

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



Pacific Gas & Electric Company
ELC (Corp ID 39)
Status of Advice Letter 4624G/6633E
As of October 26, 2022

Subject: PG&E's Annual Advanced Energy Rebuild Advice Letter in Compliance with Commission Disposition

Division Assigned: Energy

Date Filed: 06-30-2022

Date to Calendar: 07-13-2022

Authorizing Documents: None

Disposition:	Accepted
Effective Date:	06-30-2022

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

edtariffunit@cpuc.ca.gov

AL Certificate Contact Information:

Stuart Rubio
(415) 973-4587
PGETariffs@pge.com

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



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to
edtariffunit@cpuc.ca.gov



Sidney Bob Dietz II
Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

June 30, 2022

Advice 4624-G/6633-E

(Pacific Gas and Electric Company ID U 39 M)

Public Utilities Commission of the State of California

Subject: PG&E's Annual Advanced Energy Rebuild Advice Letter in Compliance with Commission Disposition

Purpose

Pacific Gas and Electric Company (PG&E) hereby submits the fourth annual Advice Letter in compliance with the California Public Utilities Commission (Commission or CPUC) disposition approving the provisions of Advice 3928-G/5219-E and Supplemental Advice 3928-G/5219-E-A, which allow PG&E to offer increased incentives and program enhancements for structures destroyed by wildfires in 2017 and 2018 that will be rebuilt under 2016 and 2019 Title 24 building code. This offering is known as Advanced Energy Rebuild (AER).

Background

On April 27, 2018, the Commission approved the following requests included in PG&E Advice 3928-G/5219-E "Request for Energy Efficiency Program Enhancements to Assist October 2017 Wildfire Impacted Customers" and Supplemental Advice 3928-G-A/5219-E-A:

1. Double residential new construction incentives and increase technical support.
2. Increase non-residential new construction incentive cap and design assistance.
3. Allow the California Advanced Homes Program (CAHP) to apply to in-law units.
4. Evaluate program enhancements every two years.

The enhanced program offerings, known as Advanced Energy Rebuild (AER), were made available to serve customers with destroyed homes or businesses in the eight counties impacted by the October 2017 wildfires. On March 19, 2019, the Commission approved PG&E Advice 4068-G/5479-E, which expanded the offering to customers impacted by the Camp and Carr fires of 2018. On January 13, 2020, the Commission approved PG&E Advice 4119-G/5588-E and Advice 4194-G/5719-E, which extended AER program eligibility to customers rebuilding to 2019 Title 24 Code.

Per Commission direction, Supplemental Advice 3928-G-A/5219-E-A also included an Evaluation, Measurement, and Verification (EM&V) plan stipulating that PG&E would conduct annual reporting of program uptake. This fourth annual Advice Letter meets this requirement, and provides an annual report detailing program progress, uptake, and lessons learned during implementation as **Attachment A**. The data and narrative in Attachment A cover program activity through April 2022.

Due to the anticipated launch of the Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) program¹, which is managed through the Building Decarbonization Proceeding (R.19-01-011), the AER program closed to new applications in December 2020. Due to supply chain delays caused by the ongoing COVID-19 pandemic, there are AER projects still in the pipeline awaiting completion; these projects are now expected to be completed by November 2022, with the program formally sunsetting in December 2022. PG&E will file a fifth and final annual Advice Letter to document the details of all projects completed after May 1, 2022, and will include a review of overall performance and lessons learned over the life of the AER offering.

Protests

Anyone wishing to protest this submittal may do so by letter sent electronically via E-mail, no later than July 20, 2022, 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).

¹ As approved in D.21-11-002, issued November 9, 2021.

Effective Date

PG&E requests that this Tier 1 advice letter submittal become effective upon submittal on June 30, 2022.

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.13-11-005. 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 filings can also be accessed electronically at: <http://www.pge.com/tariffs/>.

/S/

Sidney Bob Dietz II
Director, Regulatory Relations

Attachments:

Attachment A – Annual Program Uptake Summary Memo

cc: Service List R.13-11-005



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 (U 39 M)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Stuart Rubio

Phone #: (415) 973-4587

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: SHR8@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) #: 4624-G/6633-E

Tier Designation: 1

Subject of AL: PG&E's Annual Advanced Energy Rebuild Advice Letter in Compliance with Commission Disposition

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 #:

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: N/A

Confidential treatment requested? Yes No

If yes, specification of confidential information:

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:

Resolution required? Yes No

Requested effective date: 6/30/22

No. of tariff sheets: 0

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: N/A

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: (415)973-2093
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

Annual Program Uptake Summary Memo



10680 White Rock Road, Suite 100
Rancho Cordova, CA 95670

916.844.0146 PHONE

June 15, 2022

MEMORANDUM

To: Conrad Asper (Pacific Gas and Electric Company)
From: Nic Dunfee, Melissa Buckley, Allison Wittwer (TRC)
Re: **Advanced Energy Rebuild – Annual Program Uptake Summary Memo**

ADVANCED ENERGY REBUILD OVERVIEW

Background

In response to the Northern California wildfires in the fall of 2017 and 2018, Pacific Gas and Electric Company (PG&E) launched the Advanced Energy Rebuild (AER) program in May 2018, in conjunction with Sonoma Clean Power (SCP), the Bay Area Air Quality Management District (BAAQMD), MCE, and TRC, with TRC as the program implementer. PG&E and SCP extended the enrollment period for AER through 2020¹. Under this program, TRC is responsible for design assistance, technical review of all projects, processing incentives, reporting and management of customer communications and marketing.

The deadline to apply for the program was November 15, 2020. Due to project delays caused by the ongoing COVID-19 pandemic, PG&E and SCP extended the construction completion period for AER through 2022. Enrolled projects must complete construction and verification processes by November 15, 2022 in order for TRC to issue the incentive payment by the program end date of December 31, 2022. AER offered incentives for both manufactured homes and homes permitted under the 2016 and 2019 Title 24 energy code as well as both *all-electric homes* and *advanced energy homes* (dual fuel). Customers could choose from the following pathways to demonstrate eligibility for the incentives:

- ◆ **2016 Code Site-built Homes, Flexible Performance Path:** Energy model should demonstrate a 20% improvement in time dependent valuation of energy, as shown on the compliance form document generated by a California Energy Commission (CEC)-approved 2016 Title 24 compliance software
- ◆ **2016 Code Site-built Homes, Simple Menu-based Path:** Incorporate a list of measures, as described in the [program handbook](#)², to qualify and submit an energy model using a CEC-approved 2016 Title 24 compliance software to demonstrate them
- ◆ **2019 Code Site-built Homes, Flexible Performance Path:** Energy model should demonstrate an Efficiency Delta Energy Design Rating (EDR)³ of 1.0 or higher in time dependent valuation of energy, as shown on the compliance form document generated by a CEC-approved 2019 Title 24 compliance software

¹ PG&E Advice Letter 4119-G/5588-E

² AER Program Handbook (2016 code): https://www.cahp-pge.com/AER_TRC_Handbook_2019.pdf

³ Delta EDR is a whole home efficiency metric that considers all aspects of the building, both regulated as well as non-regulated, and includes energy-use impacts from insulation, heating, cooling, water heating, appliances, lighting etc. The Delta EDR is calculated by subtracting the Efficiency EDR of Proposed Design score from the Efficiency EDR of Standard Design score.

- ◆ **Manufactured Homes, ENERGY STAR Certified Path:** Build the home to comply with the ENERGY STAR Version 2 or higher certification to qualify

The 2016 code Flexible Performance and Simple Menu-based paths for site-built homes offered an incentive amount of \$12,500 for qualifying all-electric homes, \$7,500 for qualifying advanced energy homes, and an optional \$5,000 incentive for the addition of solar photovoltaics (PV) and battery storage. Projects permitted under the 2016 Title 24 code received 50% of their incentive upfront, and the remaining amount following verification, after the project completes construction. The 2019 code Flexible Performance path for site-built homes offered a qualifying advanced energy home or all-electric home an incentive amount of \$2,500 or \$12,500 respectively and an optional \$1,000 incentive for battery storage. The ENERGY STAR Certified path offered qualifying manufactured homes an incentive amount of \$3,000. All-electric manufactured homes could earn up to \$4,000 more in incentives through bonus options for battery storage, North West Energy-Efficient Manufactured Housing (NEEM)+⁴ certification, heat pumps, and induction cooking. Dual-fuel manufactured homes can earn up to \$2,000 more in incentives through bonus options for battery storage and NEEM+ certification. The program also offered a 50% reduced incentive for qualifying accessory dwelling units (ADUs)⁵ with an option to receive a battery storage incentive for all pathways. AER pays incentives for all 2019 code and manufactured home projects after program staff verify completion of documentation for the completed home.

Program Metrics

The following sections summarize program metrics from program launch on May 1, 2018 through April 30, 2022.

Program Pipeline

- ◆ TRC has enrolled 574 eligible projects for a total of 720 dwelling units; 556 units are site-built and 164 are manufactured homes. The units consist of the following:
 - ◆ 2016 Title 24 code: 380 single family residences, 34 ADUs, and 2 multifamily complexes with 120 total units
 - ◆ 2019 Title 24 code: 20 single family residences, and 2 ADUs
 - ◆ Manufactured homes: 163 single family units and 1 ADU
- ◆ Of the 720 dwelling units, the following have received their full incentive:
 - ◆ 323 (45%) units under the 2016 Title 24 code
 - ◆ 12 (2%) units under the 2019 Title 24 code
 - ◆ 122 (17%) manufactured homes

⁴ NEEM Website: <https://www.neemhomes.com/>

⁵ Accessory Dwelling Unit, also known as a casita or granny unit, is a small permanent home that may be established in addition to the main dwelling on a parcel zoned for residential use. ADUs may be attached or detached from the main dwelling.

Enrollment Data

- ◆ 547 of the 556 total enrolled site-built units (98%) have taken the Flexible Performance Path, while 9 of 556 enrolled site-built projects (2%) have taken the Simple Menu-based Path. The 164 manufactured homes are not included in the total number as they were only required to meet the ENERGY STAR Certified pathway.
- ◆ Of the 720 enrolled units, 170 (24%) built an all-electric home, 550 (77%) built a dual fuel home.

Overall Program Savings and Measures

- ◆ Enrolled projects have secured projected savings of -10,570.87 in kWh and 97,916.60 in therms (-22.16 kWh and 197.81 therms per home on average). These numbers include savings for 41 of the total manufactured homes enrolled in the program; negative savings are driven by all-electric projects.⁶ TRC is working with PG&E to develop a deemed savings approach to claim savings for the remaining homes that pursued the MH pathway.
- ◆ The current program average for kW savings is -0.01 kW. Enrolled projects demonstrate an average delta EDR of 4.67, with projects ranging between -1 to 18 delta EDRs. Many of the all-electric projects enrolled demonstrate negative savings. Please note that savings do not include generation from installed solar PV.
- ◆ Enrolled projects are demonstrating an average of 24.7% of energy efficiency improvement above 2016 Title 24 code, with project efficiency improvements ranging from 0.07 to 53.3% above 2016 Title 24 code requirements.
- ◆ Enrolled projects are demonstrating an average of 7.9% of energy efficiency improvement above 2019 Title 24 code, with project efficiency improvements ranging from 3.2 to 29.3% above 2019 Title 24 code requirements.
- ◆ 153 of the enrolled projects pursued the solar PV and battery storage bonus, totaling an average PV system size of 14.78 kW and an average battery system size of 14.05 kWh. 129 projects installed solar PV but did not install battery storage.
- ◆ Of the enrolled projects, 196 installed heat pump water heating and 249 installed heat pump space heating.

All-Electric Program Savings

- ◆ 170 out of 720 (24%) of the total enrolled units were all-electric. On average, these projects achieved 5.1 delta EDR (all projects ranging from 0 to 18) and 24.9% above 2016 and 2019 Title 24 code (all projects ranging from 3.2 to 53.3% above code).
- ◆ Since the energy modeling software does not have an all-electric baseline, such projects yielded a total projected negative savings of 52,462.34 kWh and positive 6.40 kW savings. The software reported 14,892.93 unused therms for these projects.

⁶ Many of the all-electric projects enrolled demonstrated negative savings. This negative arises from the unavailability of an all-electric baseline in the CEC-approved Title 24 energy modeling software (California Building Energy Code Compliance-Residential and Energy Pro), which generated a significantly low magnitude of kWh savings for the program.

Lessons Learned

The following sections summarize lessons learned from this advice letter period. As the program prepares to close at the end of December 2022, TRC continues to guide and support projects to completion as soon as possible, and strives to maintain communication with projects during this process.

COVID-19

In 2020, the COVID-19 pandemic created challenges in the supply chain for both site-built and manufactured homes. Due to shelter-in-place and stay-at-home orders, many factories and manufacturers of various construction materials had to temporarily close. The halt in production caused significant construction delays for homeowners participating in the program which continued to impact customers throughout 2021. In response to the continued delays participants experienced, PG&E and SCP extended the program through 2022.

Manufactured Homes

As mentioned in the previous Advice Letter⁷, many of the manufactured home customers do not access the internet and can only communicate by phone. The program team has continued to rely on manufacturer and sales representatives to collect the documentation required to process manufactured homes participants reserved incentives. This has allowed the program team to reduce the administrative burden and confusion for the participant, but has required more of the manufacturer and sales representatives time.

Implementation

There were a handful of cases where unforeseen circumstances such as project delays, escalating building material costs, increasing contractor fees, and COVID-19-related delays occurred. Offering a single point of contact for participants throughout their participation in the program has been helpful in navigating delays and guiding a project to completion. Many participants had hired contractors or energy consultants who became unresponsive to the participants after the design stage, and participants were forced to hire other consultants and contractors to perform the work, often requiring changes to the initial design. The program extension has allowed these customers to continue to be eligible for their reserved incentive in light of these construction delays. Such situations, though rare, demonstrate the challenges that face a rebuild program (and its participants) that spans across large, diverse territories. Participants have suffered much loss, and though the implementation of a rebuild program needs to abide by a set of program rules, there is a need to have flexibility and to have the ability to consider situations on a case-by-case basis.

As the program continues to process incentives for participants, many customers have been unaware of program requirements related to HERS raters and the verifications they must perform. The program team explains the HERS verification requirements at enrollment and throughout construction. However, homeowners are often not hiring a general contractor or builder and are instead acting as both owner and builders. Homeowners filling the builder role are often unfamiliar with the HERS rating process, and their raters do not always specify which verifications they provide. This leads the homeowner to have to hire multiple HERS raters to perform site visits and additional verifications, resulting in increased costs. Additional reminders to homeowners and HERS raters (when known by the program implementer) about HERS verifications may help to avoid this challenge.

⁷ PG&E Advice Letter 4460-G/6239-E

**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

Barkovich & Yap, Inc.
Braun Blasing Smith Wynne, P.C.
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

East Bay Community Energy Ellison
Schneider & Harris LLP
Engineers and Scientists of California

GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz &
Ritchie
Green Power Institute
Hanna & Morton
ICF
International Power Technology

Intertie

Intestate Gas Services, Inc.
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
NLine Energy, Inc.
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.
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