers relying on public charging do not have the same flexibility or convenience as home-charging, resulting in charging during more expensive times of the day and at more expensive locations. Table 9 shows the difference in rates between at-home and public charging based on publicly available data. Note that many charging apps only advertise the cost to charge at a station at the time the customer is viewing the data, so there is no easy way to determine whether there are cheaper times to charge.

Table 9: At-Home and Public Charging Rates

| Entity | Range of Rates (per kWh) | Charging Type | Source |
|------------------------------------|---|--------------------|---|
| PG&E EV Charging Home Rate (EV-2A) | \$0.28 to \$0.59 | Level 1 or Level 2 | PG&E’s EV rates ³⁴ |
| Privately-owned charging stations | \$0.11 to \$0.59 | Level 2 | Surveys of customers on PG&E’s Business EV rate and participants in EV Charge Network ³⁵ |
| Privately-owned charging stations | \$0.31 to \$0.85 | DCFC | Survey of customers on PG&E’s Business EV rate ³⁶ |
| EVGo ³⁷ | \$0.36 to \$0.63, plus \$1 per session (pay as you go) \$0.24 to \$0.41 (subscription) | DCFC | EVGo ³⁸ |

³³ PG&E’s EV-2A Rates, available at https://www.pge.com/en_US/residential/rate-plans/rate-plan-options/electric-vehicle-base-plan/electric-vehicle-base-plan.page (accessed Oct. 4, 2023). EVGo Time of Use Pricing website, available at <https://www.evgo.com/pricing/tou/california/> (accessed Oct. 4, 2023).

³⁴ Ibid.

³⁵ Note that due to small response rates, the survey responses are not necessarily representative of other customers. Business Electric Vehicle (BEV) Rate Annual Performance Report, September 2022, page 30, https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_6701-E.pdf. The EV Charge Network data is from a PG&E survey of customers in 2021; pricing may have increased since then.

³⁶ Ibid.

³⁷ Electrify America and Tesla, two other major DCFC providers, have rates that can vary by charger, subscription plan, and time-of-day and are not published online. Electrify America publishes the real-time pricing on its phone app and at the charger. Tesla includes the real-time pricing on the vehicle’s console when a driver searches for a Supercharger. EVSPs, site hosts, or community members can upload the pricing to sites like PlugShare, but the information may be outdated.

³⁸ EVGo Time of Use Pricing website, available at <https://www.evgo.com/pricing/tou/california/> (accessed Oct. 4, 2023).

Approximately 80% of typical EV charging is performed at home,³⁹ and CARB’s posted LCFS data indicates that home charging accounts for approximately 3,200kWh per vehicle each year.⁴⁰ If this represents 80% of total EV charging that means that an additional 800kWh of public charging is performed each year, for a total of 4,000kWh per vehicle. Assuming an average of 4,000 kWh per vehicle per year, an off-peak CARE home EV-charging rate of \$0.20/kWh⁴¹ and a public charging rate of \$0.48/kWh, an income-qualified driver will pay over \$900 more – about twice as much – each year if all their charging is performed at public stations compared to 80% of their charging at home on a discounted rate.

While other programs at a federal, state, local, and utility level target access to public charging and reliability, this program will focus on reducing this cost disparity between at-home and public charging.

Program Alignment

To date, most programs related to public charging have provided incentives and/or project management support to install level 2 or DCFC charging stations at multifamily housing, workplaces, community centers, schools, parks, and other places where customers park their vehicles for extended periods. These programs, which include PG&E’s EV Charge Network, EV Fast Charge, EV Schools and Parks, and the Multifamily Small Business and Direct Install programs, aim to reduce the cost of commercial properties to provide the charging stations. However, they do not target the cost of charging at those stations once the project is completed.⁴²

Meanwhile, most programs centered on reducing the total cost of ownership for residential customers have either targeted the cost of the upfront vehicle purchase (such as PG&E’s Pre-Owned EV Rebate program), the charging station purchase for a single-family home, or home EV rates that can help customers avoid charging during peak periods and save them money while reducing strain on the grid. The latter two program designs generally only support customers in single-family homes.

CBOs have called attention to the higher cost of public charging and how it disproportionately affects renters. Because of how prices are set for public charging and the number of entities that are involved (i.e. site host, EVSP, utility), there are no simple solutions to reduce or mandate rates similar to how utilities

³⁹ Eighty-three percent of California EV drivers reside in detached houses, and these drivers charge primarily (≥84 percent) at home. Nicholas et al. (2019). Quantifying the Electric Vehicle Charging Infrastructure Gap Across U.S. Markets. The International Council on Clean Transportation. Available at <https://theicct.org/publication/quantifying-the-electric-vehicle-charging-infrastructure-gap-across-u-s-markets> (accessed Oct. 9, 2023).

⁴⁰ CARB’s VIN decoder and data for non-metered base credits, available at https://ww2.arb.ca.gov/sites/default/files/2023-07/BaseCreditingData_2023_07_forposting.xlsx (accessed Oct 9, 2023).

⁴¹ CARE discount applied to PG&E’s EV-2A Rates, available at https://www.pge.com/en_US/residential/rate-plans/rate-plan-options/electric-vehicle-base-plan/electric-vehicle-base-plan.page (accessed Oct. 4, 2023).

⁴² The site hosts choose what per-kWh pricing rate they want to use for these programs, even for charging stations that PG&E owns. PG&E does not mandate any rate or rate structure.

are regulated.⁴³ In the meantime, entities can provide discounts or credits that cover the cost of charging at those stations, especially to income-constrained customers. For example, OEMs or dealerships may provide customers with an incentive towards a home charging installation or public charging. Within the last year, several EV program administrators have also piloted these incentives, including:

- The Universal Equity Zero Emission Vehicle Charging Card demonstration project in 2022-2023 provided a \$1,000 public charging credit via a prepaid debit card to 98 participants in the Central Valley (learnings from the project were critical to the development of the PG&E/SCE program and are described in further detail in the “Stakeholder Feedback” section below).⁴⁴
- The Clean Vehicle Assistance Program (CVAP) offered either up to \$2,000 for a home charger installation or a \$1,000 public charging credit, but the program closed on June 23, 2023.^{45,46}
- The Clean Vehicle Rebate Project (CVRP) began offering a \$2,000 public charging debit card as of August 15, 2023. However, CVRP is nearly out of funding and applications after September 6, 2023, have been placed on a waitlist.⁴⁷

Even though other program administrators are considering these kinds of incentives, the patchwork of geographically-constrained pilots, participation requirements, and funding limitations means that customers may not have easy access. For example:

- All three of these programs are tied to a customer’s EV purchase. Customers that previously purchased their vehicle are not eligible for any of these credits.
- The CVAP charging credit was only available at EVGo and ChargePoint networks.
- The CVRP charging credit is only available to customers purchasing their vehicles new – pre-owned vehicles, which are more affordable, are not eligible.
- The Universal Equity Zero Emission Vehicle Charging Card demonstration project was open to Clean Cars 4 All (CC4A) participants in the Central Valley.
- The CVAP is closed, CVRP is likely to exhaust its funding shortly, and the Universal Equity Zero Emission Vehicle Charging Card demonstration project was a limited-run pilot.

⁴³ In D.10-07-044, the CPUC determined that the legislature did not intend for the CPUC to regulate providers of electric vehicle charging services as public utilities pursuant to Public Utilities Code Sections 216 and 218. The CPUC could mandate per-kWh pricing rates charged at utility owned and operated public charging stations, but the CPUC has moved away from utility ownership of behind-the-meter (BTM) infrastructure in D. 22-11-040 (“We find it appropriate to eliminate all IOU ownership of BTM infrastructure beginning with FC1 [Funding Cycle 1]. Such a shift in the ownership paradigm allows for technology and construction flexibility, while reducing the cost burden that capitalized IOU expenditures impose on ratepayers.” See page 101).

⁴⁴ Cal-ITP, “Universal Equity Zero Emission Vehicle Charging Card Project Demonstration Report,” Sept. 30, 2023, available at https://valleycan.org/wp-content/uploads/2023/10/Cal-ITP-Report-ValleyCAN-ZEV-Charge-Card_Sep-2023.pdf (accessed Oct. 18, 2023).

⁴⁵ Clean Vehicle Assistance Program Charging Grant Guidelines, available at <https://cleanvehiclegrants.org/wp-content/uploads/2022/06/CVAP-Charging-Grant-Guidelines-April-2022.pdf> (accessed Oct. 4, 2023).

⁴⁶ Clean Vehicle Assistance Program announcement, available at <https://cleanvehiclegrants.org/announcement/the-cva-program-is-now-closed-to-new-applications/> (accessed Oct. 18, 2023).

⁴⁷ Clean Vehicle Rebate Project Frequently Asked Questions, available at <https://cleanvehiclerebate.org/en/faqs> (accessed Oct. 18, 2023).

As a result, a joint PG&E/SCE program that serves all income-qualified EV drivers in both service territories greatly expands the availability of this needed support. Some customers may be eligible for multiple public charging credit programs, but since the PG&E/SCE program will use a debit card and only one card can be used per charging transaction, there is no double-dipping and a customer will have to choose which program to use for each transaction.

A public charging card incentive will enable PG&E to create a suite of EV programs available for income-qualified customers that will support them throughout their electrification journey. The Pre-Owned EV Rebate program provides a \$4,000 rebate for purchasing or leasing a used EV; Residential Charging Solutions and its Electrification Support expansion in this proposal support single-family homes with incentives for panel upgrades or other load-limiting technologies; and Affordable Public Charging supports customers with incentives for public charging. Because all these programs use the same income qualification, customers will be able to show participation in one of these programs to prove their income eligibility for the others.

The idea of a public charging credit is also being considered as a possible future expansion of the statewide California Clean Fuel Reward (CCFR) program, which is also funded by utility LCFS credit proceeds.⁴⁸ If the CCFR adds an income-qualified public charging credit to its offerings in later years, or if CARB or another entity launches a statewide public charging credit program, then PG&E and SCE would consider sunsetting this program early if the replacement statewide program has greater coverage and options for participants than the PG&E/SCE program. The PG&E/SCE Affordable Public Charging program would be discontinued after a period of overlap and customer communication to ensure customers are adequately served during the transition. In addition, PG&E and SCE would support the development of the fully statewide incentive with lessons learned from this program.

Alignment with LCFS Requirements

CARB's LCFS regulation provides a list of projects that qualify as Holdback Credit Equity Projects, including "[a]dditional rebates and incentives for low-income individuals beyond existing local, federal and State rebates and incentives including the Clean Fuel Reward for: promoting the use of public transit and other clean mobility solutions; and offsetting costs for residential or nonresidential EV charging."⁴⁹ Accordingly, the joint Affordable Public Charging Program should be considered an equity program, as it meets the LCFS requirement for an equity project by providing these services to PG&E's low-income customers.

⁴⁸ CARB is considering changes to the CCFR along with other amendments to the LCFS regulation. The updated regulation is expected to go to a Board vote in Q1 2024, with the regulation going into effect sometime later in 2024. See CARB, Low Carbon Fuel Standard 2023 Amendments Standardized Regulatory Impact Assessment, Sept. 8, 2023, available at: https://ww2.arb.ca.gov/sites/default/files/2023-09/lcfs_sria_2023_0.pdf (accessed Oct. 19, 2023).

⁴⁹ 17 CCR §95483(c)(1)(A)(6)(a)(vi).

Stakeholder Feedback

In developing concepts for the Affordable Public Charging program, SCE and PG&E collaborated with the staff at the California Integrated Travel Project (Cal-ITP), a team inside of Caltrans that is working to deploy a common-payment platform that works for all public transit agencies in California,⁵⁰ and ValleyCAN, a community-based organization that operates in the Central Valley. ValleyCAN is implementing a 100-participant pilot for Cal-ITP that integrates public charging on to the Cal-ITP platform for income-qualified customers that have participated in Clean Cars 4 All. Many of the proposed program features in the PG&E/SCE program come directly from suggestions made by the pilot team, including the use of debit cards over app-based participation and the recommendation to make it as easy as possible for the customer to enroll in the program at the same time they are acquiring their vehicle (for example, having a customer participate in both the Pre-Owned EV Rebate and Affordable Charging Programs at the same time). ValleyCAN also noted that many of the drivers in the pilot are unbanked or underbanked; the introduction to debit cards through a trusted partner can get them started with electronic banking, which is a positive move towards future financial security.

Cal-ITP also acknowledged that Merchant Category Code (MCC) controls – a common electronic purchase control that limits the use of a card to certain types of transactions – are one of the next logical features to add for this type of program but that they have yet to implement it in their pilot. To this end, SCE and PG&E anticipate working closely with Cal-ITP such that the joint program can scale the practices and recommendations that will continue to be developed through Cal-ITP’s future pilots. This will allow Cal-ITP’s pilot to focus on the development of new or novel features that benefit lower-income EV drivers, while the Affordable Public Charging program will focus on the challenges of scaling these solutions.

In addition, PG&E met with an extensive and diverse group of external stakeholders over the course of the development of the program and the others in this implementation plan. Those stakeholders include CBOs, environmental groups, program implementers, and government entities. These conversations were extremely productive and helpful in designing the pilot to be effective and equitable. Overall, stakeholders were supportive of the pilot design and intent and expressed the need for a program to support customers reliant on public charging. Specific examples of stakeholder feedback incorporated into the pilot design include:

- The program should provide a physical debit card rather than a digital credit or per-transaction discount. The physical card allows the customer to use it at both physical payment terminals and via EVSP phone apps. The separate debit card also supports un- and under-banked customers that do not have a debit/credit card or who are hesitant to use a debit card for purchases in case it drops their bank account below an amount they need to pay recurring bills or avoid fees.
- An “open loop” card that can be used at any EVSE, rather than partnerships with EVSPs, is more equitable – especially in rural areas where residents are dependent on a small number of charging stations that may not be affiliated with big networks.

⁵⁰ More information on Cal-ITP can be found at <https://www.calitp.org/> (accessed Oct. 9, 2023)

- While PG&E and SCE also explored providing a per-transaction discount of 30% to those customers to more closely approximate CARE, this requires directly contracting with EVSPs and forces customers to only charge at the larger EVSPs that can work with PG&E to apply the discount. It also requires customers to have another form of card payment to pay the non-subsidized 70%. Stakeholders agreed that an incentive was easier to administer and explain to customers than a discount.
- The best way to get a customer enrolled in a charging assistance program is to link it with the acquisition of the vehicle, so both PG&E and SCE will explore ways to integrate the program with the existing Pre-Owned EV Rebate programs that both utilities run.
- CBOs recommended running a survey for customers that did not use their card frequently to find out why.
- Stakeholders noted there are definite advantages to joint implementation in making the process more streamlined for customers and CBOs that work in both territories, and it provides a scale-up step between regional pilots and a fully statewide program.
- Stakeholders maintained that CBO outreach is an organic and effective way to reach customers and should be continued for this program.

Customer Eligibility

The following criteria must be met for a PG&E customer to be eligible for the Affordable Public Charging program:

- Be an active PG&E residential electric distribution customer (Community Choice Aggregator customers are eligible)
- Own or lease a Battery Electric Vehicle (BEV) or Plug-in Hybrid Electric Vehicle (PHEV) and can provide proof of current California vehicle registration
- Make less than 80% of Area Median Income (AMI) for the applicable county and household size through income documentation or “categorical eligibility.” PG&E and SCE will use 80% of AMI as the income qualification because it maintains consistency with other EV programs and is one of the eligible definitions of equity in D.20-12-027 and CARB’s LCFS regulations. Proof of categorical eligibility means customers must show proof of current enrollment in a program that requires income verification and has equal or stricter income limits. The eligible public assistance program lists will be kept consistent across PG&E’s LCFS-funded programs. Customers that have recently participated in another PG&E LCFS-funded income-qualified program, such as Pre-Owned EV or Residential Charging Solutions, will automatically qualify.⁵¹

While the incentive is targeted for customers that do not have access to charging at home and are therefore dependent on public charging, the program will not require customers to prove they do not have home charging. This is because of the number of different situations that could lead to a lack of home charging – some multifamily properties do have dedicated charging for their residents, whereas some

⁵¹ SCE customers will be subject to the same criteria but will have other SCE programs that can be utilized to prove eligibility. Because income limits are based on the county of residence, SCE customers that move to PG&E’s service territory and vice versa will need to be income-qualified for the new location.

single-family properties would not be able to support level 2 charging. As a result, all income-qualified customers will be eligible for the charging credit. If the customer also has access to home charging, they are likely to use it preferentially given the convenience of being able to plug-in at home and will therefore use less of the credit.

Pending available budget and program continuation (i.e., the incentive has not been incorporated into the statewide CCFR program), an individual applicant will be eligible to renew their card for a second year of enrollment. An applicant must reconfirm their vehicle ownership and PG&E/SCE account status each year to maintain enrollment but will not be asked to reverify their income (similar to CARE/FERA, where income is verified every two years).

Distribution of Revenue

The Affordable Public Charging Program proposes to use two innovations in its incentive design. First, the program will provide debit cards to participating customers rather than mailed checks or credits with specific EVSPs. This allows the administrator to set limits on what transactions the incentive can be used for but gives customers the freedom to use the credit at any charging station they choose. Second, rather than a lump-sum payment, PG&E and SCE will test reloading the card weekly instead, which minimizes the amount of unspent program funds sitting in low-usage accounts while better supporting high-mileage drivers. Both of these are described more below.

Debit Cards

Similar programs have been proposed that rely on partnerships with specific EVSPs to provide credits or discounts to registered customers – for example, the CVAP charging credit was only available at EVGo and ChargePoint networks. Given the evolving public charging market and current state of charging station reliability and network uptime,⁵² a customer relying on public charging will likely need to use stations from more than one or two providers for their charging needs. The Cal-ITP/ValleyCAN pilot found that their participants used more than twenty brands for public charging, supporting the need for a vendor-agnostic option.⁵³

While there may be cost and operational benefits of designing a technology solution that would work at the EVSP level across multiple providers, there is already a fungible mechanism for paying across multiple platforms that can be implemented quickly: debit cards. Debit cards are both directly acceptable at many charging station locations and they also can work as the payment mechanism for smartphone,

⁵²Shulz, Bailey, “How reliable are public EV charging stations? Report shows many EV drivers have issues,” USA Today, June 14, 2023, available at <https://www.usatoday.com/story/money/cars/2023/06/14/public-ev-chargers-jd-power-reliability-study/70279294007/> (accessed Oct. 18, 2023).

⁵³ Cal-ITP, “Universal Equity Zero Emission Vehicle Charging Card Project Demonstration Report,” Sept. 30, 2023, available at https://valleycan.org/wp-content/uploads/2023/10/Cal-ITP-Report-ValleyCAN-ZEV-Charge-Card_Sep-2023.pdf (accessed Oct. 18, 2023).

vehicle, or other app-enabled charging.⁵⁴ This enables the customer to enroll in as few or as many networks as they choose, giving them maximum flexibility in choosing where and how they charge in today's charging ecosystem.

The debit card will be mailed to the customer upon enrollment in the program. The physical card allows the customer to use it directly at payment terminals on public charging stations or be used as the card-of-record for electronic payments through EVSP smartphone applications enabling universal payment access to the EV charging ecosystem. The program will implement Merchant Category Code (MCC) controls on the debit cards. This common practice enables electronic purchases to be limited to certain types of transactions (e.g., EV charging) so that the funding may only be used for the intended purpose of reducing the cost of EV charging. The Cal-ITP/ValleyCAN pilot found that about 70% of EV charging stations were correctly coded, with most of the remainder in adjacent categories like "parking."⁵⁵ PG&E and SCE will use the MCC recommendations from this pilot, set up a process to allow customers to report stations that are mis-coded, and investigate the process of having the codes updated as appropriate.

Incentive Structure

Other programs have proposed fixed dollar amounts that are preloaded at one time which may lead to unutilized program funds for customers who are low-mileage drivers, and may simultaneously lead to scenarios where customers are inadequately subsidized given how much they drive. For example, a \$1,000 charging credit will cover about half the annual charging costs for a customer that drives an average amount and is dependent on public charging.⁵⁶ However, it may cover multiple years' worth of charging for a low-mileage driver or someone who predominantly uses home charging – but it may only cover a few months' worth of charging costs for a high-mileage driver, especially someone who is dependent on DCFC during long trips or constant use. The flat-rate incentive may be equal, but it is not necessarily equitable across customers with different usage needs.

In addition to inadequately supporting high-mileage drivers, the flat-rate incentive model leads to scenarios where thousands of dollars may be set aside for customers that will never use the money. For example, a customer may spend \$200 of the credit before selling their car, leaving \$800 sitting in the customer's account that cannot be used to support other customers that might need it.

The incentive mechanism that will be tested by PG&E and SCE in the Affordable Public Charging program address both challenges by pre-loading smaller increments on a recurring basis, which preserves program funds and better serves high-mileage drivers. The program will provide debit cards to

⁵⁴ CARB regulations require that all new public charging stations accept chip and contactless "tap" card payments as of January 2022 (for DCFC) or July 2023 (for Level 2), in addition to mobile/contactless payment methods. Existing stations must be retrofitted but have until 2033 to comply. See "Electric Vehicle Supply Equipment Standards Regulation Background and FAQs," <https://ww2.arb.ca.gov/resources/documents/electric-vehicle-supply-equipment-standards-regulation-background-and-faqs>. (accessed Oct. 10, 2023).

⁵⁵ Cal-ITP, "Universal Equity Zero Emission Vehicle Charging Card Project Demonstration Report," Sept. 30, 2023, available at https://valleycan.org/wp-content/uploads/2023/10/Cal-ITP-Report-ValleyCAN-ZEV-Charge-Card_Sep-2023.pdf (accessed Oct. 18, 2023).

⁵⁶ Based on the same assumptions used in the example in the "Barriers Addressed" section above.

participating customers that will be reloaded each week with a set value, likely \$50, that is sufficient to cover a range of weekly charging needs. The card will have a maximum value, such as \$150-200, that will allow for several weeks to accumulate to cover very high-usage weeks (for example, if a customer takes a long road trip). Each week, the cards will be reloaded with up to \$50, up to the maximum card balance.⁵⁷

Setting a maximum account balance will mitigate the risk that funds are being allocated to an account that is not being utilized and will minimize loss if the card is misplaced or stolen. The per-week credit and maximum balance ensures the incentive is tied to the customer's actual usage – it scales to support high-mile drivers while minimizing funds set aside for customers that use public charging less frequently. Customers will receive the benefit for 12 months, at which time they can re-renew for an additional 12 months by proving they still have their EV as described in the Customer Eligibility section above. The maximum amount a customer will be able to receive annually is \$2,600, but due to the weekly increments and card maximum, customers will only receive what they actually use for charging.

The incentive amount and how it is administered (i.e., weekly increments, card limits, subsequent year incentives) is subject to change based on program learnings and the evolving market. PG&E and SCE plan to revisit the incentive process each year after the program's launch and may adjust the credit levels in response to customer participation, market factors, and revenue spend requirements. PG&E and SCE will work with the implementer to appropriately alert the customers to a change in incentive levels via the program website, application, and email communications to customers. PG&E and SCE will include a summary of the rebate information each year in their Annual LCFS Forecast Advice Letters required by D.14-12-083.

Program Administration

PG&E and SCE will jointly implement the program, including jointly running a solicitation for a third-party implementer and a debit card provider. Administration responsibilities and costs will be shared equally between the two utilities.⁵⁸ A jointly implemented program will reduce administrative costs by having one contract with an implementer, minimizing duplicative development, and creating economies of scale on management and processing. It would also streamline the process for organizations that support customers across the two service territories, such as CBOs.

PG&E and SCE will be responsible for:

- **Pre-launch activities:** Running the request for proposal (RFP) process, determining the approval and payment processes between the two utilities, setting up the selected implementer, working

⁵⁷ For example: a customer does not use the card for the first three weeks and accumulates \$150 on the card, the maximum card balance. In week 4, no additional funds are added because the card is at its limit. Later in week 4, the customer uses \$30 on a charging session. In week 5, the card is reloaded with \$30 to bring the card value back up to \$150.

⁵⁸ Administration expenses will be shared between the utilities, but the incentives would be invoiced to the customer's utility. For example, if PG&E had 800 customers participate and SCE 1000, then PG&E would be invoiced for the 800 customers rather than splitting it 900 between each.

with the implementer to develop a detailed program implementation plan, supporting ME&O activities. Each utility will also develop a marketing plan for their territory.

- **Program execution activities:** General implementer oversight, data review and reporting, ME&O coordination, program evaluation, and ad hoc requests.

Once a third-party implementer is contracted, they will be responsible for:

- **Pre-launch activities:** Developing a detailed program implementation plan (along with the PG&E/SCE team); developing a marketing plan under the direction of the PG&E and SCE Marketing teams; and developing an Evaluation, Measurement, and Verification (EM&V) plan, including customer surveying, with the PG&E/SCE team.
- **Program implementation activities:**
 - **Application processing:** Screening applications for eligibility, delivering cards to qualified applicants, providing customer support and troubleshooting. Details of website and application design, back-end processes and timeline for application processing, and rebate delivery method will be determined through the development of the RFP scope of work and with the selected third-party as appropriate.
 - **ME&O:** Supporting program marketing efforts as described below.
- **Program evaluation activities:** Tracking and reporting on key program metrics as listed in the program evaluation section below; administering a post-rebate survey to each customer with questions about the influence of the card on their purchasing/charging decisions and with educational information about EV rates and charging. The implementer will share the survey responses with the PG&E/SCE team to aid in program evaluation and generating key customer insights.

The program will also require a debit card provider. PG&E and SCE will determine whether to include the scope of those services within the implementation RFP (likely requiring a subcontractor) or to issue a separate RFP for just the debit card provider.

As part of the development of the program design and procedures, PG&E, SCE, and the implementer will also determine appropriate fraud controls to avoid ineligible customers gaining access to the cards and the cards being used for non-EV-charging purposes. Adding the MCC restrictions will be a critical safeguard for the latter, but PG&E and SCE expect there to be a need for regular monitoring for stations that are mis-coded.

ME&O

The PG&E program team will work with SCE, the implementer, and PG&E's Solutions Marketing team to design and implement a marketing strategy to reach income-qualified customers in PG&E's service territory. This will include a heavy focus on cross-marketing with other programs (especially the PG&E Pre-Owned EV Rebate program, the Residential Charging Solutions program, and tenant education through the Multifamily and Small Business Direct Install Pilot, as well as EV rates, CARE/FERA, and other clean energy income-qualified programs.) ME&O will include a mix of direct-to-customer, low-cost

digital channels for awareness-raising and participation, and high-touch, one-to-one outreach performed by local CBOs to work through specific barriers and needs within equity communities.

The marketing plan will be informed by lessons learned from the CBO pilot that PG&E is running with its current suite of LCFS-funded equity programs. Early findings indicate that “case management,” or direct support to individual customers to answer questions about EV purchasing or charging and even help completing documentation, is effective in helping customers that need personalized support through the participation process. Meanwhile, low-cost channels like email continue to be cost-effective ways of raising awareness and participation and building customer-to-customer word of mouth (a PG&E email to customers introducing the Pre-Owned EV Rebate program after launch led to an immediate jump in website traffic and applications submitted, then a smaller but sustained increase over time).

Specific ME&O tactics and responsibilities for each entity may include:

- **PG&E activities:** Message integration into residential newsletters, email campaigns to existing equity customer segments, social media targeting specified geographic regions, co-marketing with existing PG&E EV and energy programs, updates to PG&E’s EV Home Page and the EV Savings Calculator, and development of marketing collateral. Where appropriate PG&E will conduct message and list testing with customers.
- **Implementer activities:** Dependent on the implementer’s strengths. May include social media campaigns; work with existing CBO, dealership, or other stakeholder networks; and collateral development.
- **CBO activities:** Conducting targeted outreach to equity customers. The exact strategies will differ by community and CBO strengths, but may include direct customer case management, hosting webinars or sessions to communicate program eligibility and application directions, in-person events, and co-development of marketing collateral with PG&E (including multi-lingual options).

This is not an exhaustive list of ME&O activities and specific strategies will be adjusted based on the implementer selected, the specific CBO partners, and customer participation. These ME&O efforts will be critical to raising awareness about the program and encouraging participation, and their effectiveness will be measured by number of customers reached and number of applicants.

Data and Program Evaluation

As described in the Portfolio Structure section (C.3), evaluation includes both regular assessment of program performance and customer satisfaction, as well as more formal reports and research studies determined by the specific needs of the program. The program’s evaluation activities will include:

- **Key metrics:** PG&E and SCE will collect and analyze program data on a regular cadence to assess the effectiveness of the program. Key data points include:
 - Number of debit cards issued
 - Aggregated card utilization data
 - Evidence of the rebate’s influence on the customer’s charging behavior and/or vehicle purchase (via attribution questions on the customer survey)

- Location of participants throughout the service territory, including whether they are in a DAC, rural community, tribal community, etc.
- Whether or not the customer has access to home charging
- Application turnaround time
- Application rejection rate

PG&E will include additional data collection metrics for the pilot once the implementer is contracted and the program’s design and procedures are finalized.

- **ME&O effectiveness:** PG&E and SCE will set up a regular cadence of program status reporting with the implementer (e.g., weekly/monthly) and CBOs to evaluate progress of ME&O efforts and identify opportunities for process improvements. PG&E will also regularly evaluate internal and external ME&O efforts to identify any need for change.
- **Customer experience:** PG&E and SCE will review customer survey responses and document key customer insights about customer charging to inform program improvements and customer outreach.
- **Additional studies:** PG&E will assess the specific needs, challenges, and opportunities of the program as it is implemented and will suggest additional traditional evaluations or specific research studies as appropriate.

Estimated Budget and Implementation Schedule

While the incentive disbursed will differ for each participant, PG&E is budgeting for an average incentive of \$1,500 per person per year (\$3,000 over two years) across 6,600 individuals that enroll in the Affordable Public Charging program, resulting in approximately \$24M in subsidized charging through 2028. This assumes the program being open to customer applications in 2025 and 2026 with two years of support in 2027 and 2028 where the program is not accepting new applications but is still paying incentives to enrolled customers. The actual timing will depend on budget, program interest, and other market factors. These numbers represent only PG&E’s share of the program costs; SCE will include its own budget in its upcoming LCFS implementation plan.

Estimated annual spend for the program is detailed in the table below.

Table 10: Estimated PG&E Budget for Affordable Public Charging Program (\$M)

| Affordable Public Charging | | | | | | |
|----------------------------|---------------|---------------|----------------|---------------|---------------|----------------|
| Category | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
| Admin | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| Incentives | \$0 | \$3.76 | \$9.64 | \$8.14 | \$2.46 | \$24.00 |
| TOTAL | \$0.20 | \$5.30 | \$11.39 | \$8.87 | \$3.08 | \$28.84 |

Note: Numbers may not add up due to rounding. These numbers only include PG&E's estimated budget. SCE's will be proposed separately in its implementation plan.

The budget estimates may change based on adjustments to the incentive levels, number of enrollments and usage per person, ME&O strategies, customer participation, and market factors. PG&E and SCE may also extend the length of the program based on customer interest and portfolio needs and will work closely with Energy Division Staff on any adjustments to the program. PG&E and SCE will continue to provide updated forecasts in their Annual LCFS Forecast ALs and updated expenditures in their annual reports.

Assuming PG&E and SCE receive approval for this advice letter in Q2 2024, PG&E and SCE anticipate beginning distributing incentives in Q2 2025 as shown in the schedule below.

Table 11: Preliminary Schedule for Affordable Public Charging Launch

| | |
|------------------|--|
| Q4 2023 | PG&E files 2023 Implementation Plan |
| Q2 2024 | Estimated timing of possible CPUC approval of 2023 Implementation Plan |
| Q3 2024 | PG&E/SCE issues RFP for third-party implementer |
| Q4 2024/ Q1 2025 | PG&E/SCE contracts with third-party implementer and begins program set up |
| Q2 2025 | PG&E/SCE/Implementer launch ME&O campaign and Implementer begins receiving rebate applications |
| Q2 2025 | Implementer begins distribution of incentives |

Program #2: Residential Charging Solutions Program Expansion: Panel & Flexible Electrification Support

The Panel & Flexible Electrification Support expansion to the existing Residential Charging Solutions program will increase the menu of options available to support income-qualified customers with home charging. The existing Residential Charging Solutions program provides rebates for technology solutions; this expansion adds incentives for panel upgrades and circuit extensions. The expansion also adds a “point-of-sale” option for distributing the incentives through a network of qualified contractors and provides education to both customers and contractors on flexible electrification options. Pending CPUC approval of the expansion, PG&E plans to implement the adjustments to the current program starting in Q3 2024 and running until the budget is exhausted, estimated to be the end of 2026 with closeout occurring in 2027.

| Residential Charging Solutions Expansion: Panel & Flexible Electrification Support | |
|--|--|
| Customer Segment | Residential income-qualified customers |
| Program Design | Expansion to existing Residential Charging Solutions program offering upfront cost reductions through contractors or after-the-fact rebates for panel upgrades and circuit extensions, and customer/contractor education promoting panel optimization |
| Implementation Structure | Hybrid – PG&E manages website and application; third-party implementer responsible for application processing and managing trade ally network |
| Program Goals | <ul style="list-style-type: none"> • Reduce total cost of ownership for customers installing home charging • Target a known barrier to adoption, especially among low-income customers that tend to reside in older homes that have not had electrical updates • Provide education on alternatives to panel upgrades to customers and contractors |
| Timeframe & Launch Date | 2024-2027; Q3 2024 (anticipated) |
| Total budget | \$19.27 million (for expansion) |
| Funding source | Residential holdback revenue |
| Focus | Equity |

Policy and Market Support

Barriers Addressed

Charging at home is the most convenient way for most customers to fuel their EVs. Unlike public charging, there is no out-of-the-way trip to another station, no waiting if the station is in use, and it costs

less. For these reasons, currently about 80% of charging is done at home.⁵⁹ However, getting a home charger installed in the first place can come with many unexpected hurdles and costs that often the customer does not discover until after they have started the installation process.

The current Residential Charging Solutions program aims to reduce the total cost of EV ownership by decreasing the cost to install Level 2 home charging, but with a unique focus on customers that face a more complex road to charger installation than a simple “plug-and-play”, due to capacity or physical space constraints. The program provides a dual benefit by educating customers on less well-known technologies that can provide them with charging while avoiding the time and cost of a panel upgrade, and by providing rebates that cover the cost of these technologies. As of writing, the program is close to launching with three products: two load-limiting smart charging stations and a 240V outlet splitter. The smart chargers ensure that the EV charging power draw never exceeds a preset level; the outlet splitter allows a customer to use one 240V outlet for both a level 2 EV charger and another appliance, such as a dryer, and will ensure only one device is used at a time.

PG&E received feedback from stakeholders on the 2021 Implementation Plan that there would still be scenarios where the only way to allow a customer access to Level 2 home charging would be to upgrade the customer’s electrical panel and the service they receive from PG&E.⁶⁰ This is especially likely for lower-income customers, who are more likely to live in older homes with smaller panels with no remaining capacity for a large-draw appliance like a Level 2 charger. Sixty percent of homes in California were built before 1979 and are more likely to require an electrical upgrade (though some portion may have installed air conditioning or other large loads added in the intervening forty years).⁶¹ Meanwhile, around one quarter of PG&E’s customers are low-income.⁶² PG&E estimates that between 300,000 and 400,000 single-family homes are occupied by low-income customers and are old enough to make a panel upgrade likely necessary.⁶³ Panel upgrades are costly, running from \$2,000 to upwards of \$18,000 based on the customer’s home configuration and whether expensive services like trenching or relocating the gas meter are required.⁶⁴ The additional money and hassle required is a major barrier for customers trying to

⁵⁹ Eighty-three percent of California EV drivers reside in detached houses, and these drivers charge primarily (≥84 percent) at home. Nicholas et al. (2019). Quantifying the Electric Vehicle Charging Infrastructure Gap Across U.S. Markets. The International Council on Clean Transportation. Available at <https://theicct.org/publication/quantifying-the-electric-vehicle-charging-infrastructure-gap-across-u-s-markets> (accessed Oct. 9, 2023).

⁶⁰ Panel upgrades (where the customer’s electric panel is changed out to the same or a higher amperage rating to support greater electrical usage or fix a safety issue) often trigger service upgrades (where the wire connecting to the customer’s home and/or other utility equipment like transformers must be upgraded to support the additional amperage). This proposal uses the term “panel upgrades” to describe the service being performed, but notes that service upgrades may also be required as a result.

⁶¹ NV5, “Service Upgrades for Electrification Retrofits Study Final Report,” May 27, 2022. Available at: <https://pda.energydataweb.com/api/view/2635/Service%20Upgrades%20for%20Electrification%20Retrofits%20Study%20FINAL.pdf> (accessed Oct 4, 2023).

⁶² PG&E internal Residential Customer Query Tool

⁶³ Ibid

⁶⁴ NV5, “Service Upgrades for Electrification Retrofits Study Final Report,” May 27, 2022. Available at: <https://pda.energydataweb.com/api/view/2635/Service%20Upgrades%20for%20Electrification%20Retrofits%20Study%20FINAL.pdf> (accessed Oct 4, 2023). This statistic does not include utility-side upgrades charged to the customer, as per D. 21-12-033, PG&E must cover utility-side costs in excess of the Rule 16 allowance related to EV charging upgrades at residential properties.

install home charging. Stakeholders urged PG&E to also incentivize panel upgrades for customers for whom that was the only option.

However, panel upgrades alone are not a perfect solution. In addition to the cost, it can take months for the coordination between the electrician, PG&E, and permit-issuing entity like a city. In some cases, increasing a customer's level of service could trigger utility-side construction, like upgrading the transformer or wires feeding the customer's house or neighborhood. This adds substantial complexity and time to the process.⁶⁵

In addition, there is not much awareness from contractors and customers about alternatives. Most contractors will steer customers towards panel upgrades as a way of futureproofing and minimizing callbacks. A 2022 study conducted for PG&E and SDGE on service upgrades for electrification retrofits found that of 15 PG&E customers surveys, only one of them considered alternatives to the panel upgrade; contractor interviews were similar, with the only contractor considering alternatives explicitly defining themselves as an electrification contractor.⁶⁶ As a result, customers are unaware of options that might get them faster, easier access to EV charging.

PG&E is therefore taking an "all of the above" approach to supporting customers in their unique situations: we will provide incentives for panel upgrades for customers that need them, and we will provide incentives and education to both customers and contractors about the range of alternatives that could get a customer access to Level 2 charging more quickly and cost-effectively if their situation allows.

Program Alignment

Access to home charging goes a long way to help customers make the switch to EVs, and PG&E is trying to make that experience better from start to finish. There are three levels to this: first, providing education and outreach to help customers navigate existing processes; second, tailoring the process to help customers find solutions that fit their specific situations; and third, supporting customers by reducing the cost through incentives or financing.

PG&E provides several educational resources about EV charging at home, including the EV Savings Calculator, PG&E's EV Charging webpage, and the PG&E Energy Action Guide. These resources provide an overview of the types of home charging, an explanation of the process to install charging, a checklist for working with an electrician, and a list of available Level 2 EV chargers. The EV Savings Calculator does have some options to customize recommendations, but the current resources do not delve into "edge case" situations where a customer may be faced with additional barriers such as lacking electric panel capacity or the authority to install equipment.

⁶⁵ Per D. 21-12-033, PG&E must cover utility-side costs in excess of the Rule 16 allowance related to EV charging upgrades at residential properties.

⁶⁶ NV5, "Service Upgrades for Electrification Retrofits Study Final Report," May 27, 2022. Available at: <https://pda.energydataweb.com/api/view/2635/Service%20Upgrades%20for%20Electrification%20Retrofits%20Study%20FINAL.pdf> (accessed Oct 4, 2023).

PG&E’s Empower EV program is PG&E’s first EV-focused pilot offering financial support for residential charging and panel upgrades. The program supports Level 2 charging at income-qualified single-family households, offering a no-cost Level 2 charger, valued up to \$500, and \$2,000 for any panel upgrades required through a program-contracted electrician. The program is expected to be fully subscribed by Q1 2024 with installations continuing throughout 2024, and the EV team will heavily leverage learnings from this program as they become available. Empower EV uses a “turnkey” model where the program supplies the electrician that performs the electric assessments, design, and service panel installations. In addition, PG&E has been running a non-EV-specific electrification pilot in the San Joaquin Valley performing home electrical upgrades, including panel upgrades, since 2020 that employs a similar turnkey model.⁶⁷ As a result, the Residential Charging Solutions expansion will test out a different model using trade allies – described more below – and future program updates will be made based on comparing participation success between rebates, upfront incentives through trade allies, and turnkey services. Past the incentive design, the expansion will gather lessons learned from both programs and implement them wherever possible.

There are also many state and local programs that provide incentives for a Level 1 or Level 2 EV charger, but there is currently only one CCA program that also provides incentives for panel upgrades (the Electrify Your Ride program from Central Coast Community Energy (3CE)).⁶⁸ PG&E will coordinate with 3CE and other local administrators if future rebates are added to handle any overlap in customer support, enabling incentive stacking where possible but limiting situations where customers could receive duplicate incentives.

PG&E’s Residential Charging Solutions program, and the expansion proposed in this implementation plan, target all levels of the customer home charging experience: education, tailored support, and incentives. The existing program offers rebates for technologies that help customers install Level 2 charging without needing a panel upgrade, and the expansion would provide incentives for panel upgrades and circuit extensions (if the customer has sufficient capacity but needs a line added to their garage). The current program will provide some resources to help customers determine what solutions might work for their situation, and the expansion will add to those by providing education on available alternatives for contractors participating in the program.

The program’s focus on providing options that can be tailored to meet customers’ unique needs also supports PG&E’s research & development strategy by establishing a bridge to get customers access to home charging now, while setting the stage for more holistic and proactive approaches to building out capacity to support electrification across PG&E’s service territory. One of the R&D strategy themes for

⁶⁷ PG&E, San Joaquin Valley Disadvantaged Community Electrification Pilots 2022 Annual Progress Report, Dec. 19, 2022, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M500/K050/500050133.PDF> (accessed Oct. 18, 2023).

⁶⁸ For example: Bay Area Air Quality Management District [EV Charger Rebate](#), Sonoma Clean Power [GridSavvy Rewards](#), Silicon Valley Power [EV Charger rebate](#), Central Coast Community Energy [Electrify Your Ride](#), and Redwood Coast Energy Authority [Rebate for Home Electric Vehicle Charging Stations](#). Outside of PG&E’s electric service territory, Silicon Valley Power, the City of Lodi, and the City of Roseville all offer charger rebates.

transportation electrification is “ensure affordable and timely connection for every customer.”⁶⁹ The current Residential Charging Solutions program, with the Panel & Flexible Electrification Support expansion, provide readily available options for doing so. Meanwhile, several of PG&E’s potential Electric Program Investment Charge (EPIC) proposals include related efforts at an earlier stage of scalability, including using managed charging or smart panels to mitigate distribution transformer capacity limitations, and developing a customer-facing tool with visibility into the available transformer capacity at their home. The program team will coordinate closely with these pilots for lessons learned as well as any opportunities for cross-participation.

SCE has already received CPUC approval for a similar program focused on panel upgrades in their 2021 LCFS Implementation Plan.⁷⁰ The program will provide incentives to support panel upgrades at single-family homes in DACs and for low-income customers, upfront through a network of contractors or after-the-fact through a rebate application. SCE is currently setting up this program, and PG&E will collaborate with their program team to gather lessons learned from the setup of the program and contractor network.

Alignment with LCFS Requirements

CARB’s LCFS regulation provides a list of projects that qualify as Holdback Credit Equity Projects, including “[a]dditional rebates and incentives for low-income individuals beyond existing local, federal and State rebates and incentives including the Clean Fuel Reward for: promoting the use of public transit and other clean mobility solutions; and offsetting costs for residential or nonresidential EV charging.”⁷¹ Accordingly, the Residential Charging Solutions expansion should be considered as an equity program, as it meets the LCFS requirement for an equity project by offsetting costs for residential EV charging for PG&E’s low-income customers.

Stakeholder Feedback

PG&E met with an extensive and diverse group of external stakeholders over the course of the development of the expansion. Those stakeholders include community-based organizations, environmental groups, program implementers, and government entities. Overall, stakeholders were supportive of the expansion’s design and intent in resolving a gap in the original Residential Charging

⁶⁹ See Theme 1 under Electric Vehicles on pg 42. PG&E, “PG&E R&D Strategy Report,” June 2023, available at https://www.pge.com/pge_global/common/pdfs/about-pge/environment/what-we-are-doing/innovative-community-programs/PGE-RD-Strategy-Report.pdf (accessed Oct. 16, 2023).

⁷⁰ Advice Letter (AL) 4518-E, SCE’s 2021 Low Carbon Fuel Standard Implementation Plan, filed June 15, 2021, and AL 4518-E-A, filed February 24, 2022. The public versions can be found at https://edisonintl.sharepoint.com/:b:/r/teams/Public/TM2/Shared%20Documents/Public/Regulatory/Filings-Advice%20Letters/Approved/Electric/ELECTRIC_4518-E.pdf and https://edisonintl.sharepoint.com/:b:/r/teams/Public/TM2/Shared%20Documents/Public/Regulatory/Filings-Advice%20Letters/Approved/Electric/ELECTRIC_4518-E-A.pdf. The CPUC’s November 3, 2022 Resolution E-5236 approving the programs with modifications can be found at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M498/K338/498338742.docx>. See page 21 of AL 4518-E for the detailed program proposal.

⁷¹ 17 CCR §95483(c)(1)(A)(6)(a)(vi).

Solutions approach and expressed the need for these incentives to support customers. Specific examples of stakeholder feedback incorporated into the expansion design include:

- During stakeholder engagement for the original 2021 Implementation Plan, stakeholders noted that low-income customers tend to live in older homes that may not have updated electrical work, and therefore may have no choice but to go through with a panel upgrade if they wanted to electrify. They advocated that PG&E include incentives for “traditional” panel upgrades to ensure these customers were not left behind.
- While providing cheaper and faster alternatives that could benefit customers in some situations, CBOs cautioned against providing anything experimental or unproven for income-qualified customers, preferring sure solutions like panel upgrades to avoid future customer issues.
- Panel upgrades should be sized to take into account other potential building electrification upgrades to better future-proof the project and support California’s broader climate goals.
- Stakeholders advocated strongly that the incentives be provided point-of-sale as a reduction in the cost the customer pays upfront, rather than a rebate paid out some time afterwards. This is especially critical for low-income customers, where they may not be able to front the full cost, financing the full amount will cost them more in the long run, or receiving an after-the-fact rebate might be counted as taxable income whereas an upfront discount would not. The importance of this increases as the upfront cost increases.
- As the electrical work and panel upgrades are not issues customers usually foresee when they start looking into purchasing an EV, major home upgrades like this can cause customers to give up given the cost, effort, and confusing processes they may encounter. If the customer has already purchased an EV, they may decide to return it. As a result, stakeholders noted that the process needs to be made as easy as possible with as much of the upfront cost covered as possible.

Customer Eligibility

The customer eligibility requirements are the same as for the Affordable Public Charging program and other LCFS-funded income-qualified programs. The customer must:

- Be an active PG&E residential electric distribution customer (Community Choice Aggregator customers are eligible)
- Own or lease a qualifying Battery Electric Vehicle (BEV) or Plug-in Hybrid Electric Vehicle (PHEV) and can provide proof of current California vehicle registration⁷²
- Make less than 80% of Area Median Income (AMI) for their county and household size through income documentation or “categorical eligibility.” Customers that have recently participated in another PG&E LCFS-funded income-qualified program, such as Pre-Owned EV or Affordable Public Charging, will automatically qualify.⁷³

⁷² PG&E may provide a window for customers to complete this requirement, as the program should not penalize customers who are being proactive and completing the charging station install before purchasing the EV to ensure they will be able to fuel it.

⁷³ See the Affordable Public Charging section for additional detail on income qualification.

In addition, the customer must complete the installation of a panel upgrade or circuit extension through a certified electrician and provide documentation substantiating the installation. The required documentation will be determined by the program staff in collaboration with the implementer. The customer will have two options on receiving the incentive and providing documentation, described under “Distribution of Revenue” below.

Due to the nature of the equipment being incentivized, a customer is only eligible for one incentive through the Residential Charging Solutions program (either the first phase or the expansion). There may be limited exceptions where a customer may need a combination of upgrades. PG&E will determine whether to incentivize the measures in combination or only one based on the technology solutions included in the program at that time.

Distribution of Revenue

The existing Residential Charging Solutions program already includes after-the-fact rebates for technology solutions chosen via a Request for Qualifications (RFQ). The incentive amount is currently set at \$700 for each of the three technologies selected, which covers all or almost all the cost for each solution, but is subject to change based on technology costs and participation. PG&E may conduct additional RFQs to add technologies to the program or add technologies that are proven via pilot projects, like via PG&E’s Electric Program Investment Charge (EPIC) 4 pilots or other approved pilots. The budget for these incentives and administration is already included in the existing Residential Charging Solutions program.

This expansion will add incentives for electrical panel upgrades and circuit extensions installed by a qualified electrician. A panel upgrade is needed if installing EV charging equipment would exceed the available capacity on the existing panel and its breakers, and a circuit extension is needed if the customer does not already have a dedicated 240V outlet in the location where they wish to install the charging station. Similar to the existing Residential Charging Solutions program, PG&E may offer incentives for additional flexible load measures and/or costs as the market evolves and new alternatives become available.

The 2022 study found that costs for an electric panel upgrade alone ranged from \$2,000 to \$4,500, with an average cost of \$2,780.⁷⁴ However, this figure does not include costs like trenching, panel or gas meter relocations, or other costs based on the customer’s home configuration; the study reported a range of total costs from \$2,000 to \$18,000.⁷⁵

The incentive amounts and structure will be set based on feedback from the program team, the implementer, and other similar programs (such as Empower EV and SCE’s panel upgrade program). PG&E is currently budgeting \$4,000 per panel upgrade and \$1,000 per circuit extension or other flexible

⁷⁴ NV5, “Service Upgrades for Electrification Retrofits Study Final Report,” May 27, 2022. Available at: <https://pda.energydataweb.com/api/view/2635/Service%20Upgrades%20for%20Electrification%20Retrofits%20Study%20FINAL.pdf> (accessed Oct. 4, 2023).

⁷⁵ Per D. 21-12-033, PG&E must cover utility-side costs in excess of the Rule 16 allowance related to EV charging upgrades at residential properties.

load measure. The program staff will investigate providing a fixed rebate up to 100% of the project cost and a scaled incentive model, similar to other level 2 charging programs like the Multifamily and Small Business Direct Install pilot, where the program would cover 100% of the costs with an average of around \$4,000 per site. This allows for customers to have a greater portion of costs covered, but may lead to the program turning away some customers with very expensive projects to maintain the average per-site cap.

In addition, PG&E plans to add a second incentive pathway that allows customers to receive the panel upgrade/circuit extension incentive “instantly” through their electrician’s bill rather than after-the-fact. CBOs advocated strongly for upfront incentive options, pointing out that the high initial outlays can be a major barrier to low-income customers considering EVs, so offering the incentive upfront rather than a rebate several months later is far more beneficial.

To do so, PG&E plans to set up a “trade ally” network of qualified, licensed electrical contractors, where contractors would enroll in the network and complete a short training on the program requirements. The customer would submit a shorter application to be pre-qualified for the program (i.e., have their income eligibility confirmed) and would receive a code they can then present to a contractor as evidence of their eligibility. The contractor would perform the work and bill the customer for the installation minus the amount of the PG&E incentive, allowing the customer to see the instant reduction in cost. Finally, the contractor would submit a claim to PG&E for reimbursement. Customers that choose to use a non-enrolled contractor can still apply for the incentive as an after-the-fact rebate using the existing pathway. SCE’s panel upgrade program will have a similar network setup, and PG&E will collaborate with the SCE program staff to gather lessons learned.

As with the incentive amount and how it is administered, the trade ally network design, enrollment/qualification process, and other structural details will be determined through discussions with the program implementer, programs with similar contractor networks, and other stakeholders, and is subject to change. PG&E may adjust the program design if setting up the network is found to be infeasible with the time and budget proposed.

PG&E plans to revisit the incentive process each year after the program’s launch and may adjust the incentive levels in response to customer participation, market factors, and revenue spend requirements. This includes opportunities for integration with another important flexible load measure: vehicle-grid integration (VGI), including managed charging or vehicle-to-everything (V2X) opportunities. Pending budget and need, the program may also offer education and/or incentives in the future for paired participation in Residential Charging Solutions and PG&E VGI programs. PG&E will ensure customers and contractors are appropriately alerted to a change in incentive levels or requirements via the program website, application, and email communications to customers. PG&E will include a summary of the rebate information each year in their Annual LCFS Forecast Advice Letters required by D.14-12-083.

Program Administration

The current Residential Charging Solutions program is managed by PG&E, with a third-party implementation contractor utilized to process the applications, perform income verification, and provide customer service. The expansion will require additional support on processing prequalification applications and contractor claims, setting up the trade ally network, and providing education on

alternative solutions to customers and contractors. As a result, PG&E will contract with one or more third-party consultants to support PG&E staff.

PG&E will be responsible for:

- **Pre-expansion launch activities:** Making updates to the existing program application and website, setting up a process for trade allies to enroll in the program and submit claims, and ensuring a smooth transition in application processing from the existing process to the hybrid process
- **Program execution activities:** Implementer oversight, data review and reporting, ME&O coordination, program evaluation, and ad hoc requests.
- **Program evaluation activities:** Developing an Evaluation, Measurement, and Verification (EM&V) plan for both the existing and expansion program phases. Tracking and reporting on key program metrics as listed in the program evaluation section below. Administering a post-rebate survey to each customer with questions about the influence of the rebate on their purchasing decision and with educational information about EV rates and charging.

The third-party consultant(s) will be responsible for:

- **Pre-expansion launch activities:** Developing a detailed program plan for the new incentives and trade ally network (along with the PG&E team); determining contractor enrollment requirements; and producing educational materials for customers and contractors under the direction of PG&E Marketing.
- **Program implementation activities:**
 - **Application processing:** Screening customer prequalification applications for eligibility; enrolling contractors in the program; processing contractor reimbursement claims; and providing customer/contractor support and troubleshooting.
 - **ME&O:** Supporting program marketing efforts as described below.
- **Program evaluation activities:** Tracking and reporting on key program metrics as listed in the program evaluation section below.

As part of the development of the program design and procedures, PG&E and the implementer will also determine options for limiting concerns about contractor overcharging and customer/contractor fraud.

ME&O

The Residential Charging Solutions expansion includes marketing for customers and contractors as well as an important educational component on alternative options for panel optimization. These are described separately below.

Marketing/Customer and Contractor Awareness

The existing Residential Charging Solutions program includes customer awareness-building activities, which will be leveraged to support the additional measures included in the expansion. These activities include community-specific CBO outreach, cross-marketing with other programs (especially the PG&E

Pre-Owned EV Rebate and Affordable Public Charging programs, as well as EV rates, CARE/FERA, and other non-EV-related income-qualified programs), low-cost digital channels like email, and integration into PG&E’s existing Energy Action Guide (formally the Marketplace) and EV Savings Calculator. The PG&E program team will work with PG&E’s Solutions Marketing team to make refinements to the marketing strategy once the new measures are added.

A new area of focus for the expansion will be raising awareness of the program among electrical contractors that perform panel upgrades to convince them to enroll in the program and provide the upfront incentive benefit to our customers. The PG&E program team will solicit feedback from other PG&E residential programs involving trade allies and SCE’s panel upgrade program to gather lessons learned in working with electrical contractors. With this information, the PG&E program team will work with PG&E’s Solutions Marketing team and the implementer to design a marketing plan specifically for reaching contractors.

Some specific ME&O tactics and responsibilities for each entity include:

- **PG&E activities:** Implementing message integration into residential digital newsletters, email campaigns to existing equity customer segments, potential social media targeting specified geographic regions, co-marketing with existing PG&E EV and energy programs, updates to PG&E’s EV Home Page and the EV Savings Calculator, and development of marketing collateral. Contractor outreach will also leverage Workforce Education and Training lists and course work.
- **Third-party consultant activities:** Dependent on the consultant’s strengths. May include social media campaigns; work with existing CBO, dealership, or other stakeholder networks; and collateral development.
- **CBO activities:** Conducting targeted outreach to equity customers – the exact strategies will differ by community and CBO strengths, but may include direct customer case management, hosting webinars or sessions to communicate program eligibility and application directions, in-person events, and co-development of marketing collateral with PG&E (including multi-lingual options).

This is not an exhaustive list of ME&O activities and specific strategies will be adjusted based on the implementer selected, the specific CBO partners, and customer participation.

Education

The 2022 study found that a very small number of customers and contractors consider anything but a panel upgrade even when alternatives might be available.⁷⁶ As a result, education is needed on the range of options that might provide customers with faster and cheaper access to Level 2 charging, especially if a utility-side capacity constraint exists.

⁷⁶ NV5, “Service Upgrades for Electrification Retrofits Study Final Report,” May 27, 2022. Available at: <https://pda.energydataweb.com/api/view/2635/Service%20Upgrades%20for%20Electrification%20Retrofits%20Study%20FINAL.pdf> (accessed Oct. 4, 2023).

The expansion will develop resources aimed at customers, contractors, and entities like CBOs that contribute to program outreach. These will be focused on listing a menu of available options (both those included within the scope of the program and others that might be relevant) and providing simple, self-service support for what options might be relevant to a particular customer's situation. The resources, developed in concert with the third-party consultant(s), may include a pamphlet, a self-service tool providing recommendations based on customers' answers to questions about their home setup, an on-demand short webinar, or other options. PG&E will use existing channels – the program website, the EV Savings Calculator, the Energy Action Guide, and partners like CBOs – to provide the information. For contractors, the program team will develop training materials on the program and technology alternatives that will be included as part of the enrollment process.

Program Evaluation

As described in the Portfolio Structure section (C.3), evaluation includes both regular assessment of program performance and customer satisfaction, as well as more formal reports and research studies determined by the specific needs of the program. The program's evaluation activities will include:

- **Key metrics:** PG&E will collect and analyze program data on a regular cadence to assess the effectiveness of the program. Key data points include:
 - Number of incentives issued for each measure type and application pathway
 - Number of contractors enrolled in the program
 - Evidence of the incentive's influence on the customer's decision to purchase an EV and install home charging (via attribution questions on the post-rebate survey).
 - Evidence of the program's influence on customer and contractor willingness to consider alternatives to panel upgrades for the customer's situation
 - Location of participants throughout the service territory
 - Application turnaround time
 - Application rejection rate

PG&E will determine additional data collection metrics for the program when building the expansion's design and procedures.

- **ME&O effectiveness:** PG&E will set up a regular cadence of program status reporting with the CBOs (e.g., monthly) to evaluate progress of ME&O efforts and identify opportunities for process improvements. PG&E will also regularly evaluate internal and external ME&O efforts to identify any need for change.
- **Customer/contractor experience:** PG&E will run customer and contractor surveys and document key insights from the responses about the home charger installation journey to inform program improvements and customer outreach.
- **Additional studies:** PG&E will assess the specific needs, challenges, and opportunities of the program as it is implemented and will suggest additional traditional evaluations or specific research studies as appropriate.

Estimated Budget and Implementation Schedule

The budget is presented separately for the existing program and the expansion proposed here, but the two phases will be managed and reported on jointly as a unified program. Since the expansion will rely on the program manager funded by and application developed under the original Residential Charging Solutions program in the 2021 Implementation Plan, it is not appropriate to manage the two phases separately, especially from an administrative cost perspective. Estimated annual spend for the program is detailed in the table below.

Table 12: Estimated Budget for the Residential Charging Solutions Program Expansion (\$M)

| Category | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
|---|---------------|----------------|---------------|---------------|---------------|----------------|
| Residential Charging Solutions - 2021 Implementation Plan (already authorized) | | | | | | |
| Admin | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| Incentives | \$1.68 | \$2.00 | \$0.56 | \$0.00 | \$0.00 | \$4.24 |
| TOTAL | \$2.56 | \$3.06 | \$0.85 | \$0.00 | \$0.00 | \$6.47 |
| Panel & Flexible Electrification Support - 2023 Implementation Plan | | | | | | |
| Admin | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| Incentives | \$1.55 | \$7.45 | \$7.45 | \$0 | \$0 | \$16.45 |
| TOTAL | \$1.95 | \$8.42 | \$8.58 | \$0.32 | \$0 | \$19.27 |
| Combined Residential Charging Solutions Program | | | | | | |
| Admin | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| Incentives | \$3.23 | \$9.45 | \$8.01 | \$0.00 | \$0.00 | \$20.69 |
| TOTAL | \$4.51 | \$11.48 | \$9.43 | \$0.32 | \$0.00 | \$25.74 |

Note: Numbers may not add up due to rounding

For the expansion, PG&E is budgeting for 4,000 participants at \$4,000 for panel upgrades, and 2,000 participants at \$1,000 for circuit extensions and other flexible load measures. The budget estimates may change based on adjustments to the rebate levels, number of incentives issued, ME&O strategies, customer participation, and market factors. PG&E may also extend the length of the program based on customer interest and portfolio needs and will work closely with Energy Division Staff on any adjustments to the program. PG&E will continue to provide updated forecasts in the Annual LCFS Forecast AL and updated expenditures in the annual report.

Assuming PG&E receives approval for this advice letter in Q2 2024, PG&E anticipates beginning distributing panel/circuit extension rebates in Q3 2024 and adding the upfront incentive option in Q2 2025 as shown in the schedule below.

Table 13: PG&E’s Preliminary Schedule for Panel & Flexible Electrification Launch

| | |
|-----------------|--|
| Q4 2023 | PG&E files 2023 Implementation Plan |
| Q2 2024 | Estimated timing of possible CPUC approval of 2023 Implementation Plan |
| Q3 2024 | PG&E adds panel and circuit extension rebates to the existing program application |
| Q3 2024-Q1 2025 | PG&E contracts with a third-party consultant, sets up the trade ally network, and revises the application to allow for income prequalification |
| Q2 2025 | PG&E launches the trade ally network and the upfront incentive option |

Program #3: Resilient Fleet Charging Playbook

The Resilient Fleet Charging Playbook will develop an interactive website resource with online tools, available on PG&E’s website and targeted to critical fleet customers preparing to electrify their fleets, to help businesses clarify the risk of interrupted grid-source charging and identify mitigation measures. The Playbook will also serve as an accessible one-stop resource for these same customers on vehicle-grid integration. Pending CPUC approval of the program, PG&E plans to begin development of the playbook starting in Q3 2024 and launch the resource in Q3 2025.

| Resilient Fleet Charging Playbook | |
|-----------------------------------|--|
| Customer Segment | Fleet customers (targeting critical or essential service fleets) |
| Program Design | Provide an online playbook on resilient charging solutions, targeted at critical customers looking to electrify their fleets |
| Implementation Structure | Third-party to develop playbook; PG&E to manage all ME&O and integration with other programs |
| Program Goals | Support near-term EV adoption by critical customers by addressing hesitancy to electrify over resiliency concerns |
| Timeframe & Launch Date | Playbook launch in Q3 2025; ME&O for the Playbook will extend through 2025; Playbook maintenance will extend through 2028 |
| Total budget | \$2.50 million |
| Funding source | Residential holdback revenue |
| Focus | Resiliency |

Policy and Market Support

Barriers Addressed

Following the California Air Resource Board (CARB)’s adoption of the Advanced Clean Fleets (ACF) regulation in 2023, all PG&E fleet customers in PG&E’s service territory will have to electrify their fleets by 2045 everywhere feasible.⁷⁷ However, to meet this timeline, critical customers – which include fire stations, emergency response providers, and public and private gas, electric, and water utilities, among many others⁷⁸ – need additional support to address their concern of an interruption to charging availability for their fleets when grid-source power goes out. A public comment filed with CARB on March 28, 2023, regarding ACF reads “[our] Water District is located in an isolated, rural corner of San Diego County

⁷⁷ CARB Advanced Clean Fleets, available at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets> (accessed Nov. 1, 2023). CARB adopted the Advanced Clean Fleets Regulation on April 28, 2023, available at <https://ww2.arb.ca.gov/rulemaking/2022/acf2022> (accessed Nov. 1, 2023).

⁷⁸ Defined here as critical facilities and critical infrastructure that are essential to the public safety and require additional assistance and advance planning to ensure resiliency during de-energization events. For more, See D. 20-12-027, pg. 25.

with an unreliable power grid... We are battered by frequent power outages and a solar charged fleet is unrealistic.”⁷⁹

The same concern is present in PG&E’s service territory: according to a 2022 analysis, approximately 10 percent of non-residential EV ports⁸⁰ are on feeders repeatedly impacted by Public Safety Power Shutoffs (PSPS).⁸¹ By 2030, as many as one in five non-residential EV ports could be on feeders frequently impacted by PSPS given growing fleet electrification and using the same dataset of historical PSPS events. While PG&E continues to employ methods like Enhanced Powerline Safety Settings (EPSS) to reduce the amount and duration of PSPS outages, customers who must have fleets readily available will need to consider resiliency solutions for PSPS events and other natural disasters that could cause power outages. Critical customers have unique concerns about the impact to public safety and societal continuity should they be unable to charge and operate vehicles needed to complete their critical business functions.

In speaking with customers, PG&E has found that there is varying understanding of the risk posed by power outages. PG&E has heard customers ask how likely a grid-sourced power outage is and express confusion over how much of their total fleet would really require resilient charging solutions. PG&E has found that the utility’s own electrified fleet can organically recover (i.e., charge fully and still be operational in time for use without any alternative charging solutions) from a grid-source power outage of up to six hours. As the operator of a critical fleet, PG&E must now identify resilient charging solutions for power outages in excess of six hours, regardless of the probability of such outages. A more than six-hour power outage at a PG&E facility without a resilient charging plan could mean a compromised electrified fleet unable to perform standard operations, resulting in PG&E being less responsive to emergency situations for its customers, the potential for prolonged outages to the electrical system, and additional risks to public safety.

While resiliency solutions are needed to support reliable charging, electrified fleets can also serve as resiliency solutions by powering non-transportation load. The Resilient Fleets Charging Playbook will address both these resilience use cases: resiliency *for* EVs and resiliency *from* EVs.

The Resilient Fleet Charging Playbook will develop a robust and interactive resource, available digitally and targeted to critical fleet customers preparing to electrify their fleets, to help these customers clarify the risk of interrupted grid-source charging and identify mitigation measures (also referred to as resilient charging solutions). The Playbook will also provide information on vehicle-grid-integration applications for critical customers who are interested in using their fleets to provide backup power to other critical, non-transportation loads.

⁷⁹ “Comment 9 for Advanced Clean Fleets Regulation,” available at https://www.arb.ca.gov/lispub/comm/iframe_bccomdisp.php?listname=acf2022&comment_num=422&virt_num=9 (accessed Nov. 3, 2023). See also “Comment 56 for Advanced Clean Fleets Regulation (acf2022) – 45 day,” available at https://www.arb.ca.gov/lispub/comm/iframe_bccommprt.php?listname=acf2022 (accessed Nov. 3, 2023).

⁸⁰ Includes workplace, PG&E fleet, and public Level 2 and DCFC chargers forecast for 2022 in PG&E geospatial analysis, using PG&E’s internal 2022 EV forecast.

⁸¹ Based on a 4-year PSPS lookback.

Program Alignment

Funding the Playbook now will help ensure that the state remains on track for meeting its decarbonization goals as reflected in CARB’s ACF regulation. While the need for guidance on resilient charging solutions is evident, PG&E is aware of no programs or efforts in existence today from the other California investor-owned utilities or CCAs that directly address resilient fleet charging, though they expressed interest in the offering.

The proposed Playbook will complement existing support that PG&E provides to fleets through its EV Fleet Program, as well as support proposed in its Transportation Electrification Advisory Services (TEAS), currently pending with the CPUC. The EV Fleet Program provides comprehensive infrastructure support and incentives to PG&E customers that are electrifying their medium- and heavy-duty vehicle fleets. As proposed, TEAS will provide advisory services to medium- and heavy-duty fleets to help accelerate their electrification. Service would include web resources, fleet electrification planning, capacity guidance, and post-energization services.

The educational and interactive tool components of the Playbook build on PG&E’s expertise developing highly utilized EV-related online resources such as the EV Savings Calculator (ev.pge.com) and the EV Fleets Calculator (fleet.pge.com). As of August 2023, the EV Savings Calculator webpage has hosted over 1.7 million sessions from over 1.4 million unique users, and a net promoter score of 25. As of May 2023, the EV Fleet Calculator webpage has hosted 19.5 thousand sessions from over 13 thousand unique users and has a net promoter score of 53. Net promoter scores above 0 are considered good, above 20 great and net promoter scores above 50 are amazing.⁸²

The Playbook will be complementary to and used for several existing and upcoming efforts:

1. **EV Fleet:** The Playbook will be promoted on the EV Fleet website and EV Fleet Onboarding Specialists will be trained to speak about the Playbook and resilient charging in their conversations with customers. The EV Fleet program is currently being implemented and is expected to enroll customers through 2026.
2. **TEAS:** The Playbook will be used by TEAS Advisors in consulting with critical customers on resilient charging. As proposed, TEAS will accept applications for three years, beginning in 2024, if approved.
3. **Transportation Advisory Services:** The Playbook can be leveraged for use in the Transportation Advisory Services being developed as part of the Commission’s Transportation Electrification Framework Funding Cycle 1, which will follow the launch of TEAS.⁸³

⁸² Ord, “What Your Net Promoter Score is Trying to Tell You,” *Forbes*, Jun. 2022, available at <https://www.forbes.com/sites/forbestechcouncil/2022/06/07/what-your-net-promoter-score-is-trying-to-tell-you/?sh=3cbdad653bc6> (accessed Nov. 3, 2023).

⁸³ D.22-11-040

4. **Existing resiliency resources:** The Playbook will be promoted through PG&E’s existing customer resiliency resources, including the Backup Power page⁸⁴ and the PSPS website.⁸⁵

The timing for this Playbook is concurrent with PG&E’s internal fleet electrification initiative. PG&E is responsible for providing resiliency solutions to approximately 3,800 of its own vehicles by 2030 and 9,000 vehicles by 2045. The transition to an electric fleet reliant on the grid to charge introduces new levels of dependency on the grid. PG&E is discovering that there are challenges providing resiliency solutions to critical fleets of this size due to nascency in the resiliency market, cost of existing technology, and limited space at existing sites to incorporate resiliency solutions. The learnings from PG&E researching and pursuing resiliency solutions for its own critical fleet will be incorporated into the Playbook for the benefit of the Utility’s fleet customers at large.

The effort is also complementary to PG&E’s efforts on vehicle-grid integration (VGI), which allow for customer resiliency as well as act as grid assets. PG&E has a 2030 goal to enable two million EVs to participate in vehicle-grid integration (VGI) applications, allowing EVs to be a cornerstone of reliability and resilience. In the near-term, PG&E is implementing four VGI pilots, comprising a \$12.5 million portfolio. VGI is one tool that customers may be able to leverage in the event of a PSPS event or power outage.

Meanwhile, PG&E has made significant strides in reducing the impact of PSPS events for its customers.⁸⁶ Over the past several years, PG&E has:

- Refined existing artificial intelligence and machine-learning models to precisely target PSPS in areas experiencing severe weather,
- Built microgrids that can power critical services, even when there is an outage,
- Enhanced safety patrols that check for damage, which helps get the power back on faster, and
- Installed sectionalizing devices to limit the number of customers who lose power during PSPS outages.⁸⁷

Nevertheless, the risk of power outages – both from PSPS events and natural disasters – persists, and there is a remaining need for guidance on how to mitigate the impact of these events for critical fleets.

⁸⁴ PG&E, “Backup Power, available at https://www.pge.com/en_US/safety/electrical-safety/electric-generator-safety/electric-generator-safety.page?WT.mc.id=Vanity_backuppower (accessed Nov. 3, 2023).

⁸⁵ PG&E, “Learn about Public Safety Power Shutoffs,” https://www.pge.com/en_US/residential/outages/public-safety-power-shutoff/learn-about-psps.page (accessed Nov. 3, 2023).

⁸⁶ The number of PSPS events has been reduced from 2019 where there were 8 PSPS events impacting 2 million customers to 6 PSPS events in 2020 impacting 650,000 customers, 5 PSPS events in 2021 impacting 80,000 customers, 0 PSPS events in 2022, and 2 PSPS events in 2023 year-to-date impacting 5,000 customers.

⁸⁷ PG&E, “2023 Public Safety Power Shutoff Pre-Season Report,” June 2023, https://www.pge.com/pge_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/R18-12-005-pge-psps-2023-pre-season-report-20230629.pdf (accessed Nov. 3, 2023).

Alignment with LCFS Requirements

Per LCFS Decision (D.) 20-12-027, LCFS resiliency projects are defined as those “that would appear to be consistent with CARB’s LCFS regulations as:

1. Those that lead to the installation of EV charging facilities at evacuation/emergency response centers, or at other critical facilities and critical infrastructure, like those defined under the Self-Generation Incentive Program. This could include deployment of charging infrastructure at these locations, storage-supported charging, off-grid charging, or other innovative ways to support charging infrastructure and resiliency by providing EV owners with the ability to charge their vehicles in the event that grid outages prevent them from fueling their EVs where they would normally charge them; and/or
2. Those that pilot technologies that allow EV owners to use their electric vehicle to power electric equipment at their homes or businesses in the event of power shut-offs due to weather, wildfire risk, or other emergencies.”⁸⁸

Consistent with the first category of qualifying projects per D.20-12-027, the Resilient Fleets Charging Playbook is an innovative way to support charging infrastructure resiliency. The Playbook’s interactive, online interface will provide easy access for critical facilities and critical infrastructure customers to learn about novel strategies to improve charging resiliency.

In its portfolio of four vehicle-to-everything (V2X) pilots, PG&E is testing various nascent technologies to allow EV owners to use their vehicles to power their homes, businesses, and communities, consistent with the second category of qualifying projects. The lessons learned from these V2X pilots will be leveraged in the development of the Resilient Fleets Playbook.

In addition to supporting resiliency solutions through the V2X pilots, PG&E has made significant strides in reducing the impact of PSPS events for its customers as described in the *Program Alignment* section above. PG&E has therefore designed this pilot as a highly targeted offering to fill a specific but unaddressed gap at the intersection of EVs and resiliency without duplicating existing efforts.

While PG&E’s overall LCFS expenditures dedicated to resiliency in this Implementation Plan constitute less than the 20 percent target established in D.20-12-027, this is reasonable because PG&E has provided substantial investment in resiliency initiatives outside of the LCFS program, as described above. Instead, this Implementation Plan presents the measures that PG&E believes will fill the gaps in addressing resiliency issues through the Resilient Fleet Charging Playbook. The budget needed to achieve the objectives in the Playbook constitutes less than 20 percent of LCFS holdback proceeds, allowing for LCFS revenues to support other critical programs advancing transportation electrification.⁸⁹

⁸⁸ D.20-12-027 pp.25-26.

⁸⁹ See Table 7 (Estimated Holdback Portfolio Budgets by Expenditure Category and Compliance Target) in the Portfolio Budget section (D.2) for percentages by year.

Stakeholder Feedback

PG&E met with a varied group of external stakeholders over the course of the development of the program. Those stakeholders included critical customers, Environmental Justice advocates, environmental groups, and government entities. These conversations proved central in designing the concept of a Playbook to meet the actual barriers and needs of target customers. The section below provides a sample of specific questions and concerns brought up by critical customer stakeholders which are followed by a short description of how the Playbook will address these issues.

- One utility customer, looking for any advice they could find, simply asked what other customers are doing about resilient charging. The Playbook will provide case studies of other critical customers who have identified resilient charging solution, such as PG&E. The Playbook will also provide customers with menus of resilient charging solutions they may want to consider.
- A different utility customer, based on their initial research into resiliency solutions, found a tension between cost-effective and clean energy-sourced solutions. This is an issue PG&E is facing in its internal fleet electrification efforts. As PG&E identifies a path forward through this tension, it will be well-positioned to provide insights to customers in the Playbook.
- One customer described encountering roadblocks in the utility process when attempting to co-locate batteries and EV chargers. As part of the Playbook development process, PG&E will develop a customer journey map on the Rule 21 (interconnection of DERs) and Rule 29 (EV service extensions) process. The journey map will be included in the Playbook to make this dual-tariff process easier to follow for customers. During the creation of this journey map, PG&E may identify improvements to how the utility implements Rule 21 and/or Rule 29.
- A utility customer identified physical space limitations as a concern when planning for backup power solutions. As part of the customer research phase of the Playbook's development, PG&E will aggregate a set of customer considerations, such as but not limited to space limitations, cost, and speed of deployment. During the tool's development, PG&E will rate an array of resilient charging solutions based this universe of customer considerations. Ultimately, the Playbook tool will prompt the visiting customer to identify their primary considerations. The tool will select resilient charging solutions to suggest for the customer accordingly.

Playbook Overview

The Playbook will be in the form of an interactive website resource with online tools. What follows is an initial outline of Playbook content, based on conversations with customers and PG&E customer representatives. The Program Manager will be responsible for determining the final Playbook content.

Resilient Charging:

Assessing the risk

- Determining historical risk of outages at a customer's site(s), and why this may or may not reflect future risk

- Circuit redundancy, and how to determine whether a customer has circuit redundancy⁹⁰
- Case study of how a critical customer determined the subset of their overall fleet that needed reliable charging and concluded that this subset of vehicles could sustain an X-hour outage before needing resiliency solutions. The Playbook here will include an interactive tool with which customers can calculate the same after inputting basic information about their fleet’s duty cycle and transportation needs to maintain critical operations.

Resiliency Solutions

- Overview of customer considerations, including cost, speed of implementation, human resources, real estate, and others.
- A cornerstone of the Playbook will be an interactive tool into which customers will input site-specific information such as size of critical fleet, fleet duty cycle, and the customer’s priority considerations. The tool will output recommended resiliency solutions, including but not limited to battery storage, charging at alternative locations, generators, and mobile charging services, along with general price estimates.

Co-locating EV Chargers and Distributed Generation

- Journey map for customers looking to go through Rule 21 (used for interconnecting generating facilities to the distribution level grid) and Rule 29 (used for service extensions to support added load from EV charging) and tips on how to navigate the dual-tariff process. Rules 21 and 29 have separate application pathways within the YourProjects portal and they are implemented by separate teams at PG&E.⁹¹ While PG&E allows for a single project number to be used across both the load and generation applications, how to navigate both processes is not always clear to customers looking to co-locate distributed energy resources (DER) and EV chargers.⁹²

Vehicle-Grid Integration:

Assessing the need

- Case study of a commercial customer who installed bidirectional chargers capable to powering their critical business operations. The Playbook here will include an interactive tool with which customers can calculate the size of their critical non-transportation load and understand how much of this load can be served through backup power provided by their EV fleet.

⁹⁰ Circuit redundancy refers to PG&E serving a customer from two different electric circuits from two different substations, such that if the power goes down at any point at one substation but not the other, the customer is not without power. Circuit redundancy is typically initiated by the customer when they are first establishing their service with PG&E and is most often seen with critical customers.

⁹¹ Available at <https://yourprojects-pge.com/login>.

⁹² There is reason to believe that there will be an increase in the number of projects utilizing both tariffs. For example, customers who want to install bidirectional chargers to participate in vehicle-to-grid (V2G) – using EVs as a reliability resource for the grid – will have to go through both Rules 21 and 29.

Resiliency Solutions

- There are limited options for commercially available bidirectional charging solutions on the market currently. This section of the Playbook will provide a list of available charging equipment and rough pricing.

Installing Bidirectional Chargers

- Customers installing bidirectional chargers must go through both Rule 21 and Rule 29. The same journey map provided in the Resilient Charging section of the Playbook will be linked here, with additional description of how it applies to customers looking to use their EVs to charge non-transportation load.

More Resources

- This section of the Playbook will direct visitors to more resources to support them in their resilient electrification journey. Other resources promoted/linked may include PG&E's proposed Transportation Electrification Advisory Services, how to connect with PG&E Business Energy Solutions Representatives, Rule 21 and Rule 29 resources, and material on PSPS and EPSS.

Implementation of the Playbook will begin with a customer discovery phase, led by the Program Manager. During this phase, PG&E will speak with critical customers – including the same customers PG&E engaged as part of developing this Implementation Plan proposal – to refine the Playbook's contents. For example: are there interactive tools in addition to the two outlined above (one to calculate resiliency need and one to suggest resilient charging solutions) that customers would benefit from? Customer interviews to underpin the creation of customer case studies, including PG&E's own experience with identifying resilient charging solutions for its internal electrified fleet, will also happen during this phase. At the time of writing, PG&E is conducting a thorough survey of resilient charging solutions and will then select site-specific solutions for its own fleet. The resulting content will be heavily leveraged in the development of the Playbook.

PG&E will leverage similar user acceptance testing that was performed when developing the EV Savings Calculator. During this process, a sample of customers will assess the tools' functionality, usability, and overall performance, providing feedback and possible improvements to the Playbook. This will allow PG&E and the third-party developer to make changes that improve the customer experience before the Playbook is launched.

The PG&E Program Manager will be responsible for development of the Playbook's content in collaboration with a third-party developer. As part of content development, the program manager will be responsible for conducting customer case studies, researching resiliency solutions and their associated costs, and creating a Rule 21/Rule 29 combined Customer Journey Map. Playbook development will also include the graphic design of the playbook and development of the interactive features of the playbook, which at this time PG&E anticipates will be completed by a third-party consultant, with the direction of PG&E Marketing.

Customer Eligibility

The Resilient Fleet Charging Playbook will be publicly available online for all PG&E customers, both bundled and unbundled. However, it will be especially positioned for critical facilities and critical infrastructure customers looking to electrify their fleets, and all ME&O efforts will be targeted at critical customers specifically, as described further in the ME&O section below.

Distribution of Revenue

The Resilient Fleet Charging Playbook pilot does not include individual customer incentives; instead, the funding will be used to develop the playbook as an actionable and publicly available resource to help critical fleets electrify.

The development of the playbook may reveal opportunities for PG&E to further support critical customers in electrifying their fleets. For example, during the creation of a journey map for customers looking to co-locate EV chargers and Distributed Energy Resources (DERs), PG&E may identify improvements to how the utility implements Rule 21 (interconnection of DERs) and/or Rule 29 (EV service extensions).

Program Administration

The playbook will be owned and managed by PG&E, with development support from a third-party playbook creator.

PG&E will be responsible for:

- **Pre-launch activities:** Running the request for proposal (RFP) process for a third-party playbook creator; developing the pilot website with Information Technology (IT) and shepherding it through cybersecurity, privacy, and accessibility testing; working with the selected third party to design the playbook in accordance with PG&E brand standards.
- **Program execution activities:** Oversight of the third-party playbook creator, data review and reporting, ME&O coordination, program evaluation, and ad hoc requests.

The third-party playbook creator will be at minimum responsible for the graphic design and interactive features of the Playbook but may play a larger role depending on the selected vendor's capabilities.

After the initial launch, PG&E will perform regular operations and maintenance on the tool to keep it running and updated through the end of 2028.

Marketing, Education, and Outreach (ME&O)

The goal of ME&O will be to drive critical customers to the online Playbook via targeted outreach:

- **Partnerships and relationships:** Internal PG&E relationships (Business Energy Solutions, EV Fleet and TE Advisory Services Program Managers, Contact Center, Corporate Relations, and

Local Public Affairs); External relationships with local governments and state and local agencies, CCAs, and EV charging equipment and service providers.

- **Core marketing:** Targeted e-mail, PG&E website, PG&E digital newsletters for business customers, and integration within other relevant program content (e.g., PSPS communications).

At the start of the pilot, the Program Manager and the PG&E Marketing team will work together to design a marketing plan for the pilot. The Marketing team will be responsible for executing on the marketing tactics for the Playbook, as well as reviewing the Playbook and website content and coordinating with the Program Manager to publish the Playbook on the PG&E website.

PG&E will focus heavily on targeted relationships and partnerships for promoting the Playbook. For example, PG&E will leverage its TE Stakeholder Advisory Group (SAG), a forum to keep local government and community stakeholders informed and engaged on PG&E's TE efforts, to promote the Playbook and provide information that the organizations can share with their internal agencies and constituents. The Program Manager and Marketing team will develop talking points about the pilot and train PG&E Call Center and Business Energy Solutions (BES) representatives to take questions on and speak about the Playbook in their customer conversations, and the pilot team will work directly with BES representatives that work with critical customers to promote the Playbook where it may be most useful.

PG&E's existing and future commercial EV programs, including EV Fleet and TEAS, also represent an excellent opportunity to provide additional value to customers by offering the Playbook as a resource. The Playbook team will work closely with the EV Fleet and TEAS program managers as the Playbook is designed and launched. These program webpages also will be updated to promote the Playbook.

PG&E will complement the targeted outreach with marketing activities that reach a larger number of customers and are beneficial for awareness-raising, including emails, message integration within relevant content such as Public Safety Power Shutoff communications, and digital newsletters for business customers.

Program Evaluation

As described in the Portfolio Structure section (C.3), evaluation includes both regular assessment of program performance and customer satisfaction, as well as more formal reports and research studies determined by the specific needs of the program. The Resilient Fleet Charging Playbook's evaluation activities will include the following:

- **Key metrics:** PG&E will collect and analyze data on a regular cadence to assess the effectiveness of the pilot. The key metric used to determine Playbook effectiveness will be engagement with the Playbook webpage, such as the volume of Playbook visitors within the targeted audience and number of clicks within the Playbook. PG&E will also be interested in collecting evidence of the Playbook's influence on the customer's vehicle purchase, via EV Fleet and TEAS participant surveys and speaking with PG&E onboarding specialists and BES representatives.
- **Customer experience:** PG&E will review customer survey responses and document key customer insights about the TE journey for critical customers to inform Playbook improvements and customer outreach.

- **Additional studies:** PG&E will assess the specific needs, challenges, and opportunities of the playbook as it is implemented and will suggest additional traditional evaluations or specific research studies as appropriate.

Estimated Budget and Implementation Schedule

Estimated annual spend for the program is detailed in the table below.

Table 14: Estimated Budget for the Resilient Fleet Charging Playbook (\$M)

| Resilient Fleet Charging Playbook | | | | | | |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
| Admin | | | | | | |
| ME&O | | | | | | |
| Evaluation | | | | | | |
| Playbook Development | | | | | | |
| TOTAL | \$0.40 | \$1.59 | \$0.17 | \$0.17 | \$0.17 | \$2.50 |

Note: Numbers may not add up due to rounding

PG&E has included ongoing cost of maintaining the Playbook through 2028 in this budget proposal. Cost of maintaining the Playbook beyond 2028 may be included in the budget requests of future LCFS Implementation Plans.

The above budget estimates may change based on third-party quotes, ME&O strategies, and/or market factors. PG&E may also extend the timeframe of the outreach and tool updates based on customer interest and portfolio needs and will work closely with Energy Division Staff on any adjustments to the program. PG&E will continue to provide updated forecasts in the Annual LCFS Forecast Advice Letter and updated expenditures in the LCFS Annual Report.

Table 15: PG&E’s Preliminary Schedule for Resilient Fleet Charging Playbook Launch

| | |
|---------|--|
| Q4 2023 | PG&E files 2023 Implementation Plan |
| Q2 2024 | Estimated timing of possible CPUC approval of 2023 Implementation Plan |
| Q3 2024 | RFP issuance; PG&E work begins on playbook content development |
| Q1 2025 | PG&E contracts with the third-party playbook creator |
| Q3 2025 | Playbook goes live online and ME&O campaign launches; EV Fleet and TEAS begin incorporating resilient charging into customer conversations |

Program #4: Capacity Pilot

The Capacity Pilot will use LCFS revenue to fund distribution capacity infrastructure upgrades to enable public EV charging in Priority Communities. The Capacity Pilot plans to target EV-related new business applications that require capacity upgrades that are planned several years in advance of operation and develop programmatic learnings that may lead to eventually funding grid upgrades with LCFS funds outside of this pilot, if allowed within regulation. Pending CPUC approval, PG&E plans to set up the pilot as soon as possible, with a goal to start construction in Q1 2025.

| Capacity Pilot | |
|--------------------------|--|
| Customer Segment | <ul style="list-style-type: none"> Near-term: Non-residential customers Long-term (beyond this pilot): Organic load growth that serves all customer segments, including residential and non-residential customers |
| Program Design | Fund grid capacity upgrades related to public electric vehicle charging in priority communities |
| Implementation Structure | Implemented internally using existing distribution planning, service planning, and project management processes. |
| Program Goals | <ul style="list-style-type: none"> Near-term: fund grid capacity upgrades for interconnection applications related to public charging station development in Priority Communities. Long-term (beyond this pilot): fund grid capacity upgrades to prepare for organic load growth from transportation electrification and reduce utility delays in connecting to the distribution grid. |
| Timeframe & Launch Date | 2024-2026; Q1 2025 |
| Total budget | \$20.04 million |
| Funding source | Residential holdback revenue from credits deposited into PG&E's account prior to January 1, 2022 ⁹³ |
| Focus | Equity |

Policy and Market Support

Barriers Addressed

California has set ambitious climate goals to decarbonize the state's energy system by 2045, and state policy is accelerating transportation electrification with light duty EVs and non-residential fleet and medium- and heavy-duty (MHD) vehicles, for which loads are larger and grid readiness timelines are longer than average. PG&E anticipates a significant increase in EV load over the next two decades, accelerated by major policy drivers. These include Governor Newsom's Executive Order setting statewide goals to phase out gasoline-powered cars and trucks in California, including only selling new

⁹³ See "Alignment with LCFS Requirements" section below for more detail.

zero-emissions light duty vehicles by 2035, and getting to 100% of MHD vehicles in the State as zero-emission by 2045 for all operations where feasible, by 2035 for drayage trucks, and by 2035 for off-road vehicles and equipment where feasible.⁹⁴

Additional policy drivers include CARB's Advanced Clean Trucks⁹⁵ and Advanced Clean Fleets regulations.^{96,97} As outlined in CARB's 2020 Mobile Source Strategy (MSS), these policies are necessary to achieve the air and climate goals of the State.⁹⁸

A joint report by the California Energy Commission (CEC), the CPUC, and CARB found that meeting these goals will require a tripling of the current capacity of the electric grid by 2045.⁹⁹ According to the CEC, total electric system sales are projected to increase 40% (38,900 GWh) and peak load to increase 28% (5.7 GW) in PG&E's service area between 2022 and 2035.¹⁰⁰ Meeting these state goals and the associated increase in usage and demand requires substantial updates to the distribution system. As indicated in modeling that the CPUC commissioned in its High DER Proceeding, there is a potential need of approximately \$50 billion in distribution grid investments by 2035 collectively by PG&E, SCE, and SDGE to support a high electrification future, should load not be mitigated.¹⁰¹

The projected distribution capacity upgrades required to serve forecasted load growth far outpaces what utilities have been approved to fund in a timely and costly manner. For example, in 2023, PG&E participated in the initial stages of the Freight Infrastructure Plan (FIP) with the CPUC, completing a case study of freight infrastructure needs focused on Interstate 5 and State Route 99 south of Bakersfield. PG&E used data inputs from the California Transportation Commission's SB 671 Clean Freight Corridor Program infrastructure working group and found that freight electrification charging loads projected for this region based on SB 671 far exceed the transportation electrification growth currently included in PG&E's and the CEC's the Integrated Energy Policy Report (IEPR) distribution and transmission forecasts.¹⁰²

⁹⁴ Executive Department, State of California, Executive Order N-79-20.

⁹⁵ CARB Advanced Clean Trucks, available at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks> (accessed Nov. 1, 2023).

⁹⁶ CARB Advanced Clean Fleets, available at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets> (accessed Nov. 1, 2023).

⁹⁷ CARB adopted the Advanced Clean Fleets Regulation on April 28, 2023, available at <https://ww2.arb.ca.gov/rulemaking/2022/acf2022> (accessed Nov. 1, 2023).

⁹⁸ CARB 2020 Mobile Source Strategy, October 28, 2021, available at https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf, pg 4-5 (accessed Nov. 1, 2023).

⁹⁹ California Energy Commission, "California Releases Report Charting Path to 100 Percent Clean Electricity," March 15, 2021, available at: <https://www.energy.ca.gov/news/2021-03/california-releases-report-charting-path-100-percent-clean-electricity> (accessed Nov. 1, 2023).

¹⁰⁰ PG&E TAC area Local Reliability Scenario, California Energy Commission, 2022 Integrated Energy Policy Report.

¹⁰¹ R.21-06-017.

¹⁰² California Transportation Commission, "Senate Bill 671", available at <https://catc.ca.gov/programs/sb671> (accessed Nov. 1, 2023).

While the costs to upgrade distribution capacity are traditionally covered in the General Rate Case (GRC), it is essential that these costs are not borne by ratepayers alone. PG&E's 2023 Distribution Deferral Opportunity Report (DDOR) identifies nearly \$1 billion in distribution capacity work that does not have commensurate funding through the 2023 GRC request.¹⁰³ In PG&E's perspective, grid and infrastructure upgrade work needed to support California's transportation electrification goals should not be borne by ratepayers alone, and that alternative sources of funding, such as LCFS revenues, can represent an opportunity for PG&E to support and accelerate additional TE-related projects in priority communities.

Program Alignment

The CPUC has previously recognized the need for external funding for necessary infrastructure work, requiring California IOUs to pursue federal funding made available through the Infrastructure Reinvestment Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA) to reduce rate impacts and thereby improve affordability for all customers. PG&E believes that non-traditional funding sources, such as those developed through federal and state programs, LCFS markets, and other opportunities, are an essential component of meeting decarbonization goals at the lowest societal cost.

This proposal is a first-of-its-kind pilot that will develop important learnings around leveraging LCFS funds for capacity projects. PG&E's hope and intent is to leverage and apply these learnings in additional, future programs, should CARB and CPUC regulatory changes be made to allow for broader LCFS holdback spending on such projects.

Alignment with LCFS Requirements

PG&E's Capacity Pilot supports current and future EV drivers specifically in Priority Communities as designated by CARB's LCFS regulation and the CPUC's LCFS decision. However, due to differences between equity requirements between the two documents, the pilot will be considered an equity project for the CPUC but not for CARB.

CARB's LCFS regulation requires that Load-Serving Entities (LSEs) like PG&E must "use all credit proceeds to benefit current or future drivers in California."¹⁰⁴ By supporting capacity upgrades specifically to support load growth from EV charging equipment, the Capacity Pilot meets this requirement. In addition, starting with credits deposited January 1, 2022, utilities must use an increasing percentage of holdback credit proceeds to support projects in defined equity communities using a preapproved list of projects or request executive officer approval for projects not on the list.

The CPUC's LCFS decision applied its equity requirements to "spend" rather than "proceeds", meaning the requirements are for the year the dollars are spent rather than earned.¹⁰⁵ Historically PG&E has earned more proceeds than it could return to customers with its one program authorized under the prior CPUC LCFS decision in 2015, and PG&E therefore has a "bank" of credit proceeds. PG&E will fund the

¹⁰³ PG&E's 2023 Distribution Deferral Opportunity Report (DDOR), p. 8. Filed August 15, 2023, in R.21-06-017.

¹⁰⁴ CARB LCFS Regulation, §95491(d)(3)(A)(2).

¹⁰⁵ D.20-12-027, ordering paragraph 1, pg. 41-42.

Capacity Pilot with proceeds from its LCFS bank, and as a result, the pilot is subject to the CPUC's requirements for equity but not to CARB's (which start with credits deposited January 1, 2022).¹⁰⁶ Collectively, PG&E's other equity programs fully comply with CARB's equity requirements for each year covered by this plan, so the Capacity Pilot will not be counted as equity spend for CARB, and instead represents "bonus" equity spend.

For the CPUC's equity requirements, expenditures must "meet the equity project requirements of the California Air Resources Board's LCFS regulation, as harmonized with Assembly Bill 841 by this decision."¹⁰⁷ There are two elements to this requirement: the type of project and who benefits from it. CARB's equity project list includes "investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences."¹⁰⁸ As a result, the Capacity Pilot will fund upstream infrastructure upgrades needed to energize public charging installations (i.e. applications for public charging installations that have been delayed or put on hold indefinitely due to a lack of available capacity at the location).

To ensure the projects benefit the target equity population, PG&E will use the definitions of Priority Communities as listed in the CPUC's LCFS decision to select capacity projects, specifically:¹⁰⁹

- Disadvantaged communities: Communities within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen.¹¹⁰
- Low-income communities: Census tracts with median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low-income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Health and Safety Code §50093.
- Rural areas: Census tracts with at least 75% of its population defined as rural by the latest US Census data (the US Census identifies urban and urban cluster census tracts; rural is anything outside of these categories).¹¹¹
- Tribal communities: Communities located on lands belonging to a federally recognized California Indian tribe.

¹⁰⁶ 17 CCR § 95483 (c)(1)(A)(6)(a) and CARB LCFS Guidance 20-03, Electricity Credit Proceeds Spending Requirements, pg 7, available at https://ww2.arb.ca.gov/sites/default/files/2022-03/lcfsguidance_20-03_2022-01-13_ADA.pdf (accessed Oct. 19, 2023).

¹⁰⁷ D.20-12-027, O.P. 1, pg 41-42.

¹⁰⁸ D.20-12-027, pg 10; 17 CCR § 95483 (c)(1)(A)(6)(a)(iii)

¹⁰⁹ D.20-12-027, pg 12-15.

¹¹⁰ California Office of Environmental Health Hazard Assessment, "CalEnviroScreen," available at <https://oehha.ca.gov/calenviroscreen> (accessed Nov. 1, 2023).

¹¹¹ CARB LCFS Guidance 20-03, Electricity Credit Proceeds Spending Requirements, pg 8, available at https://ww2.arb.ca.gov/sites/default/files/2022-03/lcfsguidance_20-03_2022-01-13_ADA.pdf (accessed Oct. 19, 2023).

In addition to being able to access the public charging installation, the communities will also benefit from the additional capacity available to interconnect future EV charging, homes, businesses, and other projects.

Accordingly, the Capacity Pilot should be considered as an equity program for the purposes of CPUC compliance, as it meets the LCFS decision's requirement for an equity project. The Pilot should also be considered a valid use of LCFS revenues for the period before January 1, 2022, for the purposes of CARB compliance.

Stakeholder Feedback

PG&E has received feedback from stakeholders such as community-based organizations and environmental justice groups across several CPUC proceedings, but most notably in the High DER OIR (R.21-06-017), regarding the need to accelerate the timeline of adding capacity to the distribution system. Providing more timely capacity will support load growth for transportation electrification, as well as broader electrification in communities across the service territory. While these forums and proceedings are outside the development of this LCFS pilot, the overwhelming stakeholder support for increasing distribution capacity underscores the importance of this pilot in finding innovative solutions to addressing this gap in distribution capacity.

Project Selection

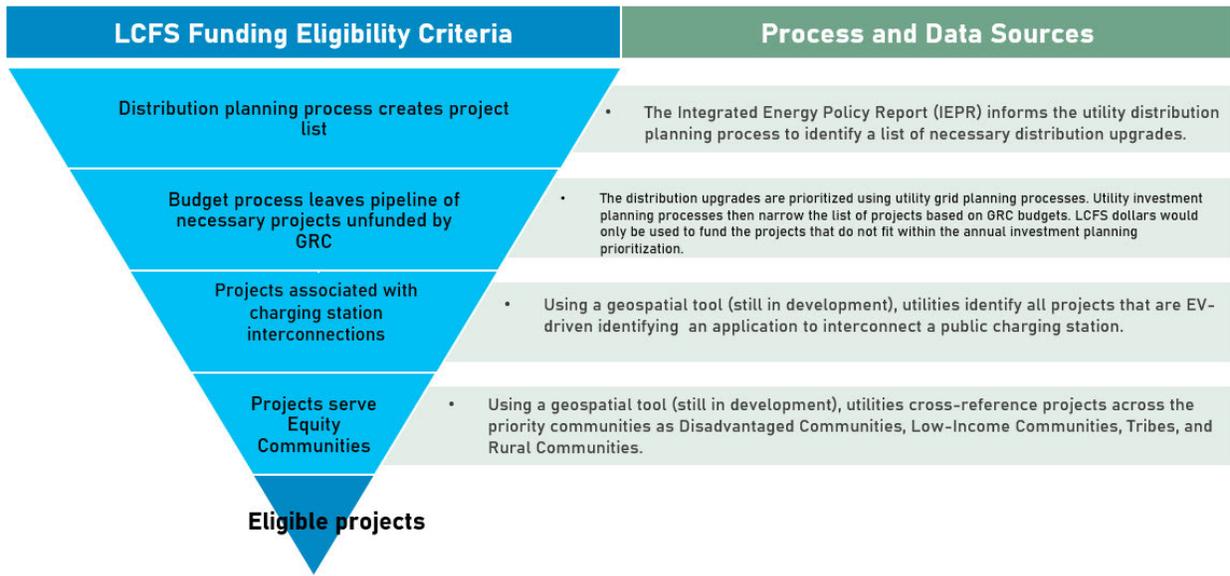
This program will fund distribution capacity upgrades that are 1) directly supporting a public EV-related request, such as a bank of charging stations; 2) located in a Priority Community; and 3) are already identified but unfunded.

Project selection will be determined by expanding upon PG&E's distribution planning process. The distribution planning process uses the IEPR, along with customer interconnection applications, to forecast asset overloads.

Using this data, technical teams identify required upgrades and assemble a list of projects related to distribution assets. Preliminary scoping and cost analysis is completed and then projects are prioritized based on a variety of characteristics, including asset overload risk, potential to bundle work as part of Integrated Grid Planning, customer wait time, cost, location, etc. The funding made available through the GRC is added as a constraint over this prioritized list to determine the projects that can be completed within a given year.

The projects that are prioritized become the annual business plan and detailed scoping and design work begin. The projects that are not able to be funded become a part of future years' work plans. PG&E proposes to use LCFS funding to design and construct projects that are EV-related but unfunded and would have been pushed to a future years' work plan. Should there be no unfunded projects, this pilot will fund projects as described above that otherwise would be GRC funded, thereby lowering the total ratepayer cost recorded to corresponding GRC balancing accounts.

Figure 1: Project Selection Criteria



Once these projects are identified, the list is then constrained again such that the pilot’s spend will be for capacity upgrades supporting public charging requests located in Priority Communities. As defined above, Priority Communities include Disadvantaged Communities, low-income communities, rural areas, and tribal lands.

These constraints create the final list of eligible projects, and PG&E proposes that the LCFS revenue fund the highest priority eligible projects up to the pilot budget limit.

It is PG&E’s intent that programmatic learnings from this pilot be leveraged to and applied to subsequent programs focused on capacity upgrades that will support broader TE adoption. Those projects would be identified through the same mechanisms described above, meeting the same or similar Priority Community eligibility criteria, with PG&E working to identify locations most in need of upgrades based on electric vehicle adoption forecasts. This would not start until all EV-related projects from the existing project pipeline are funded.

Distribution of Revenue

For the Capacity Pilot, the LCFS holdback revenue will fund necessary distribution upgrades that will serve customers and enable increased EV load on the system. Capacity projects placed in service using LCFS dollars will not go into ratebase. These upgrades support customers by allowing EV load to come online faster, enabling EV adoption and focusing on Priority Communities. As a result, the funds will support many customers – including the site, future EV charging stations on the same part of the network, and all customers that access the charging stations. There are no direct incentives needed, as the upgrade itself creates value for customers.

Program Administration

The proposed Capacity Pilot will be administered using existing PG&E Service Planning and Design processes with support from the PG&E Clean Energy Transportation team and Project Management team. Tasks will be divided as follows:

Service Planning and Design/Distribution Planning:

- Identify required capacity upgrades
- Initial engineering and scoping of projects
- Develop budget requirements
- Develop final prioritized list
- Work with Clean Energy Transportation to identify EV projects

Clean Energy Transportation:

- Work with System Planning to identify EV projects
- Utilize GIS tools to identify projects in Priority Communities
- Define finalized list of Program projects and align with Program Budget
- Work with annual business plan team to confirm projects for the upcoming year
- Work with Project Managers to save all required documentation for project reporting true up process

Project Management:

- Work with engineering, design, estimating, permitting, etc. teams to ensure that projects progress and are aligned with stringent project requirements
- Work with Clean Energy Transportation to ensure that all required documentation is saved and available for project reporting.

ME&O

The proposed Capacity Pilot uses existing PG&E system planning processes. PG&E does not plan to market this program to new customers, as the projects are identified by internal System Planning teams based on approved load growth forecasts and new business applications. Marketing this program to customers would not increase engagement, especially considering that this program expects to fund existing EV-related applications and organic EV load growth related upgrades. Project upgrades to serve this increased load would happen with or without this funding, just at a decelerated timeline with a higher cost to ratepayers.

Program Evaluation

PG&E's existing distribution planning identifies circuits at risk of overload due to climate and load growth forecasts. PG&E's distribution planning process uses a CPUC-approved forecast, historically the Integrated Energy Policy Report forecast developed by the CEC, and reconciles this forecast with new

business applications. Projects identified through these processes meet rigorous standards, many of which are identified based on existing tariffs. Project managers ensure that all projects are designed to meet these standards, including engineering requirements, alternative analyses, and environmental regulations.

PG&E will be able to share the number of public charging stations being served by a Capacity Project funded through the LCFS program. PG&E can also share the number of customers served by any given upgrade. This accelerated service is aligned with State goals, along with many company sustainability goals to electrify fleets and communities. Other metrics include megawatts (MW) of load enabled and the number/type of projects that are completed.

Finally, this program represents a unique collaboration between multiple internal teams that will require new ways of harmonizing existing processes (for example, Service Planning and Project Management budgeting and tracking processes do not necessarily correlate to how Clean Energy Transportation must report budgets and spend to the CPUC and CARB annually). A goal of this program will be to identify and document schedules, responsible parties, accounting needs, reporting structure, and other requirements needed to use LCFS funding for these distribution upgrades. This will enable a possible future expansion of this pilot including into broader transportation electrification-related capacity upgrades.

Estimated Budget and Implementation Schedule

The Program will use existing GRC funding to forecast grid needs via the Annual Distribution Planning Process and intake energization applications from customers to prioritize infrastructure projects. LCFS funding will be used to fund specific projects. These projects, once completed, will not go into ratebase using traditional ratemaking methods. However, ongoing O&M will be funded via the traditional GRC funding mechanism. O&M for these projects are on a multi-year horizon which is beyond the timeline of this pilot, which requires this to be funded through the GRC process. Therefore, only a small portion of the budget will be allocated to personnel. This program assumes 0.5 full-time equivalents (FTEs) in Service Planning and 1 FTE on the Clean Energy Transportation team. Almost the entirety of the pilot budget will go to the implementation of eligible projects. Implementation includes costs associated with project scoping, estimating, designing, material procurement, construction costs, and potential contractor costs.

A small percentage of the budget, up to \$100,000, may be allocated to upgrade internal tracking systems for project reporting purposes.

An example budget breakdown of a distribution capacity project can be found below. This was taken from a previous existing project that could have qualified for this pilot. Assuming an average budget of \$5-6 million per distribution upgrade project (slightly lower than the example below), PG&E expects that funding from this pilot could serve three to four distribution capacity projects.

Table 16: Sample Project Budget Breakdown Category

| Category | Estimated Cost (x\$1,000) | |
|---|---------------------------|----------------|
| | Expense | Capital |
| Engineering and Project Management | \$0 | \$575 |
| Land and Environmental Review | \$0 | \$25 |
| Long-Lead-Time Material (transformer & switchgear) | \$0 | \$5,500 |
| Engineering, Project Management and Estimating | \$0 | \$300 |
| Land and Environmental Review | \$0 | \$300 |
| Totals (Expense and Capital): | \$0 | \$6,700 |
| Total Advanced Authorization Requested (x\$1,000): | \$6,700 | |

Estimated annual spend for the pilot is detailed in the table below.

Table 17: Estimated Budget for Capacity Pilot (\$M)

| Capacity Pilot | | | | | | |
|----------------------|---------------|----------------|---------------|------------|------------|----------------|
| Category | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
| Admin | \$0.16 | \$0.33 | \$0.17 | \$0 | \$0 | \$0.66 |
| ME&O | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Evaluation | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Capital Expenditures | \$7.98 | \$10.26 | \$1.14 | \$0 | \$0 | \$19.38 |
| TOTAL | \$8.14 | \$10.59 | \$1.31 | \$0 | \$0 | \$20.04 |

Note: Numbers may not add up due to rounding

The budget estimates will change based on the specific projects selected. PG&E may also extend the length of the pilot based on available funds and potential regulatory changes and will work closely with Energy Division Staff on any adjustments that are needed. PG&E will continue to provide updated forecasts in the Annual LCFS Forecast AL and updated expenditures in the annual report.

Assuming PG&E receives approval for this advice letter by Q2 2024, PG&E anticipates beginning setting up the process in Q3 2024 and constructing in Q1 2025 as shown in the schedule below.

Table 18: PG&E’s Preliminary Schedule for Capacity Pilot Launch

| | |
|----------|---|
| Q4 2023 | PG&E files 2023 Implementation Plan |
| Q2 2024 | Estimated timing of possible CPUC approval of 2023 Implementation Plan |
| Q3 2024 | PG&E identifies eligible projects |
| Q4 2024 | LCFS funded proposed project(s) “locked” in annual business plan, engineering studies begin |
| Q1 2025+ | Construction |

5. Non-Holdback Pilot Proposals

Pursuant to D.14-12-083, PG&E provides the following information on how it will distribute credits generated by non-residential customers.

As described in Section II.A.1, PG&E generates credits from charging that occurs at PG&E workplaces and PG&E-owned chargers in the EVCN program. More detail on PG&E's non-residential credit generation can be found in the LCFS Annual Report. There are different revenue distribution requirements for non-residential credit revenue than for the holdback credit revenue as outlined in D.20-12-027. Primarily, PG&E must use the credit revenue to benefit current or future EV drivers in California per CARB's LCFS regulation.¹¹² PG&E has one existing Non-Holdback Pilot for the use of the non-residential credit revenue, approved in the 2021 Implementation Plan. The Research & Innovation Fund will continue to run without changes from what was originally proposed.

III. REVENUE RETURN TO GAS CUSTOMERS

PG&E provides the following information regarding its plans for the return of revenue to eligible gas customers pursuant to Item 7.a through 7.i of Appendix A: Tier 2 Advice Letter Filing Requirements in D.14-12-083, as well as the information requested in the discussion sections of D.14-12-083.

A. Summary of Changes to PG&E's 2021 LCFS Implementation Plan

PG&E will continue returning revenue from its compressed natural gas (CNG) proceeds as described in the 2015 and 2021 Implementation Plans. The program was developed in response to Items 7.a through 7.j of Appendix A: Tier 2 Advice Letter Filing Requirements in D.14-12-083, as well as information requested in the discussion sections of D.14-12-083. The revenue return program will not change from the original design. However, how PG&E procures renewable natural gas (RNG) and generates credits/revenue has changed, and this is described below.

1. Renewable Natural Gas Procurement

PG&E filed Advice Letter 3961-G and received approval in June 2018 to develop a voluntary renewable natural gas procurement pilot. The intent of this original three-year pilot was to procure RNG and replace 100% of the CNG dispensed at PG&E's natural gas stations for internal and external fleet use in support of the State policies¹¹³ by promoting renewable natural gas production and to reduce greenhouse gas emissions associated with the life cycle of transportation fuels used in California. In addition, the pilot lowered overall costs for PG&E's CNG customers by distributing increased revenues generated from the sale of LCFS credits and Renewable Identification Number (RIN) credits from the U.S. Environmental Protection Agency (EPA) under the Renewable Fuel Standard Program.

¹¹² 17 CCR § 95491 (d)(3)(A) paragraph 2, pp 196.

¹¹³ CPUC Rulemaking (R.)17-06-015.



On October 22, 2021, PG&E submitted Advice Letter 4513-G to the California Public Utilities Commission requesting the continuance of PG&E’s Biomethane Environmental Proceeds Subaccount to track the proceeds received by PG&E and to return the revenue from the sale of the LCFS and RIN credits to PG&E’s CNG customers. The CPUC approved the advice letter on September 6, 2022. As a result, PG&E will continue to earn LCFS credits from RNG usage at PG&E-owned stations and return the proceeds to customers via the annual RNG Fuel Credit.

B. Gas Program

PG&E will continue to run one program for its gas customers, the Renewable Natural Gas Fuel Credit, without any changes from its 2021 Implementation Plan.

IV. CONCLUSION

Pursuant to OP 3 of Decision 20-12-027, PG&E hereby submits this LCFS Implementation Plan detailing four program proposals for the LCFS electric credit revenue return to customers and one program proposal for the natural gas revenue return to customers. Any future program proposals will be made via a Tier 2 AL updating the LCFS Implementation Plan.

A. Summary of Compliance Requirements for Revenue Return to Electric Customers

For ease of reference, the following three tables detail the requirements for the LCFS revenue return to electric customers and the specific page numbers in the Implementation Plan demonstrating compliance.

Table 19: General Information Questions per D.14-12-083

| Questions | | General | Holdback Program | | | |
|-----------|--|---------------------|----------------------------|--|------------------|----------|
| | | Implementation Plan | Affordable Public Charging | Residential Charging Solutions Expansion | Resilient Fleets | Capacity |
| | | Page | Page | Page | Page | Page |
| 1 | How will the large electrical corporation calculate the number of LCFS credits generated by each customer? | 6 | N/A | N/A | N/A | N/A |
| 2 | Who receives the revenue from the sale of LCFS credits? | 8, 13-14 | 31-32 | 44-45 | 60 | 68-69 |
| 3 | How are LCFS revenue recipients identified? | N/A | 31-32 | 44-45 | 60 | 68-69 |
| 4 | How will the large electrical corporation calculate the amount of revenue to be distributed to each customer, if appropriate? | N/A | 32-34, 37-38 | 45-46, 50 | N/A | N/A |
| 5 | By what means is the revenue distributed to the customer and how frequently is revenue distributed? | N/A | 32-34 | 45-46 | 60 | 69 |
| 6 | How will vehicle ownership changes be identified, addressed, and tracked? | N/A | 31-32 | N/A | N/A | N/A |
| 7 | How will the large electrical corporation track and true-up revenues and disbursements from the program? | 8,9 | 36-37 | 49 | 61 | 70-71 |
| 8 | How will the program be marketed in a competitively neutral manner so that plug-in EV owners, regardless of their load serving entity, are aware that they are eligible to receive LCFS revenue? | 16-17 | 31-32, 35-36 | 44, 47-49 | 60-61 | N/A |
| 9 | How will the large electrical corporation receive and distribute credits generated by non-residential customers? | 6,15-16,74 | N/A | N/A | N/A | N/A |

Table 20: Implementation Plan Compliance Questions per D.12-20-027 Section 3.11

| Questions | | General | Holdback Program | | | |
|-----------|--|---------------------|----------------------------|--|------------------|--------------|
| | | Implementation Plan | Affordable Public Charging | Residential Charging Solutions Expansion | Resilient Fleets | Capacity |
| | | Page | Page | Page | Page | Page |
| 1 | How are its LCFS holdback expenditures dedicated to equity projects or resiliency projects in the years considered by the Implementation Plan? | 19-21 | 29, 37-38 | 43, 50 | 56, 62 | 66-68, 71-72 |
| 2 | How do each of its LCFS holdback expenditures and planned investments benefit current or future EV drivers in the state? | N/A | 24-27 | 39-41 | 52-53 | 64-66 |
| 3 | How do its LCFS holdback expenditures comply with all other CARB regulations regarding the use of LCFS holdback funds? | 21 | 29 | 43 | 56 | 66-68 |
| 4 | How does any proposal for its LCFS holdback expenditure: | | | | | |
| 4a | <u>Demonstrate input from environmental justice groups and/or community-based organizations?</u> | 22-23 | 30-31 | 43-44 | 57 | 68 |
| 4b | <u>Address gaps in program design not already addressed through a large electrical corporation's TE expenditures or other publicly funded program, or in the alternative how the proposed expenditure will reduce costs to ratepayers?</u> | N/A | 27-29 | 41-43 | 54-55 | 64-66 |
| 4c | <u>Address a barrier to TE, equity, and/or resiliency?</u> | N/A | 24-27 | 39-41 | 52-53 | 64-66 |

| | | | | | | |
|----|---|-------|-----------|-----------|-----------|-------|
| 4d | <u>Include data collection requirements</u> that allow for an evaluation of the effectiveness of the proposal in addressing TE, equity, and/or resiliency barriers? | 17-18 | 36-37 | 49 | 61 | 70-71 |
| 5 | How will any proposal for an equity project be for the primary benefit of or primarily serve communities eligible for equity project expenditures? | N/A | 29, 31-32 | 43, 44-45 | N/A | 66-69 |
| 6 | How is any proposal for a resiliency project aligned with other TE-related utility resiliency efforts, including but not limited to Public Safety Power Shutoffs (PSPS) and Wildfire Mitigation Plans, and reflects consultation with EV service providers where appropriate? | N/A | N/A | N/A | 52-55 | N/A |
| 7 | How does any proposal for a resiliency project align with Commission policy on vehicle-grid integration (VGI)? | N/A | N/A | N/A | 56, 57-59 | N/A |

Table 21: Specific Project Compliance Questions per D.12-20-027 Section 3.11

| Questions | General | Holdback Program | | | |
|---|---------------------|----------------------------|--|------------------|----------|
| | Implementation Plan | Affordable Public Charging | Residential Charging Solutions Expansion | Resilient Fleets | Capacity |
| | Page | Page | Page | Page | Page |
| For additional rebates or incentives for low-income individuals | | | | | |
| How are the proposal's aims not already addressed in existing programs? | N/A | 27-29 | 41-43 | N/A | N/A |
| What TE barrier does the proposal address? | N/A | 24-27 | 39-41 | N/A | N/A |

| | | | | | | |
|--|--|-----|-----|-----|-------|-----------|
| For Investment in public EV charging infrastructure and EV charging infrastructure in multi-family residences | | | | | | |
| | How does the proposal address gaps or barriers not addressed by current programs or how does it reduce cost of ongoing programs to ratepayers? | N/A | N/A | N/A | N/A | 64-66, 69 |
| For resiliency project expenditures | | | | | | |
| | How does the proposal address resiliency barriers by identifying opportunities to address how EV charging is impacted by a power outage? | N/A | N/A | N/A | 57-59 | N/A |

ATTACHMENT C

Declaration of Lydia Krefta Seeking Confidential Treatment

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

**DECLARATION SUPPORTING CONFIDENTIAL DESIGNATION
ON BEHALF OF
PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)**

1. I, Lydia Krefta, am the Director of the Clean Energy Transportation group at Pacific Gas and Electric Company (“PG&E”), a California corporation. Michael Delaney, the VP of PG&E’s Utility Partnerships and Innovation group, delegated authority to me to sign this declaration.

My business office is located at:

Pacific Gas and Electric Company
300 Lakeside Drive
Oakland, CA 94612

2. PG&E will produce the information identified in paragraph 3 of this Declaration to the California Public Utilities Commission (“CPUC”) or departments within or contractors retained by the CPUC in response to a CPUC audit, data request, proceeding, or other CPUC request.

Name or Docket No. of CPUC Proceeding (if applicable):

3. Title and description of document(s): Advice Letter 7071-E, “Pacific Gas and Electric Company’s 2023 Low Carbon Fuel Standard Implementation Plan.”
4. These documents contain confidential information that, based on my information and belief, has not been publicly disclosed. These documents have been marked as confidential, and the basis for confidential treatment and where the confidential information is located on the documents are identified on the following chart, with further detail provided in Appendix A, which is incorporated into this declaration:

| Check | Basis for Confidential Treatment | Where Confidential Information is located on the documents |
|-------------------------------------|---|--|
| <input type="checkbox"/> | <p>Customer-specific data, which may include demand, loads, names, addresses, and billing data</p> <p>(Protected under PUC § 8380; Civ. Code §§ 1798 <i>et seq.</i>; Govt. Code § 6254; Public Util. Code § 8380; Decisions (D.) 14-05-016, 04-08-055, 06-12-029)</p> | |
| <input type="checkbox"/> | <p>Personal information that identifies or describes an individual (including employees), which may include home address or phone number; SSN, driver’s license, or passport numbers; education; financial matters; medical or employment history (not including PG&E job titles); and statements attributed to the individual</p> <p>(Protected under Civ. Code §§ 1798 <i>et seq.</i>; Govt. Code § 6254; 42 U.S.C. § 1320d-6; and General Order (G.O.) 77-M)</p> | |
| <input type="checkbox"/> | <p>Physical facility, cyber-security sensitive, or critical energy infrastructure data, including without limitation critical energy infrastructure information (CEII) as defined by the regulations of the Federal Energy Regulatory Commission at 18 C.F.R. § 388.113</p> <p>(Protected under Govt. Code § 6254(k), (ab); 6 U.S.C. § 131; 6 CFR § 29.2)</p> | |
| <input checked="" type="checkbox"/> | <p>Proprietary and trade secret information or other intellectual property and protected market sensitive/competitive data</p> <p>(Protected under Civ. Code §§3426 <i>et seq.</i>; Govt. Code §§ 6254, <i>et seq.</i>, e.g., 6254(e), 6254(k), 6254.15; Govt. Code § 6276.44; Evid. Code §1060; D.11-01-036)</p> | (see Attachment to Declaration) |
| <input type="checkbox"/> | <p>Corporate financial records</p> <p>(Protected under Govt. Code §§ 6254(k), 6254.15)</p> | |

Third-Party information subject to non-disclosure or confidentiality agreements or obligations

(Protected under Govt. Code § 6254(k); see, e.g., CPUC D.11-01-036)

Other categories where disclosure would be against the public interest (Govt. Code § 6255(a))

- 5. The importance of maintaining the confidentiality of this information outweighs any public interest in disclosure of this information. This information should be exempt from the public disclosure requirements under the Public Records Act and should be withheld from disclosure.
- 6. I declare under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.
- 7. Executed on this 14th day of November, 2023 at Oakland, California.

Lydia Krefta

Lydia Krefta

Director, Clean Energy Transportation

Pacific Gas and Electric Company

PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

**RULEMAKING 18-12-006
ATTACHMENT TO DECLARATION
November 14, 2023**

| ATTACHMENT NAME | DOCUMENT NAME | <u>CATEGORY OF CONFIDENTIALITY</u> | LOCATION |
|---------------------------|---|---|-----------------------------------|
| Confidential Attachment A | PG&E's 2023 Low Carbon Fuel Standard Implementation Plan (Confidential Version) | Proprietary and trade secret information | Gray shaded areas of Attachment A |

ATTACHMENT D

Proposed Protective Order

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

Pacific Gas & Electric Company’s 2023 Low
Carbon Fuel Standard Implementation Plan

)
)
)
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Advice 7071-E

PROTECTIVE ORDER

1. Scope. This Protective Order shall govern access to and the use in connection with the above-referenced Advice Letter (the “Advice Letter”) of Protected Materials, produced by, or on behalf of, any Disclosing Party.

2. Modification. This Protective Order shall remain in effect until it is modified or terminated by the Commission or the Administrative Law Judge Division (“ALJ Division”). The parties acknowledge that the identity of the parties submitting Protected Materials may differ from time to time. In light of this situation, the parties agree that modifications to this Protective Order may become necessary, and they further agree to work cooperatively to devise and implement such modifications in as timely a manner as possible. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the ALJ Division or the Commission.

3. Definitions

A. The term “Protected Material(s)” means (i) trade secret, market sensitive, or other confidential and/or proprietary information as determined by the Disclosing Party in accordance with the provisions of D.06-06-066 and subsequent decisions, General Order 66-C and 454.5(g), or any other right of confidentiality provided by law, or (ii) any other materials that are made

subject to this Protective Order by the ALJ Division, Law and Motion Administrative Law Judge (“Law and Motion ALJ”), Assigned Commissioner, the Commission, or any court or other body having appropriate authority. Protected Materials also includes memoranda, handwritten notes, spreadsheets, computer files and reports, and any other form of information (including information in electronic form) that copies, discloses, or compiles other Protected Materials or from which such materials may be derived (except that any derivative materials must be separately shown to be confidential). Protected Materials do not include: (i) any information or document contained in the public files of the CPUC or any other state or federal agency, or in any state or federal court; or (ii) any information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order or any other protective order.

B. The term “redacted” refers to situations in which Protected Materials in a document, whether the document is in paper or electronic form, have been covered, blocked out, or removed. The term “unredacted” refers to situations in which the Protected Materials in a document, whether in paper or electronic form, have not been covered, blocked out, or removed.

C. The term “Disclosing Party” means a party who initially discloses any specified Protected Materials in connection with the Advice Letter.

D. The term “Market Participant” (“MP”) refers to a party that is:

- 1) A person or entity, or an employee of an entity, that engages in the wholesale purchase, sale or marketing of energy or capacity, or the bidding on or purchasing of power plants, or bidding on utility procurement solicitations, or consulting on such matters, subject to the limitations in 3) below.
- 2) A trade association or similar organization, or an employee of such organization,
 - a) whose primary focus in proceedings at the Commission is to advocate for persons/entities that purchase, sell or market energy or capacity at wholesale; bid on, own, or purchase power plants; or bid on utility procurement solicitations; or

- b) a majority of whose members purchase, sell or market energy or capacity at wholesale; bid on, own, or purchase power plants; or bid on utility procurement solicitations; or
 - c) formed for the purpose of obtaining market sensitive information; or
 - d) controlled or primarily funded by a person or entity whose primary purpose is to purchase, sell or market energy or capacity at wholesale; bid on, own, or purchase power plants; or bid on utility procurement solicitations.
- 3) A person or entity that meets the criteria of 1) above is nonetheless not a market participant for purpose of access to market sensitive data unless the person/entity seeking access to market sensitive information has the potential to materially affect the price paid or received for electricity if in possession of such information. An entity will be considered not to have such potential if:
- a) the person or entity's participation in the California electricity market is *de minimis* in nature. In the resource adequacy proceeding (R.05-12-013) it was determined in D.06-06-064 § 3.3.2 that the resource adequacy requirement should be rounded to the nearest megawatt (MW), and load serving entities (LSEs) with local resource adequacy requirements less than 1 MW are not required to make a showing. Therefore, a *de minimis* amount of energy would be less than 1 MW of capacity per year, and/or an equivalent of energy; and/or
 - b) the person or entity has no ability to dictate the price of electricity it purchases or sells because such price is set by a process over which the person or entity has no control, *i.e.*, where the prices for power put to the grid are completely overseen by the Commission, such as subject to a standard offer contract or tariff price. A person or entity that currently has no ability to dictate the price of electricity it purchases or sells under this section, but that will have such ability within one year because its contract is expiring or other circumstances are changing, does not meet this exception; and/or
 - c) the person or entity is a cogenerator that consumes all the power it generates in its own industrial and commercial processes, if it can establish a legitimate need for market sensitive information.

E. A Market Participant's Reviewing Representatives are limited to persons designated by the Market Participant who meet the following criteria:

- 1) Are outside experts, consultants or attorneys;

- 2) Are not currently engaged, directly or indirectly, in (a) the purchase, sale, or marketing of electrical energy or capacity or natural gas (or the direct supervision of any employee(s) whose duties include such activities), (b) the bidding on or purchasing of power plants (or the direct supervision of any employee(s) whose duties include such activities), or (c) consulting with or advising others in connection with any activity set forth in subdivisions (a) or (b) above (or the direct supervision of any employee(s) whose duties include such activities or consulting); and
- 3) Are not an employee of a market participant.

F. Persons or entities that do not meet the definition of market participant are non-market participants (“NMPs”), and may have access to market sensitive information through their designated Reviewing Representatives. An attorney or consultant that simultaneously represents market participant(s) and non-market participant(s) may not have access to market sensitive data. If, on the other hand, simultaneous representation is of market participant and non-market participant clients involved in completely different types of matters, there should be no bar (although there may be ethical implications of such representation that we do not address here). If, for example, an attorney represents a market participant in matters unrelated to procurement, resource adequacy, RPS, or the wholesale purchase, sale or marketing of energy or capacity, or the bidding on or purchasing of power plants, or bidding on utility procurement solicitations, in a forum other than this Commission, and simultaneously represents a non-market participant in cases related to these topics before the Commission, there should be no bar to the attorney's receipt of market sensitive data (pursuant to a non-disclosure agreement and protective order) in the latter matter. In close cases, the balance should militate to bar simultaneous representation because of the risks it poses.

H. All Reviewing Representatives are required to execute a non-disclosure agreement and are bound by the terms of this Protective Order.

4. Designation of Materials. When submitting materials in connection with the Advice Letter containing Protected Materials, a party shall physically mark such documents on each page (or in the case of non-documentary materials such as computer diskettes, on each item) as

“PROTECTED MATERIALS SUBJECT TO PROTECTIVE ORDER,” or with words of similar import as long as one or more of the terms, “Protected Materials,” “Protective Order,” or “General Order No. 66-C” is included in the designation to indicate that the materials in question are protected.

All materials so designated shall be treated as Protected Materials unless and until (a) the designation is withdrawn pursuant to Paragraph 17 hereof, or (b) an ALJ, Commissioner or other Commission representative makes a determination pursuant to Paragraph 4 hereof changing the designation.

All documents containing Protected Materials that are submitted to Commission Staff in connection with the Advice Letter, or filed with the Commission or served, shall be placed in sealed envelopes, or otherwise appropriately protected, and shall be endorsed to the effect that they are submitted, filed or served under seal pursuant to this Protective Order. Such documents shall be served upon Reviewing Representatives and persons employed by or working on behalf of the state governmental agencies referred to in Paragraph 12 hereof who are eligible and have requested to review such materials. Service upon the persons specified in the foregoing sentence may either be (a) by electronic mail in accordance with the procedures adopted in connection with advice letters, (b) by facsimile, or (c) by overnight mail or messenger service. Whenever service of a document containing Protected Materials is made by overnight mail or messenger service, Commission Staff and/or the ALJ Division, as may be appropriate for purposes of review and disposition of the Advice Letter, shall be served with such document by hand on the date that service is due.

5. Redaction of Documents. Whenever a party submits to Commission Staff, or files, serves or provides in discovery, a document that includes Protected Materials (including but not limited to briefs, testimony, exhibits, and responses to data requests), such party shall also prepare a redacted version of such document. The redacted version shall enable persons familiar with the Advice Letter to determine with reasonable certainty the nature of the data that has been

redacted and where the redactions occurred. The redacted version of a document to be submitted or filed shall be served on all persons on the utility's advice letter service list and on any third parties as specified by statute or other Commission order, and the redacted version of a discovery document shall be served on all persons entitled thereto.

6. Selection of Reviewing Representatives. Each MP and NMP selecting a Reviewing Representative shall first identify its proposed Reviewing Representative to the Disclosing Party. An attorney or consultant that simultaneously represents market participant(s) and non-market participant(s) may not have access to market sensitive data, subject to the exception in paragraph 3.F. Any designated Reviewing Representative has a duty to disclose to the Disclosing Party any potential conflict that puts him/her in violation of Decision 06-12-030. A resume or curriculum vitae is reasonable disclosure of such potential conflicts, and should be the default evidence provided in most cases.

7. Access to Protected Materials and Use of Protected Materials. Subject to the terms of this Protective Order, Reviewing Representatives shall be entitled to access to Protected Materials. All other parties in this proceeding shall not be granted access to Protected Materials, but shall instead be limited to reviewing redacted versions of documents. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials. Protected Materials obtained by a party in connection with the Advice Letter may also be requested by that party in a subsequent Commission proceeding, subject to the terms of any protective order governing that subsequent proceeding, without constituting a violation of this order.

8. Maintaining Confidentiality of Protected Materials. Each Reviewing Representative shall treat Protected Materials as confidential in accordance with this Protective Order and the Non-Disclosure Certificate executed pursuant to Paragraph 7 and 8 hereof. Protected Materials

shall not be used except as necessary in connection with review and disposition of the Advice Letter, and shall not be disclosed in any manner to any person except (i) Reviewing Representatives who have executed Non-Disclosure Certificates; (ii) Reviewing Representatives' paralegal employees and administrative personnel, such as clerks, secretaries, and word processors, to the extent necessary to assist the Reviewing Representatives, provided that they shall first ensure that such personnel are familiar with the terms of this Protective Order, and have signed a Non-Disclosure Certificate, (iii) persons employed by or working on behalf of the CEC or other state governmental agencies covered by Paragraph 12. Reviewing Representatives shall adopt suitable measures to maintain the confidentiality of Protected Materials they have obtained pursuant to this Protective Order, and shall treat such Protected Materials in the same manner as they treat their own most highly confidential information. Reviewing Representatives shall be liable for any unauthorized disclosure or use by their paralegal employees or administrative staff. In the event any Reviewing Representative is requested or required by applicable laws or regulations, or in the course of administrative or judicial proceedings (in response to oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demand or similar process) to disclose any of Protected Materials, they shall immediately inform the Disclosing Party of the request, and the Disclosing Party may, at its sole discretion and cost, direct any challenge or defense against the disclosure requirement, and the Reviewing Representative shall cooperate in good faith with such party either to oppose the disclosure of the Protected Materials consistent with applicable law, or to obtain confidential treatment of them by the person or entity who wishes to receive them prior to any such disclosure. If there are multiple requests for substantially similar Protected Materials in the same case or proceeding where a Reviewing Representative has been ordered to produce certain specific Protected Materials, the Reviewing Representative may, upon request for substantially similar materials by another person or entity, respond in a manner consistent with that order to those substantially similar requests.

9. Exception for California Independent System Operator (ISO). Notwithstanding any other provision of this Protective Order, with respect to an ISO Reviewing Representative only, participation in the ISO's operation of the ISO-controlled grid and in its administration of the ISO-administered markets, including, but not limited to, markets for ancillary services, supplemental energy, congestion management, and local area reliability services, shall not be deemed to be a violation of this Protective Order.

10. Non-Disclosure Certificates. A Reviewing Representative shall not inspect, participate in discussions regarding, or otherwise be granted access to, Protected Materials unless and until he or she has first completed and executed a Non-Disclosure Certificate, attached hereto as Appendix A, and delivered the original, signed Non-Disclosure Certificate to the Disclosing Party. The Disclosing Party shall retain the executed Non-Disclosure Certificates pertaining to the Protected Materials it has disclosed and shall promptly provide copies of the Non-Disclosure Certificates to Commission Staff upon request.

11. Return or Destruction of Protected Materials. Protected Materials shall remain available to Reviewing Representatives until the later of the date that disposition of the Advice Letter becomes no longer subject to review, or the date that any other Commission proceeding relating to the Protected Material is concluded and no longer subject to judicial review. If requested to do so in writing after that date, the Reviewing Representatives shall, within fifteen days of such request, return the Protected Materials (including Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of materials submitted to the Commission in connection with the Advice Letter that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraph 8. Within such time period each Reviewing Representative, if requested to do so, shall also submit to the Disclosing Party an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraph 8. To the extent Protected

Materials are not returned or destroyed, they shall remain subject to the Protective Order and CPUC General Order No. 66-C. In the event that a Reviewing Representative to whom Protected Material are disclosed ceases to be engaged to provide services in connection with the Advice Letter, then access to such materials by that person shall be terminated. Even if no longer engaged in connection with the Advice Letter, every such person shall continue to be bound by the provisions of this Protective Order and the Non-Disclosure Certificate.

12. Access and Use by Governmental Entities.

(a) In the event the CPUC receives a request from the CEC for a copy of or access to any party's Protected Materials, the procedure for handling such requests shall be as follows. Not less than five (5) days after delivering written notice to the Disclosing Party of the request, the CPUC shall release such Protected Materials to the CEC upon receipt from the CEC of an Interagency Information Request and Confidentiality Agreement ("Interagency Confidentiality Agreement"). Such Interagency Confidentiality Agreement shall (i) provide that the CEC will treat the requested Protected Materials as confidential in accordance with this Protective Order, (ii) include an explanation of the purpose for the CEC's request, as well as an explanation of how the request relates to furtherance of the CEC's functions, (iii) be signed by a person authorized to bind the CEC contractually, and (iv) expressly state that furnishing of the requested Protected Materials to employees or representatives of the CEC does not, by itself, make such Protected Materials public. In addition, the Interagency Confidentiality Agreement shall include an express acknowledgment of the CPUC's sole authority (subject to judicial review) to make the determination whether the Protected Materials should remain confidential or be disclosed to the public, notwithstanding any provision to the contrary in the statutes or regulations applicable to the CEC.

(b) In the event the CPUC receives a request for a copy of or access to a party's Protected Materials from a state governmental agency other than the CEC that is authorized to enter into a written agreement sufficient to satisfy the requirements for maintaining confidentiality set forth in Government Code Section 6254.5(e), the CPUC may, not less than

five (5) days after giving written notice to the Disclosing Party of the request, release such protected material to the requesting governmental agency, upon receiving from the requesting agency an executed Interagency Confidentiality Agreement that contains the same provisions described in Paragraph 10(a) above.

(c) The CEC may use Protected Materials when needed to fulfill its statutory responsibilities or cooperative agreements with the CPUC. Commission confidentiality designations will be maintained by the CEC in making such assessments, and the CEC will not publish any assessment that directly reveals the data or allows the data submitted by an individual load serving entity (“LSE”) to be “reverse engineered.”

13. Dispute Resolution. All disputes that arise under this Protective Order, including but not limited to alleged violations of this Protective Order and disputes concerning whether materials were properly designated as Protected Materials, shall first attempted to be resolved through meet and confer. If the meet and confer process is unsuccessful, the involved parties may present the dispute for resolution to the ALJ Division.

14 Other Objections to Use or Disclosure. Nothing in this Protective Order shall be construed as limiting the right of a party, the Commission Staff, or a state governmental agency covered by Paragraph 12 from objecting to the use or disclosure of Protected Material on any legal ground, such as relevance or privilege.

15. Remedies. Any violation of this Protective Order shall constitute a violation of an order of the CPUC. Notwithstanding the foregoing, the parties and Commission Staff reserve their rights to pursue any legal or equitable remedies that may be available in the event of an actual or anticipated disclosure of Protected Materials.

16. Withdrawal of Designation. A Disclosing Party may agree at any time to remove the “Protected Materials” designation from any materials of such party if, in its opinion, confidentiality protection is no longer required. In such a case, the Disclosing Party will notify

all other parties that the Disclosing Party believes are in possession of such materials of the change of designation.

17. Interpretation. Titles are for convenience only and may not be used to restrict the scope of this Protective Order.

Entered: _____
Administrative Law Judge

Date: _____

APPENDIX A TO PROTECTIVE ORDER

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Pacific Gas & Electric Company's 2023 Low
Carbon Fuel Standard Implementation Plan

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Advice 7071-E

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Protected Materials is provided to me pursuant to the terms and restrictions of the Protective Order in connection with the above referenced Advice Letter, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order. I acknowledge that a violation of this certificate constitutes a violation of an order of California Public Utilities Commission.

By: _____
Title: _____
Representing: _____
Date: _____

**PG&E Gas and Electric
Advice Submittal List
General Order 96-B, Section IV**

AT&T
Albion Power Company

Alta Power Group, LLC
Anderson & Poole

Atlas ReFuel
BART
Buchalter
Barkovich & Yap, Inc.
Braun Blaising Smith Wynne, P.C.
California Community Choice Association
California Cotton Ginners & Growers
Assn California Energy Commission

California Hub for Energy Efficiency
Financing

California Alternative Energy and
Advanced Transportation Financing
Authority
California Public Utilities Commission
Calpine

Cameron-Daniel, P.C.
Casner, Steve
Center for Biological Diversity

Chevron Pipeline and Power
City of Palo Alto

City of San Jose
Clean Power Research
Coast Economic Consulting
Commercial Energy
Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Dept of General Services
Don Pickett & Associates, Inc.
Douglass & Liddell
Downey Brand LLP
Dish Wireless L.L.C.

East Bay Community Energy Ellison
Schneider & Harris LLP

Electrical Power Systems, Inc.
Fresno
Engineers and Scientists of California

GenOn Energy, Inc.
Green Power Institute
Hanna & Morton
ICF

iCommLaw
International Power Technology
Intertie

Intestate Gas Services, Inc.

Johnston, Kevin
Kelly Group
Ken Bohn Consulting
Keyes & Fox LLP
Leviton Manufacturing Co., Inc.

Los Angeles County Integrated
Waste Management Task Force
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McClintock IP
McKenzie & Associates

Modesto Irrigation District
NRG Solar

OnGrid Solar
Pacific Gas and Electric Company
Peninsula Clean Energy

Pioneer Community Energy

Public Advocates Office

Redwood Coast Energy Authority
Regulatory & Cogeneration Service, Inc.

Resource Innovations

SCD Energy Solutions
San Diego Gas & Electric Company

SPURR

San Francisco Water Power and Sewer
Sempra Utilities

Sierra Telephone Company, Inc.
Southern California Edison Company
Southern California Gas Company
Spark Energy
Sun Light & Power
Sunshine Design
Stoel Rives LLP

Tecogen, Inc.
TerraVerde Renewable Partners
Tiger Natural Gas, Inc.

TransCanada
Utility Cost Management
Utility Power Solutions
Water and Energy Consulting Wellhead
Electric Company
Western Manufactured Housing
Communities Association (WMA)
Yep Energy