



FERA Study

An Assessment of Achievable Enrollment and Program Efforts



Submitted by Evergreen Economics

Draft Report

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1 Executive Summary

1.1 Background and Context

California law established two rate discount programs for lower income utility customers. Customers with incomes up to 200 percent of the federal poverty level (FPL) for their household size are eligible for an electric rate discount ranging from 30 to 35 percent (and a natural gas discount of 20 percent) through the California Alternate Rates for Energy (CARE) program, while customers with incomes between 200 and 250 percent of FPL are eligible for an 18 percent discount on their electric bill through the Family Electric Rate Assistance (FERA) program. The California Public Utilities Commission (CPUC) oversees the investor-owned utilities' (IOUs') implementation of these bill discounts and sets enrollment goals for the programs. While CARE enrollments have been estimated to be above 100 percent of the total eligible population served by the California IOUs, FERA enrollments have lagged substantially and are falling short of annually increasing enrollment targets. In 2024, for example, Pacific Gas and Electric's (PG&E's) enrollment target was 60 percent of the eligible customer base, but only about 25 percent of eligible customers were enrolled in FERA.

PG&E enlisted Evergreen Economics and Resource Innovations to assess its efforts to enroll eligible customers, investigate why outreach efforts that the utility considered to be aggressive have not resulted in targeted enrollment levels, and identify what PG&E could do differently to increase enrollment. In addition, the study examined what level of enrollment is actually achievable and what policy options exist to increase participation in FERA by eligible households.

1.2 Key Study Findings

The study found that:

- 1. PG&E is doing all it can reasonably do to enroll eligible customers in FERA given the rate discount parameters specified in California law and the elements of customer enrollment that are in the utility's control.**

This finding is based on multiple factors, including:

- PG&E can influence enrollment in only two ways: through outreach and by ensuring an easy enrollment process.
- Outreach efforts by PG&E are comprehensive and extensive; furthermore, marketing expenditures per dollar of customer discount provided are 31 times higher for FERA than for CARE.

- Awareness is high among eligible (and ineligible) customers that rate discounts exist for households with lower incomes; PG&E is the predominant source of customer self-reported awareness.
- Enrollment processes for FERA mirror those for CARE and require substantially less time, effort, and documentation than those of comparable means-tested social service programs for non-energy basic needs such as food, housing, and health care.

2. The maximum achievable enrollment for FERA in its current structural form is much lower than the 60 percent enrollment target for the current program year. While the exact achievable maximum enrollment is open to some debate, we estimate it to be approximately 30 percent.

Our estimate is based on a *conceptual framework for achievable enrollment* and quantitative estimates derived from primary research conducted for this study. The research consisted of a broadly-administered stratified web survey of 1,789 PG&E customers that determined their current and potential future eligibility for FERA as well as their awareness of the rate discount, perceptions about it, and interest in it. The framework we developed to estimate achievable enrollment is comprised of the following components (Table 1):

- Acknowledgement that FERA is an opt-in rate discount that customers must choose. Customer choice is based on *interest* in the discount *and willingness* to engage with an enrollment process. Primary survey research conducted for this study suggests that 83 percent of eligible customers are interested in the discount at its current level and parameters and are willing to engage with the current enrollment process. We find this self-reported rate of interest in the discount credible given the lower discount for FERA than for CARE, the higher relative resources available to FERA-eligible customers than participants of most other low-income programs, and the high rate at which households transition into and out of the narrow income range that qualifies households for FERA.
- **Awareness** by 71 percent of FERA-eligible PG&E customers (and by 76 percent of PG&E customers overall) that rate discounts exist for lower income households, according to our customer survey. Given PG&E's extensive outreach efforts to reach a broad swath of customers who might be eligible, we doubt that awareness could be raised to any meaningful extent at a justifiable cost.
- **Perceived eligibility** by about 57 percent of eligible households that a rate discount is likely to be available to them and thus warrants further action on the customer's part. While the IOUs help CARE-eligible customers establish this connection between awareness and personal relevance, the IOUs have much more limited ability to help customers make this connection for FERA. This is because the FERA program has a narrow income eligibility band with both upper and lower limits. This requires potential participants to have a precise understanding of their income, since they have to compare it to two thresholds. Additionally, this eligibility range is narrow, making it even more difficult for potential

participants to determine their eligibility. Making this connection for a small segment of the moderate-income population requires more precise income information than utilities can obtain through third-party sources or modeling. As a result, the step whereby customers turn awareness into an understanding of their own eligibility rests primarily with eligible customers for FERA in ways that it does not for CARE.

- Assumed **follow-through** rates of 85 percent by customers with the intent to enroll. Unlike the remaining parameters of our achievable enrollment estimate, the follow-through rate is not based on new empirical research. Rather, it rests purely on an assumption and the intent to account for less-than-perfect follow-through by people on things they intend to do. Readers of this report can substitute their own assumption. However, we note that even a perfect follow-through would result in an achievable enrollment estimate of 34 percent.

Table 1: Achievable Enrollment Framework

Enrollment Target Calculator	Rate	Customers
Number of Eligible Customers		100
Expression of Interest (a) benefit of 18% discount (b) willing to go through existing enrollment process	83%	83
Can be made aware with a strong outreach effort	71%	59
Connects discount availability with own eligibility	57%	34
Follow-through adjustment	85%	29

■ Based on survey data

■ Based on assumptions and professional judgment

3. Legislative and regulatory directives affect FERA enrollment and offer both opportunities and limitations. Specifically:

- CPUC specifications on how FERA and CARE enrollment rates are to be reported result in underreporting of the rates at which FERA eligible households receive rate discounts.
- The narrow band of eligibility for FERA creates limitations for the IOUs' ability to target and engage eligible customers. At the same time, the availability of CARE rate reductions for all customers below the FERA eligibility bands creates an opportunity for integration of the two programs for all customer-facing components, including marketing and enrollment.

- That is, it is easier to market and engage customers in low-income rate reductions for customers with incomes up to 250 percent of FPL than it is to market FERA separately for customers whose current income is between 200 and 250 percent. Combined outreach and enrollment efforts that channel customers into the appropriate discount level based on income would provide a more effective and easier-to-follow offering for Californians.
 - Similarly, it is important for policymakers to recognize that some California households find themselves in the eligible income range for FERA for only a short time, which affects both the ability to find and market to them as well as potential customer interest and motivation to seek rate discounts for which they may not be eligible for very long. Census data suggest that it is likely that approximately half of FERA-eligible households remain within the eligible income range for more than one year.
- Recent statutory changes will expand eligibility for FERA to one- and two-person households. The change in eligibility affords an opportunity for a fresh marketing push for customers—possibly through bill-related communications—to consider their eligibility in income-based rate discounts given a recent expansion in who qualifies. The change also creates a potentially modest disconnect between the program name and eligibility, as the Family Electric Rate Assistance program name implies a connection to families.
 - The change in eligibility also will require adjustments of current marketing materials and a review of current outreach targeting lists to ensure targeting models used in the past do not inadvertently exclude smaller households that will now be eligible.
 - Our estimate of achievable enrollment rates applies to the newly expanded eligible population, but there is likely to be a transition period for enrollments of one- and two-person households to ramp up.
- The shift in California to an income-graduated base services charge (also known as the income-graduated fixed charge) will involve a process by which a component of utility bills is based on customer incomes. While details are still in development, it is apparent that IOUs or a third-party administrator will classify California IOU customers into separate income-based tiers for billing purposes. Income information gathered for this process could potentially be used to administer CARE and FERA rate discounts as well, rather than relying on customer action to initiate a request for the discount.¹ California residents may well

¹ The initial base services charge being implemented currently assigns CARE and FERA enrollees into the lowest charges by default. A working group is currently exploring how the next phase of the base services charge will be defined and administered. Some working group participants have expressed interest in a holistic approach to income verification that would also apply to CARE- and FERA-eligible households. If income verification is applied to CARE- and FERA-eligible households for determining who receives the lowest base services charge, that income verification process would offer an alternative to the current process for identifying and enrolling eligible customers into CARE and FERA as well.

expect alignment between the ways income-based fixed charges and variable charges are determined and the processes they need to follow for each.

1.3 Suggestions and Recommendations

We offer recommendations and suggestions related to FERA marketing, FERA enrollment goals, and FERA-related policy.

1.3.1 FERA Marketing

Opportunities to achieve higher enrollment through marketing and outreach are limited. We have identified three options for PG&E's consideration, each of which may offer some modest, incremental opportunities. **We suggest that PG&E consider the following marketing-related options:**

- Review the current targeting strategy, which focuses primarily on outreach to customers classified as having elevated probabilities of eligibility and probabilities of enrollment. While the primary audiences are based on the combination of having elevated propensities to enroll and elevated likelihood of eligibility, there may be some *minor* theoretical potential to increase the effectiveness of program marketing to *secondary targets* with tweaks to how PG&E balances the prioritization of the likelihood of eligibility and the likelihood of enrollment.
- Screen for applicability of income-based offerings when PG&E interacts with customers about new accounts or account transfers to new addresses. Asking customers about applicability and interest in information about income-based offerings could also proactively identify customers who may not be eligible now but foresee lower incomes in the future due to pending retirements or similar factors. Such customers could be added to a "lower income" group for marketing and customer-specific communications.
- Use the expansion of FERA eligibility for a broader push to encourage customers to consider whether income-based rate discounts may apply to them.

1.3.2 Goal Adjustments

We recommend that PG&E present to the CPUC the conceptual framework developed for this report (and described above) when establishing future FERA enrollment goals.

We further recommend that the CPUC adopt this framework for considering enrollment rates for FERA that are achievable and proportionate to the population size of eligible customers. Doing so will account for customer choice and the opt-in nature of income-based rate discounts established by the California Legislature and will focus IOU goals on the factors under IOU control.

We suggest that the CPUC consider the quantified estimates we have developed based on customer research of the degree of customer interest in FERA, the achievable rates of program awareness, and the ability of customers to self-identify as eligible.

1.3.3 Policy

Our review of barriers to identifying and engaging FERA-eligible households also points to a disconnect between customer realities and policy mechanisms that warrants consideration. For households trying to make ends meet, home energy costs are part of a larger group of expenses that need to be managed on an on-going basis against existing resources. Household options to manage energy bills include reducing energy consumption, making efficiency improvements, enrolling in lower rates, making payment arrangements, and seeking energy-related emergency assistance. Policy-related offerings to California residents tend to focus separately on the varying cost centers that households manage holistically (such as housing, food, energy, etc.), and policy-initiated offerings result in disparate programs to address bill management options. CARE, FERA, Energy Savings Assistance (ESA), federally funded weatherization, the Low Income Home Energy Assistance Program (LIHEAP), bill payment arrangements, and budget billing are all distinct programs rather than a holistic approach that aligns with household efforts to make ends meet. We think this misalignment between household efforts and policy solutions contributes to the challenges FERA implementers have faced in engaging eligible households (and may well affect other efforts to assist households with their basic needs).

With this overall observation in mind, we have suggestions for policymakers' future consideration concerning rate discount programs, broader energy assistance, and public assistance for basic needs. Specifically, **we suggest the following:**

- **Broaden the FERA enrollment metric** to focus on the combined share of CARE- and FERA-eligible households enrolled in an income-based rate discount so that inadvertent enrollments in CARE by FERA-eligible customers are accounted for.
- **Consider combining CARE and FERA into a single low-income rate discount offering** with a single outreach effort that targets households below 250 percent of FPL, offers a single enrollment process, and provides the appropriate discount for the customer's income level.
 - **If programs are not combined, update the enrollment rate computation to more accurately reflect the program in which customers are likely to enroll** if they are eligible for both CARE and FERA.
- **Consider using a single, comprehensive approach to applying rate discounts and the new income-based fixed service charges** so that customer classifications into tiers for base service charges and their access to rate discounts (CARE and FERA) are based on the same information, the same process, and the same degree of rigor.
- **Link rate discounts, energy-saving programs for lower income households, payment arrangements, other forms of energy assistance, and reciprocal expectations on customers to manage their usage and costs as much as possible** so engagement with customers on energy support is as comprehensive and holistic as possible rather than piecemeal.

2 Introduction

Pacific Gas and Electric (PG&E) enlisted Evergreen Economics and Resource Innovations to assess PG&E's efforts to enroll eligible customers into the Family Electric Rate Assistance (FERA) program, investigate why outreach efforts that the utility considered to be aggressive have not resulted in targeted enrollment levels, and identify what PG&E could do differently to increase enrollment. In addition, the study examined what level of enrollment is reasonably achievable and what policy options exist to increase participation in FERA by eligible households.

2.1.1 Program Description

The FERA program is an electric rate discount available to moderate-income households. Eligible households for FERA have a total household income between 200 percent and 250 percent of the federal poverty level (FPL). The program is designed to help households whose income levels are slightly higher than the requirements for the state's primary income-based rate discount program (the California Alternate Rates for Energy program, known as CARE). Households enrolled in the FERA program receive an 18 percent monthly electric bill discount.

Customers apply for FERA by self-certifying their household income, and most households are eligible for two years² before they need to re-certify their income, which does not require proof of income.

Approximately 5 percent of FERA participants are selected annually for post-enrollment verification (PEV), for which they need to verify their income through documentation.³ Currently, categorical eligibility is not available for the FERA

program, in part because of its unique income requirement structure where there are both minimum and maximum income thresholds that do not align with other assistance programs.

FERA complements the state's CARE rate discounts with discounts of 18 percent on electric bills for qualifying households with incomes between 200 and 250 percent of the Federal Poverty Level. Both CARE and FERA are available for enrollment based largely on the honor system.

The program structure for both CARE and FERA—including eligibility criteria, discount levels, and the opt-in nature of the discount—are set by the California Legislature in the Public Utilities Code.⁴

² Some households' enrollment periods are longer. Households determined to be on fixed incomes are enrolled for four years at a time.

³ A.19-11-003, et al. 2025. *Pacific Gas and Electric Company's (U 39 M) Family Electric Rate Assistance Program 2024 Annual Report*.

⁴ See Section 739.

The California Public Utilities Commission (CPUC) sets enrollment targets and reporting requirements for regulated utilities. Investor-owned utilities (IOUs), including PG&E, administer the rate discount for their customers.

2.1.2 Enrollment Levels and Goals

In Decision 21-06-015, the CPUC established increasing enrollment targets for all three investor-owned electric utilities that envisioned increasing enrollments from 30 percent of the eligible customer population in 2021 to 70 percent by 2026. As noted in Table 2, actual enrollments have been much lower for PG&E (as well as Southern California Edison [SCE] and San Diego Gas & Electric Company [SDG&E]).

Table 2: PG&E FERA Enrollment Targets and Levels⁵

Program Year	Enrollment Target	Actual Enrollment Level
2021	30%	25%
2022	40%	21%
2023	50%	23%
2024	60%	25%
2025	65%	n/a
2026	70%	n/a

It is important to note that enrollment targets and levels are monitored separately for FERA and CARE. This is an important nuance that affects the meaning of these statistics. While the IOUs have not achieved FERA enrollment targets, they have oversubscribed CARE on a statewide basis (with PG&E reporting 100 percent enrollment in the most recently completed annual report).⁶ The implication of the combined statistics is that enrollment levels in income-based rate discounts are close to what they should be. Rather than suggesting overall

When viewed in combination, FERA and CARE enrollment statistics point to a combination of dual eligibility and mis-enrollment among customers on these rate discounts rather than under-enrollment.

⁵ There was a dip in enrollment rates from 2021 to 2022, likely because post-enrollment verification and recertification were paused through COVID-19 customer protections.

⁶ A.19-11-003, et al. 2025. *Pacific Gas and Electric Company's (U 39 M) Family Electric Rate Assistance Program 2024 Annual Report*.

under-enrollment, the divergent results for CARE and FERA suggest a likely combination of dual eligibility and mis-enrollment.

Table 3 illustrates this point using PG&E values from the 2024 annual reports for CARE and FERA. Combined enrollment in income-based rate discounts is 88.6 percent of the eligible population, which suggests high overall enrollment in income-based rate discounts. It seems more plausible that the substantial divergence between CARE and FERA enrollment rates is caused by customers enrolled in CARE even though their income counts them as FERA-eligible. It seems highly unlikely that there would be an actual drastic drop in participation that happens to occur at the 200 percent FPL rate that divides CARE and FERA-eligible households.

Table 3: PG&E Combined FERA and CARE Enrollment for 2024

Disposition	CARE	FERA	Combined
Eligible based on income	1,436,346	156,457	1,592,803
Enrolled	1,371,555	39,262	1,410,817
Share of enrolled customers who are not eligible	unknown		
Share of eligible customers who are not enrolled	unknown		
Total enrollees compared to eligible population size		88.6%

As we explain further in Appendix A, there are two ways in which households that are counted toward the FERA enrollment goals could end up enrolled in CARE instead: (1) categorical eligibility that allows households to enroll in CARE even if their incomes do not meet CARE income specifications, and (2) mis-enrollment into CARE by households that should be enrolled in FERA.

2.2 Study Objectives and Methodology

This FERA study sought to investigate the lower-than-desired enrollment of FERA-eligible PG&E customers into the discounted rate, what efforts PG&E has made to reach CPUC enrollment goals, and what else could be done. An initial discovery and background review phase led to a more detailed review of PG&E's outreach and engagement efforts that also resulted in the conceptualization of a framework by which one can parse out what factors are required for enrollment and which PG&E can help influence. Finally, to assess barriers, opportunities, and achievable enrollment rates empirically, we conducted a customer survey designed to explore and quantify the various necessary conditions for enrollment. Recommendations and suggestions contained in this report are the result of ensuing analysis.

2.2.1 Objectives

Initial study objectives provided by PG&E were to:

- Identify what barriers exist to higher enrollment in FERA from the perspective of eligible customers;
- Determine if and how the FERA program structure creates barriers to enrollment; and
- Provide recommendations on the appropriate methodology to determine enrollment goals for future program cycles beyond program year 2026.

2.2.2 Methodology

Study leads from PG&E, Evergreen Economics, and Resource Innovations collaborated to develop the study methodology interactively and adaptively rather than establishing a fixed process at the outset. This process served the study objectives well and allowed us to follow the leads and early indicators of what factors contribute to the lower-than-desired enrollment rate in FERA. Fundamentally, there were three phased stages to the study, which we describe in sequential order below.

Discovery and Background Review

The initial stage of the study consisted largely of discovery and background review. We examined FERA enrollment levels, the nature of information PG&E maintains on FERA-related efforts and customer engagement, PG&E's hypotheses on the reasons for low enrollment, and PG&E's marketing research to understand enrollment levels and opportunities to increase enrollment. We also held multiple meetings with PG&E's FERA program and marketing staff to understand existing evidence and information that would explain current enrollment levels and what knowledge gaps exist to be able to fully assess PG&E's enrollment efforts and to understand enrollment levels.

Review of Program Marketing Activities and Efforts

Assessment of program marketing activities and efforts consisted of a holistic approach that combined reviews of PG&E program activities and program outcomes.

Our review of program activities was based on:

- Document reviews of PG&E's annual program reports to the CPUC dating back to 2017;⁷
- Document reviews of four internal and commissioned studies led by the PG&E program marketing team to test customer understanding, messaging, and targeting opportunities;

⁷ Available at the State of California Low Income Oversight Board's Monthly & Annual Reports archive at liob.cpuc.ca.gov/monthly-annual-reports. In addition, we reviewed Pacific Gas and Electric Company's (U 39 M) Family Electric Rate Assistance Program 2024 Annual Report.

- Review of direct mailing targeting approaches and strategy; and
- Multiple discussions with PG&E program marketing staff to better understand outreach and customer engagement efforts, challenges, and experiences.

In addition to our review of PG&E's annual reports from 2017 to the present, we conducted a systematic review and summary of activities in more recent years with a focus on 2023 and 2024. We summarized the descriptions of the types of outreach campaigns and efforts that PG&E conducted, the number of campaigns, the number of customers targeted, targeting approaches, and relevant outcomes and costs. The purpose of this review was to quantify PG&E's outreach efforts to inform and encourage potentially FERA-eligible customers to explore their eligibility and apply for the rate discount.

The internal studies we reviewed included:

- Testing of six different messages and marketing copy for FERA outreach to understand customer reaction (completed in 2020);
- Message testing for COVID-19, public safety power shutoffs, and CARE and FERA outreach on existing PG&E panel participants (completed in 2021);
- A test of four competing pieces of direct mail collateral for customer reaction and response (completed in 2021); and
- Research involving FERA marketing to non-responders to understand preferred communication vehicles, barriers to enrollment, and testing of six potential messages (completed in 2022).

Customer Survey

The discovery phase and review of existing PG&E information led to a conceptualization of the steps required for successful enrollment of FERA-eligible customers and the development of a broad-based survey of customers to quantify the various necessary conditions for enrollment to occur.

The customer survey was designed to collect information from FERA-eligible PG&E customers about their awareness and willingness to participate in FERA. The survey intended to do the following:

- Identify FERA-eligible households;
- Determine awareness of rate discounts among FERA-eligible households;
- Gauge willingness to participate in FERA among FERA-eligible households;
- Understand potential barriers to enrollment; and
- Understand how accurate and consistent annual income estimates are likely to be and how households tend to determine annual income.

The sampled population for the survey consisted of all residential PG&E customers who have not opted out of utility survey contacts and who are not actively on the FERA program's list for inclusion in an immediate marketing campaign. Within this population, we used a stratified sample based on program-developed bins that seek to identify likely FERA eligibility (split into 10 different bins of varying sizes) and propensities to enroll in discounted rates (split into a different set of 10 bins of equal sizes) based on the acquisition propensity model. The marketing team has used both sets of bins in its outreach.

The FERA awareness survey was implemented in two phases:

1. An initial phase on a limited sample to test the response rate we can hope to attain and the degree to which more targeted sampling, an advance note, an incentive, and supplemental telephone follow-up aid in the data collection; and
2. A second phase to serve as the primary data collection effort involving a much larger sample (with stratification and implementation refinements informed by learnings from the initial phase).

Phase 1 was fielded in July 2024; phase 2 was fielded in September 2024 with modifications based on what we learned in phase 1.

For the larger-scale phase 2 effort, we sent all contacts an emailed invitation from Evergreen Economics to a web survey on Qualtrics. All contacts received a preceding email from the study manager at PG&E to introduce the survey and assure recipients of its legitimacy. We employed an email follow-up for all non-respondents one week after the initial invitation with additional phone follow-up calls to respondents who reported FERA eligibility but did not complete the full survey.

We conducted a total of 1,789 surveys with PG&E customers. Of the 1,789 respondents, 116 were FERA-eligible (6%), which mirrors the challenge the marketing team also faces in identifying and reaching eligible customers (Table 4). Of the 116 respondents eligible for FERA, 48 percent had three or more household members, while 52 percent consisted of one- or two-person households. Thirteen percent of respondents either chose not to disclose their household income or did not know what it was.

Table 4: Self-Reported Eligibility for Rate Discount Programs (n=1,789)

Customer Category	Percent
Eligible for FERA	6%
Eligible for CARE	28%
Not eligible for FERA or CARE	52%
Unknown	13%

2.3 Report Layout

The report is organized into three main parts:

1. **Section 3** contains a description of PG&E's efforts to increase enrollment in FERA, our assessment of these efforts when viewed within the context of PG&E's ability to affect enrollments, and some suggestions for PG&E's consideration that have the potential to make small incremental improvements.
2. **Section 4** presents a framework we recommend for developing enrollment targets for PG&E and our estimate of the targets that may be achievable and under the control of PG&E with the current FERA structure.
3. **Section 5** provides a short discussion of policy-related barriers to enrollment in FERA and considerations for the CPUC and the California Legislature.

We have attached appendices with additional information and the research instruments.

3 Program Efforts and Results

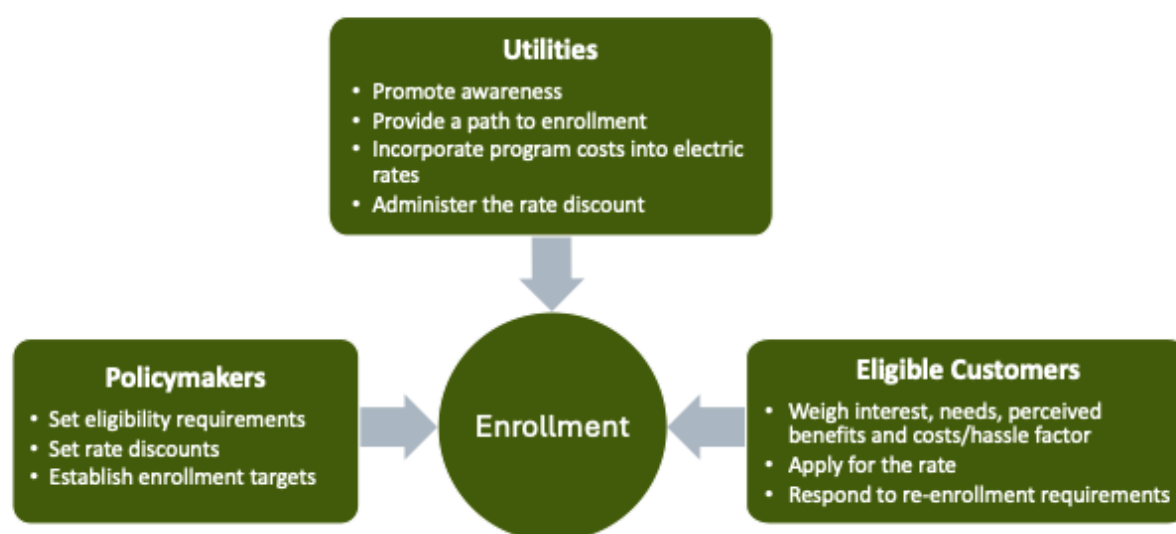
To assess what PG&E could do to increase FERA enrollment, we examined past and current program efforts to promote the FERA rate discount.

3.1 Framework for Assessing PG&E's Enrollment Efforts

In evaluating PG&E's efforts to enroll FERA-eligible customers and meet CPUC enrollment goals, it is essential to consider that FERA is a voluntary program. Enrollment is entirely up to customers, and the utility does not have the authority to apply the rate to customers who have not chosen to enroll in it. As a result, PG&E's role is to ensure eligible customers are aware of the rate discount, have the information they need to make an informed decision concerning enrollment, and have a reasonable pathway to enroll if they so choose. At the same time, there is an expectation on the investor-owned utilities (IOUs) to control program costs and keep spending balanced with the overall benefits provided, as funds spent seeking customer enrollment are paid by all ratepayers. Figure 1 illustrates the factors that affect enrollment and the roles that the IOUs, policymakers, and eligible customers play.

Figure 1: Factors that Affect Enrollment

FERA enrollment is a function of policy parameters, utility efforts, and customer preferences and choices.



Program parameters, including eligibility criteria and the size of the rate discount, are specified in legislation. Ultimately, eligible customers decide whether to enroll. Given that FERA customers have relatively low incomes, it would be reasonable to assume that eligible customers would opt in purely based on self-interest by rational economic actors. However, behavioral economics and

past research into low-income utility programs show that engagement in applicable programs is more complex. For example:

- California's 2013 Low Income Needs Assessment⁸ found that interest among eligible households in free weatherization services that can include appliance replacements, repairs, and cost-reducing energy improvements was far from 100 percent. The Evergreen-led study found a participation rate of 59 percent and a willingness-to-participate among non-participants of 52 percent.
- Non-participant research included in the Low Income Needs Assessment and similar subsequent studies to understand interest in free home improvements suggest numerous personal values and rational reasons that customers might reject rate discounts or other forms of "free money," including not perceiving a need for assistance, the belief that others need the discount more, and not wanting a handout.⁹

On the other hand, California has long estimated its participation rate in the CARE rate discount for households with the lowest incomes to be near or above 100 percent, which helped lead to high enrollment goals for FERA. However, we note that CARE enrollment statistics are structured in a way that overstates CARE enrollment by including categorically eligible customers with incomes above 200 percent of the federal poverty level (FPL) as participants but excluding them from the eligible population when dividing participant counts into the size of the eligible population. Further, it is plausible that the structure of FERA and the enrollment processes result in FERA-eligible households enrolling in CARE. We elaborate on these issues in Appendix A.

Given that the IOUs only have partial influence on FERA enrollments, the documented challenge of ramping up FERA enrollment over multiple years, and the potential for inflation in CARE enrollment, we think it is appropriate to assess PG&E's efforts based on the soundness and extent of its activities to position eligible customers to enroll.

3.2 PG&E Marketing and Enrollment Efforts

PG&E has been engaged in extensive efforts to enroll FERA-eligible customers into the rate discount. We reviewed program annual reports dating back to 2017 to understand program efforts and discussed these with program staff to supplement our document review. Based on this review

⁸ Evergreen Economics. 2013. *Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs - Volume 1: Summary Report* (the 2013 Low Income Needs Assessment [LINA] Study). CALMAC Study ID: SCE0342.01. https://www.calmac.org/publications/LINA_report_-_Volume_1_-_final.pdf

⁹ See, for example, Evergreen Economics. 2016. *Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs - Volume 1 of 2, Final Report* (the 2016 Low Income Needs Assessment [LINA] Study). CALMAC Study ID: SCE0396.01. https://www.calmac.org/publications/2016_LINA_Final_Report_-_Volume_1_of_2.pdf. Other literature on this topic is dispersed within the field of behavioral economics and among publications within the energy field.

and careful assessment of program activities in 2023 and 2024, we consider PG&E's efforts to be comprehensive and extensive. In our professional judgment, the program's attempts to drive eligible customers toward enrollment in this voluntary, opt-in rate discount have exceeded the standard of "reasonableness" recently established by the California Legislature as part of Senate Bill 1130 in the 2023-24 legislative session and updated in California code.¹⁰

This assessment is based on the following characteristics of PG&E's efforts:

- Comprehensiveness in approach;
- Extensiveness of marketing efforts;
- High likelihood of eligible customer awareness; and
- Ease of enrollment.

We elaborate on the comprehensiveness of PG&E's approach, the extensiveness of its outreach, and the ease of enrollment for interested customers in this section of the report. These activities are documented in PG&E's annual reports of FERA activities to the CPUC, and we have summarized key metrics in Table 5 below. In addition, we point readers to Section 4.4 for our estimate of awareness levels among eligible customers resulting from PG&E's efforts.

¹⁰ *California Senate Bill (SB)-1130 Electricity: Family Electric Rate Assistance program.* "Chapter 457: An act to amend Section 739.12 of the Public Utilities Code, relating to electricity." Approved and filed with Secretary of State September 22, 2024. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB1130

Table 5: Synthesis of PG&E-Reported Outreach Efforts (from annual program reports)

Metric	2023	2024
PG&E Customer-Directed Campaigns		
Never Targeted Campaign		
Customers targeted (unique)	554,678	440,408
Details	1,349,384 total contacts	1,555,000 total contacts 657,000 mail 898,000 emails
Past Due Bills Outreach		
Customers targeted (unique)	170,329	265,862
Retention Campaigns		
Welcome campaign	Newly enrolled and re-enrolled customers	
Recertification reminder campaign	1 direct mail 4 emails per applicable customer Robocalls and text reminders to a portion of customers	1 direct mail 3 emails per applicable customer Robocalls and text reminders to a portion of customers
Failed to recertify campaign	5,200 unique customers	4,000 unique customers
PG&E Indirect & Mass Marketing Efforts		
PG&E Owned Media Efforts		
Description	Home Energy Reports (HER) marketing modules Bill inserts	HER newsletter Bill inserts Multicultural interviews on radio and television ^b

Metric	2023	2024
	Articles in income-qualified targeted version of the newsletter	
Metrics	FERA-focused bill inserts to approximately 2,000,000 customers	30 general market mentions of FERA
PG&E Earned Media Efforts		
Description	Media stories across radio and TV	Press release Media interviews
PG&E Paid Marketing		
Digital media campaign	Search engine marketing, Google Performance Max, display and native advertising	Search engine marketing, Google Performance Max, display and native advertising, social media Influencer marketing test
Metrics reported	1,400,000 clicks 1.24% click-through rate	70,000,000 impressions 1.08% click-through rate
Landing page visits	1,042,382	888,000 (unique)
Other Efforts		
Partner and CBO outreach	FERA pilot with six community-based organizations (CBOs) (ended April 2023 due to low enrollment rates), CARE capitation agencies, Solutions Marketing tools	CARE capitation agencies, community outreach training, Energy solutions partner network, community events, outbound calls on past-due accounts (265,862 customers)
Other Statistics		
Marketing expenditures	\$2,623,703	\$1,964,527

Metric	2023	2024
Average monthly bill discount	\$37.76	\$45.81
Cumulative annual discount for all enrollees	\$17,146,000	\$21,280,262
Marketing expenditures as a share of discounts provided during the year	15.3%	9.3% ^c
Total enrollment	38,395	39,262
New enrollments	14,308	13,289
Discontinued enrollments	12,665	12,322
Recertification rate (among those sent a recertification request)	9%	13% ^a
Enrollment level	23%	25%
Enrollment goals (established by the CPUC)	50%	60%

Table notes:

^a Based on recertifications through September 2024. We excluded October through December because recertifications were still in progress for customers contacted during these months when the annual report was finalized. We do not expect the overall percentage to change appreciably for the full year.

^b PG&E's annual report mentioned radio and television appearances in Spanish, Mandarin, Cantonese, and Hmong. The report also cited likely mentions about FERA in the following languages: Spanish, Chinese, Japanese, Vietnamese, Punjabi, Russian, and Hmong.

^c The comparable marketing spending for CARE was 0.3 percent, based on marketing expenditures of \$2.6 million during the first nine months of 2024 for total discounts during that period of \$851.6 million.

3.2.1 Comprehensiveness of Outreach Approach

One characteristic by which we assessed PG&E's outreach to support FERA enrollment levels is the effort's comprehensiveness. We found PG&E's efforts to be comprehensive and did not find any substantial gaps.

Specifically, we note that PG&E's outreach efforts encompass the following:

- A high level of spending on FERA outreach in comparison to outreach for the CARE discount;
- Breadth of coverage that includes expansive outreach and ongoing outreach testing to attempt to reach potentially eligible non-enrollees;
- Efforts to retain FERA enrollees who are not responding to attempts to recertify;
- Multilingual and multicultural media outreach;
- Marketing research to inform outreach strategy, tactics, and messaging; and
- Pilots to engage local, trusted information sources that may have relationships with FERA-eligible households.

We briefly discuss each of these topics below, highlighting relevant statistics from Table 5, where appropriate.

High level of spending. PG&E's total investment in FERA marketing has been approximately \$2 million annually. For 2024, PG&E's marketing expenditures for the program equaled 9.3 percent of the total rate discounts provided by the program. The comparable marketing expenditures for the CARE rate discount were 0.3 percent in 2024. This comparison demonstrates a substantial level of effort that suggests that low enrollments are due to factors other than the degree of PG&E's effort.

Breadth of coverage. Outreach to households believed to have elevated rates of eligibility for FERA¹¹ result in direct mail and email marketing of the program to approximately 500,000 households annually. As PG&E staff note, the outreach is broad in large part because identifying households whose incomes fall within the range of 200 to 250 percent of FPL is not realistic. Identifying these households is imprecise due to the narrowness of the income range, the fluidity with which household incomes can move households into and out of that range (see Appendix B for more discussion on this topic), and the likelihood that these incomes exist in a broader set of geographic areas than households at the lower end of incomes. These factors have led PG&E to reach out to a half million customers annually (and far more when multiple years of efforts are combined) even though only about 200,000 PG&E customers are eligible at any point in time.

¹¹ Based on data available to PG&E and its marketing partner.

Additionally, PG&E utilizes a multi-channel approach to reach customers, as well as ongoing testing and optimization. These include new tactics such as direct marketing testing in 2023 and the influencer marketing campaign testing in 2024. New tactics are consistently utilized as PG&E tests how to target, message, and reach customers.

Outreach to households whose payment practices suggest financial challenges. In 2024, PG&E customer service representatives placed outbound calls to 265,862 customers with past due accounts and presented PG&E's rate discount programs, including FERA, where appropriate.

Efforts to retain enrollees. While recertification every two years is a program requirement, PG&E has in place multiple efforts to retain enrollees despite low recertification rates (near 10 percent). Recertification efforts provide extended qualification periods for households identified as being likely to be on fixed incomes or likely to continue to qualify for FERA based on probabilistic models; PG&E uses the Eligibility Score to auto-recertify for FERA where customers with an eligibility score of 1 or 2 (i.e., those that look most likely to be eligible based on available income data) are auto-recertified and all other customers receive recertification requests. For those required to recertify, PG&E sends direct mail and multiple email reminders, and conducts additional outreach after customers have not responded to recertification requests.

Multilingual and multicultural outreach. PG&E has expanded its multilingual and multicultural efforts to promote FERA over time. In 2024:

- PG&E's primary direct outreach (the *Never Targeted* campaign) and its digital and social media campaigns were bilingual (in English and Spanish).
- PG&E's multicultural media communications group conducted interviews on non-English radio and telephone outlets in the San Francisco Bay area and in the Central Valley in Spanish, Hmong, Mandarin, and Cantonese.
- PG&E identified more than 30 general market article mentions with apparent coverage of FERA in Spanish, Chinese, Japanese, Vietnamese, Punjabi, Russian, and Hmong.
- FERA program information on PG&E's website was translated into 15 languages, and the online application is available in English, Spanish, and Chinese.
- FERA print applications are available in English, Spanish, Chinese, and Vietnamese. Large print versions are offered in all these languages, and braille applications are also available.

Marketing research. PG&E's marketing team has conducted multiple marketing research studies to test marketing approaches and messages to adjust and improve outreach effectiveness. These studies included:

- Testing of six different messages and marketing copy for FERA outreach to understand customer reaction (completed in 2020);

- Message testing for COVID-19, public safety power shutoffs, and CARE and FERA outreach on existing PG&E panel participants (completed in 2021);
- A test of four competing pieces of direct mail collateral for customer reaction and response (completed in 2021); and
- Research involving FERA marketing non-responders to understand preferred communication vehicles, barriers to enrollment, and testing of six potential messages (completed in 2022).

Pilots and engagement of local community-based organizations (CBOs). PG&E regularly engages with its CBO partner network, which includes CARE capitation agencies. In addition to the CARE capitation program, PG&E has developed multiple paid CBO grant pilots to reach customers through other local organizations that may have relationships with FERA-eligible households, and conducts community events. Despite these efforts and investments, CBOs have not driven significant FERA enrollments.

3.2.2 Ease of Enrollment and Recertification

As observed through the Categorical Eligibility study conducted by Evergreen Economics in 2023,¹² the application and enrollment process for the FERA program is substantially less rigorous than it is for other public assistance programs explored as part of the research.

Customers apply for FERA by self-certifying their household income and providing their household size. This is in contrast to many public assistance programs that verify income at enrollment and some of which require in-person intake interviews. As a result, FERA is relatively easy to apply for as it requires only self-certification of income and household size (Figure 2).

¹² Evergreen Economics. 2023. *2022 Categorical Eligibility Study – Final Report*.
<https://pda.energydataweb.com/#!/documents/2814/view>

Figure 2: FERA Program Enrollment Application

PG&E CARE/FERA PROGRAM APPLICATION Form 01-9077
Residential Customers

1. Fill out Section 1.
 2. Fill out Section 2A OR Section 2B. Only one section (A or B) is required to qualify for this program. However, if you complete Section 2B, you may qualify for additional discounts as new programs become available.
 3. Sign and date this form and mail to PG&E.

If you qualify, your CARE or FERA discount will appear on the first page of your next PG&E bill.

1 You and your household

Your PG&E account number [Find yours on page 1 of your PG&E bill.]

Account holder's name (Use the name as it appears on your PG&E bill, which must be in your name.)

Your home address (Address must be your primary residence. Do NOT use a P.O. Box.) Unit #

City/State/Zip Code

Email address
(By entering your email address, you are authorizing PG&E to send you information from time to time regarding your PG&E utility service and PG&E programs and services that may be available to you.)

Preferred phone number ☐ Home ☐ Work ☐ Mobile

Alternative phone number ☐ Home ☐ Work ☐ Mobile

What language do you prefer for future CARE and FERA communications? (Choose one)
☐ English ☐ Spanish ☐ Mandarin ☐ Cantonese ☐ Vietnamese
☐ Russian ☐ Korean ☐ Tagalog ☐ Hmong

What is your preferred method of communication? (Choose one)
☐ Mail ☐ Email ☐ Phone ☐ Text (Message and data rates may apply)

Number of people in your household at this address:
 Adults + Children = (under 18)

2 Household qualification

Fill out Section 2A OR Section 2B.

2A Public assistance programs
 Check all the programs in which you, or someone in your household, participate.

<input type="checkbox"/> Low Income Home Energy Assistance Program (LIHEAP)	<input type="checkbox"/> Medi-Cal for Families (Healthy Families A&B)
<input type="checkbox"/> Women, Infants, and Children (WIC)	<input type="checkbox"/> National School Lunch Program (NSLP)
<input type="checkbox"/> CalFresh/SNAP (Food stamps)	<input type="checkbox"/> Bureau of Indian Affairs General Assistance
<input type="checkbox"/> CalWORKs (TANF) or Tribal TANF	<input type="checkbox"/> Medicaid/Medi-Cal (under age 65)
<input type="checkbox"/> Head Start Income Eligible (Tribal only)	<input type="checkbox"/> Medicaid/Medi-Cal (age 65 and over)
<input type="checkbox"/> Supplemental Security Income (SSI)	

OR

2B Household income
☐ I am currently on a fixed income and receive income or benefits from one or more of the following: pensions, Social Security, SSP or SSDI, interest/dividends from retirement accounts, Medicaid/Medi-Cal (age 65 and over) or SSI.

My household income is:
 Total gross annual household income \$.00
(please account for all income from every household member)

3 Your declaration

By signing this declaration, I certify that the information I have provided in this application is true and correct.

I acknowledge that I have read and understood the contents of this application. I also agree to follow the terms and conditions of the CARE or the FERA program, including the following:

1. I am not claimed as a dependent on another person's income tax return other than my spouse.
2. I am not knowingly sharing an energy meter with another home.
3. I will notify PG&E if my household is no longer eligible for the CARE or FERA discount.
4. I understand I may be required to provide proof of household income.
5. I understand I may be required to participate in the Energy Savings Assistance Program.
6. I understand I may be removed from the CARE program if my monthly electric usage exceeds six times the Tier 1 allowance.
7. I understand that I may be switched or dropped from the CARE or FERA program if I submit information or PG&E receives information from other programs which deem me ineligible.
8. I authorize PG&E to share my information in order to remain eligible for available energy management assistance, and price reduction and residential rate programs with other utilities, state agencies and entities designated by the CPUC.
9. I will pay back the discount I have received if I provided false information to support my application for the CARE or the FERA program.

X Customer signature ☐ Fill in circle if you are a guardian or you have power of attorney.

Date

FOR INTERNAL USE ONLY
W

Information collected on this application is handled in accordance with PG&E's Privacy Policy. The Privacy Policy is available at pgae.com/privacy.
 "PG&E" refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation, 20224 Pacific Gas and Electric Company. All rights reserved.
 These offerings are limited by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission.

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The standard enrollment period for FERA participants is two years; however, participants who are determined to have fixed incomes and customers who are retired or are receiving other benefits and whose income is unlikely to change year to year have an enrollment period of four years. At the time of recertification, participants provide their household size and income to self-certify continued eligibility in FERA. Approximately 5 percent of enrolled customers are selected for post-enrollment verification annually, for which proof of income eligibility is required.

3.3 Marketing and Customer Awareness

We consider marketing that drives customer awareness to be the most effective step PG&E can take to drive enrollment in FERA. In this section, we discuss the connection between PG&E's FERA-related outreach and customer awareness, which leads to the opportunity for eligible customers to realize the opportunity for rate discounts and choose to enroll.

3.3.1 Marketing Leading to Customer Awareness

PG&E's *Never Targeted* marketing campaign (described above in Table 5) is the company's primary direct marketing campaign and a key element of the marketing strategy to inform potentially FERA-eligible customers about the rate discount. This targeted campaign combines with other broad-based outreach via media, general customer contacts, and various other customer-specific outreach via partners to build awareness about rate discounts for lower income customers and inform eligible customers that rate discounts may apply to them. Those other information sources are general outreach by PG&E about efforts for lower income customers, engagement with customers struggling to pay their bills, and outreach that supports CARE awareness.

As noted in Table 5, PG&E sends direct mail and email about the FERA rate discount to about a half million customers annually. The purpose of the outreach is to build awareness about the rate discount and drive enrollment. PG&E seeks to target customers based on two parameters: 1) the likelihood of the targeted customers' FERA eligibility, which is based on household size and income data purchased from Acxiom,¹³ and 2) the likelihood of enrollment, which is based on decile scores assigned via an acquisition propensity model for FERA. These targeting efforts have evolved over time, and PG&E has reached approximately a half million unique customers annually with information about FERA through these campaigns, thereby facilitating potentially widespread awareness about the rate discount among customers who are eligible for it, as well as customers with incomes above and below the eligible range.

3.3.2 Measured Level of Customer Awareness

The customer survey we fielded for this study suggests strong awareness among customers of income-based rate discounts, which we see as the necessary step to enabling eligible customers to enroll in FERA. Seventy-one percent of current and future FERA-eligible respondents reported being aware of rate discounts for low-income households.¹⁴

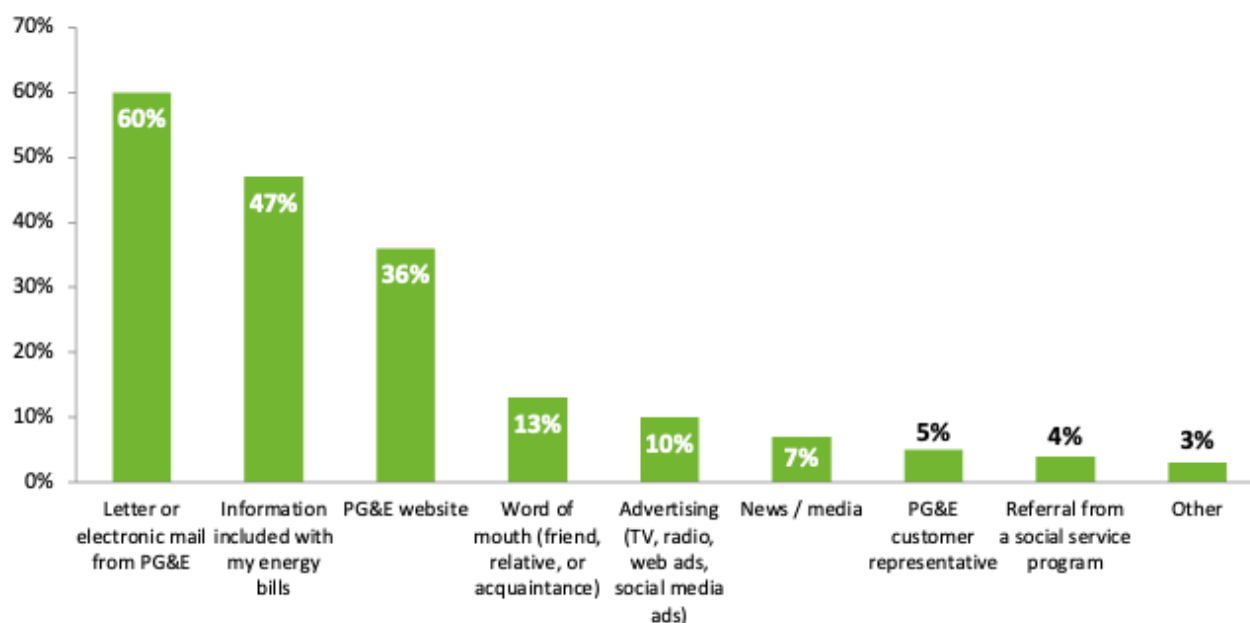
¹³ Where Acxiom data are not available, the modeling uses Athens data in its place.

¹⁴ Among current FERA-eligible households, the awareness rate is 77 percent. Mirroring the challenge PG&E faces in identifying these households, this metric is based on 48 households among our 1,789 survey completions. We find these metrics to be credible even with the low response number given the general consistency of current FERA-eligible households' awareness with that of those who will become eligible when the program expands to include one- and two-person households and with general awareness among PG&E's customer base. The overall population awareness rate is 76 percent.

This awareness rate is based on questions in which we asked respondents whether they had heard of rate discounts available for low-income customers. First, we asked respondents whether they had seen information about rate discounts available for PG&E customers with low incomes in the past five years. Next, we asked those who reported that they had not seen such information whether they were aware that households with low incomes could receive reduced rates for electricity and natural gas. This combination of questions allowed us to assess self-reported awareness. Separately, we classified respondents who self-reported enrollment in FERA as aware of rate discounts independently of their other survey responses.

We also asked all survey respondents whether they had seen information about various PG&E offerings in the past five years. Survey respondents most frequently reported coming across information about rate discounts for customers with low incomes (67%) and incentives to reduce energy use during times of high demand (64%). Fewer than half of respondents reported seeing information about energy efficiency equipment rebates or free home energy efficiency upgrades for households with low incomes (45% and 38%, respectively).

PG&E customers generally learn about income-based rate discounts from IOU messaging (Figure 3). The most common sources of awareness for PG&E customers are letters or electronic mail from PG&E, information included with energy bills, and the PG&E website. Overall, 93 percent of survey respondents reported learning about income-based rate discounts from utility messaging.

Figure 3: Sources of Information About Rate Discounts for Low-Income Households (n=100)


3.4 Assessment and Discussion

As noted in Figure 1, enrollment in FERA is a function of multiple factors. The customer’s utility provider only controls two of these factors: *making eligible customers aware of the discount* and *making the enrollment process easy*. The California Legislature’s revisions to FERA in the 2023-24 legislative period through Senate Bill 1130 suggests a revised standard to which the IOUs should be held accountable.¹⁵ In addition, the legislation states that the CPUC “shall review each electrical corporation’s report to ensure it has made *reasonable efforts* to enroll eligible households in the FERA program *commensurate with the proportion of households the commission determines to be eligible* within the electrical corporation’s service territory.” (emphasis added)

Our review suggests that PG&E has met—and quite likely exceeded—the standard of making a reasonable effort.

Barring further definition of the term *reasonable effort* by the CPUC, we think there are two outstanding questions to be considered:

1. Does the level of effort by PG&E to enroll eligible customers in FERA achieve an appropriate balance of the company’s responsibilities toward FERA-eligible customers and ratepayers overall?

¹⁵ In addition, Senate Bill 1130 expanded the household sizes to be eligible for FERA. We discuss the implications of that change in the next section of the report.

- This is not a question we sought to answer in this study, so we are simply raising it for future consideration in the assumption that the CPUC will also find PG&E's efforts on behalf of FERA-eligible households to have been at least reasonable.
2. Are there activities that PG&E could add or revisions to its approaches that would increase the enrollment rate in FERA among its customers?
 - Our short answer to this question is that PG&E's opportunities to increase enrollment appear to be limited. We expand on our thinking below.

We did not consider an increase in marketing spending for two reasons. First, the relative spending on marketing for FERA is already 30 times as high as that for CARE when seen as a proportion of customer rate discounts provided. This raises a question of the appropriate balance. Second, more marketing is likely to increase enrollment at an increasingly slower rate given that PG&E's marketing efforts are already extensive.

We do see two options that PG&E's FERA and marketing teams could explore without increasing marketing spending:

1. **Including outreach about CARE and FERA to customers who are starting a new account with PG&E as a new customer or because of a move within PG&E's service area.** This stage of a customer relationship is an appropriate time to slot customers into the rate most appropriate for them and to inform them of the role income plays in the rates available to them in the future. Additionally, customers expect to make account-related decisions at this point in time, so they are engaged on the topic in ways they may not be later. Optionally, PG&E could also ask customers whether they consider low-income offerings to be potentially relevant to the customer (due to low current incomes, fluctuations in incomes, or the advent of low fixed incomes in the foreseeable future). Customers who report low-income rates and offerings to be potentially relevant to them could be added to distribution lists through which PG&E sends occasional reminders and updates that would be useful for low-income customers.
2. **Continued refinement of PG&E's customer targeting model through which it selects customers for its *Never Targeted* FERA outreach campaign.** Our review of self-reported FERA eligibility among customers targeted for outreach suggests that customer groupings identified by the model are logical and tend to include the customer bins with elevated eligibility levels. At the same time, we found that a shift of emphasis from customers' estimated propensity to enroll to customers' estimated likelihood of eligibility would reach customers with an equally elevated eligibility rate. This means that a change in the targeted groups would not necessarily perform better, but it also illustrates that some tweaking in the prioritization approaches between estimated propensity to enroll and propensity to be eligible has the potential to result in modest increases in marketing performance.

4 Achievable Enrollment

As noted, enrollment into FERA has fallen short of California’s established goals for program participation for several reasons. The study team sought to provide a replacement for enrollment targets with an updated goal. We present our estimate of achievable targets for FERA given the current program structure and offering. More importantly, we offer a methodical framework that regulators, policymakers, and IOUs can use to develop their own enrollment targets or to update targets in the future. This framework can also be used to identify surmountable barriers to enrollment by quantifying the various factors that hinder greater participation.

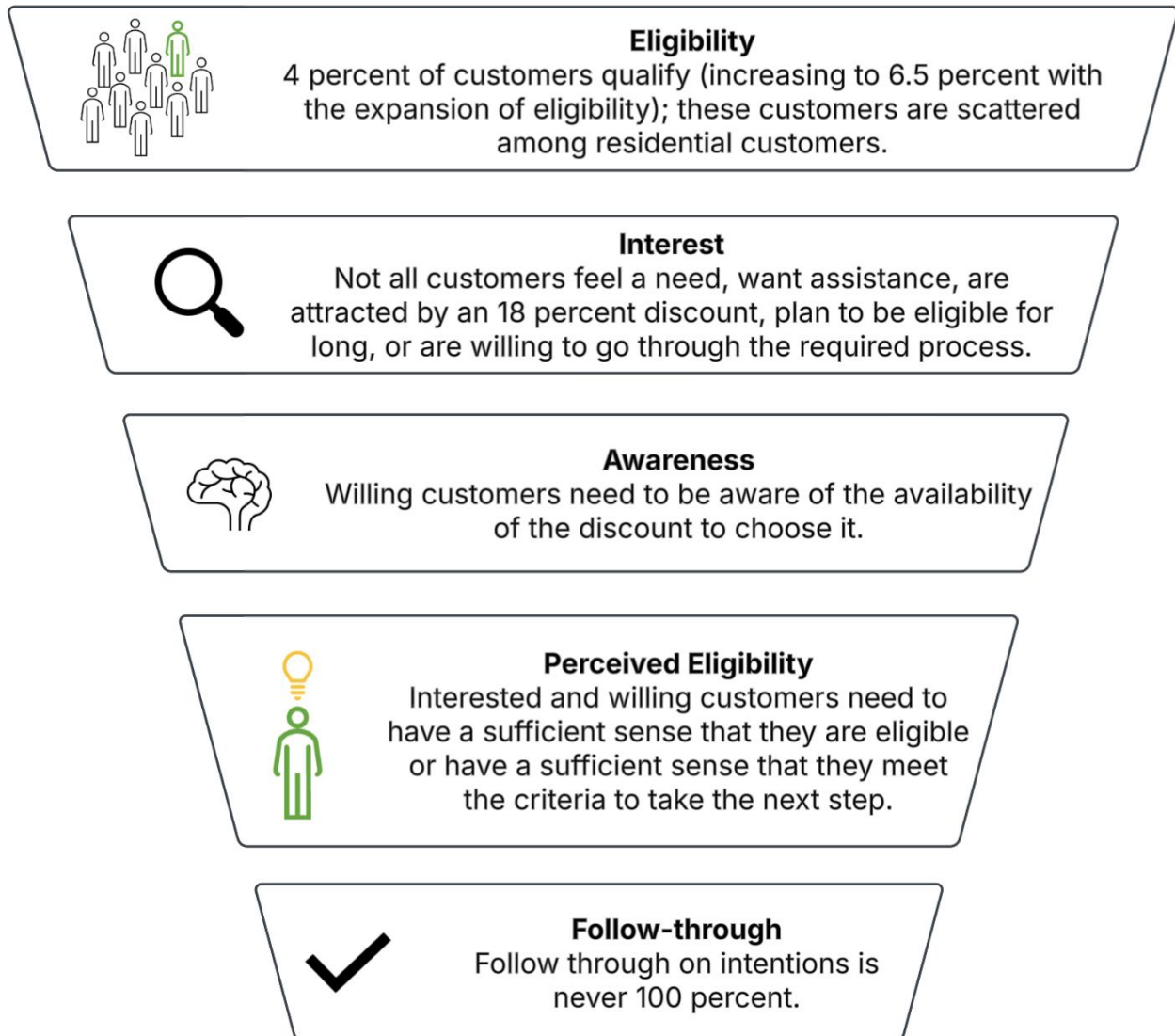
4.1 Framework

The framework we created is a step-by-step process that acknowledges the various pieces that need to fall in place for eligible households to participate in FERA. It uses different questions from the customer survey to estimate eligible customers’ interest in and awareness of the program, and their perceived eligibility. We describe this structure broadly here in pictorial form and in narrative.

One key feature of the framework we present is that it builds an achievability estimate in a comprehensive way that accounts for each step involved in the journey from eligibility to participation. As illustrated in Figure 4, potential enrollment begins with eligibility. For those who are eligible, willingness to participate and awareness of the discounted rate are prerequisites for opt-in enrollment.

We included two different forms of awareness in our framework to address a particular challenge of FERA outreach that could be called the “needle in the haystack” effect. Because the IOUs do not have (and cannot readily obtain) sufficient information about customer eligibility to target those who qualify with direct messages, awareness of the program involves a step on the part of the customer. IOUs can make customers generally aware of rate discounts that might apply to them, and customers will then need to follow up on this awareness with a self-assessment of whether they are eligible. To address this two-step process, we included both awareness and self-awareness as separate but related steps.

The final step in the process is the application for the rate discount by eligible, interested, and aware households that have decided to ask for the discount. We included this step to knowledge that alignment of the prerequisites still requires follow-through.

Figure 4: FERA Enrollment Process

4.2 Eligibility

The framework is based on the subset of the residential customer base that meets legislatively determined eligibility criteria. The eligibility rate was about 4 percent of the total population before a legislative approved in the 2023-24 legislative session that will eliminate the minimum household size requirement of three individuals. Because the framework begins with the eligible population as its basis, there is no separate estimate of attrition for this step.

However, we do note that FERA eligibility requirements most likely affect actual interest and self-awareness by potential participants. As noted earlier, eligibility for the program is defined by a

narrow income band based on household size. This creates a specific eligibility window positioned so there are ineligible income ranges above and below the eligible band. The narrowness and placement of the eligible income range within the broader income scale contributes not only to the low eligibility rate but also to the time customers with changing incomes can expect to be eligible and benefit from the rate. (It is easier for customers to self-identify as being in the lowest (or highest) X percent of incomes than it is for them to know if they are in a narrow band somewhere in the middle of the income spectrum.) These factors and the household size-dependent eligibility ranges likely also make it difficult for customers to accurately self-identify as being eligible. We explore these factors further in our policy-related discussion in Section 5.

4.3 Interest

Interest in FERA reflects eligible households' likelihood to claim the discounted rate given the totality of the offer. This consideration includes eligible IOU customers' interest in claiming the 18 percent discount. Our measurement of interest also includes eligible households' willingness to complete the required enrollment process, which is a function of their understanding of the process (as we described it) and their comfort and trust in engaging with PG&E. The resulting interest-based adjustment to achievable enrollment reflects the fact that not all eligible customers choose to engage in an offer even if fully informed about it.

To estimate eligible customers' interest in the FERA discount, we asked FERA-eligible respondents to the PG&E customer survey to rate their likelihood of enrolling in an 18 percent rate discount on their electric bill. As part of the survey question, we provided a brief description of what the household would need to do to apply. We included only respondents who had already self-reported household sizes and income ranges that were consistent with FERA eligibility requirements.


Respondents who reported that they were "very likely" or "somewhat likely" to enroll were categorized as interested in FERA. Additionally, respondents who self-reported already being enrolled in the program were classified as interested in FERA, regardless of whether our records showed them as enrolled.

We found that 16 percent of currently eligible respondents reported being enrolled in FERA. Of the respondents not currently participating in FERA, 67 percent expressed interest in enrolling. In combining these two groups, we get an overall interest rate of 83 percent.

This means that if we start with 100 customers, we assume that 83 of them would decide to enroll in FERA on the basis of the 18 percent discount and the enrollment process (Table 6).

Table 6: Interest Level Impact on Achievable Enrollment

Enrollment Target Calculator	Rate	Customers
Number of Eligible Customers		100
Expression of Interest (a) benefit of 18% discount (b) willing to go through existing enrollment process	83%	83

 Based on survey data

4.4 Awareness

Awareness is a prerequisite for customer engagement in any voluntary opt-in program or offer. Awareness functions in parallel with interest. Customers need to be both aware and interested before they will choose to make use of an offer. For the FERA achievable enrollment framework, we applied a modest standard of general awareness of the availability of income-based rate discounts (discussed here) combined with perceived eligibility by customers with qualifying incomes (in the next step discussed below).

For an assessment of achievable enrollment, estimated awareness needs to be based on the combination of naturally occurring knowledge about the program's availability and the effects of program marketing. Given the ambitious goals for FERA enrollment and the need for marketing to be commensurate with societal, customer, and ratepayer benefits, we assume that a concerted but not unlimited marketing effort should define the appropriate level of program awareness. As noted in Section 3, we find PG&E's outreach efforts for FERA to meet this criterion and to have been further supplemented by outreach related to CARE and low-income energy initiatives generally. As a result, we are using the awareness level that PG&E has been able to achieve as indicative of what is possible given that the audience is challenging to identify, that the audience changes over time, and that PG&E has put extensive effort into FERA marketing.


To measure awareness of the availability of income-based rate discounts, we asked respondents to the PG&E customer survey a series of questions on whether they had heard of rate discounts available for low-income customers. First, we asked respondents whether they had seen information about rate discounts available for PG&E customers with low incomes in the past five years. Next, we asked those who reported that they had not seen such information whether they were aware that households with low incomes could receive reduced rates for electricity and natural gas. This combination of questions allowed us to assess self-reported awareness. Separately, we classified respondents who self-reported enrollment in FERA as aware of rate discounts independently of their other survey responses.

Thirty-nine percent of FERA-eligible respondents reported seeing information about rate discounts for low-income households in the last five years. An additional 25 percent of respondents reported already knowing about such discounts. Finally, respondents who reported current enrollment in FERA but who had not also reported being aware of rate discounts were added to the overall awareness rate; these comprised an additional 7 percent of respondents. The sum of these three percentages leads to an overall awareness rate of 71 percent.

Building on the achievable enrollment calculations, we then applied a 71 percent awareness rate to the 83 FERA-eligible and interested customers for a total of 59 interested customers who could reasonably be made aware of income-based rate discounts (Table 7).

Table 7: Awareness Level Impact on Achievable Enrollment

Enrollment Target Calculator	Rate	Customers
Number of Eligible Customers		100
Expression of Interest (a) benefit of 18% discount (b) willing to go through existing enrollment process	83%	83
Can be made aware with a strong outreach effort	71%	59

 Based on survey data

4.5 Perceived Eligibility


Awareness of income-based rate discounts itself is not sufficient for customers to know about FERA specifically or to be prompted to look into the nature of any such discounts that apply to them. Eligible customers with awareness of income-based rate discounts need to have a reason to think the discounts apply to them. We refer to this personal sense of eligibility as perceived eligibility and account for it in the achievable enrollment framework.

To estimate perceived eligibility, we asked PG&E customer survey respondents whether they believed they were eligible for discounted energy rates based on their household's income. Respondents who reported that "yes, [they] think [they] do" or "[they] might, but [they] are not sure" were classified as believing that they personally qualified. We included the latter group because they could be reasonably expected and motivated to explore the rates further and determine whether they qualify. Thirty-eight percent of FERA-eligible respondents reported that they think they are eligible, while 18 percent stated they might be, but they are not sure. This leads to an overall perceived applicability rate of 57 percent.

Continuing to calculate the achievable enrollment rate, once we apply the 57 percent perceived eligibility rate, we can assume that 34 of the 57 FERA-eligible, interested, and aware customers could connect income-based discounts to their own personal eligibility (Table 8).

Table 8: Perceived Eligibility Level Impact on Achievable Enrollment

Enrollment Target Calculator	Rate	Customers
Number of Eligible Customers		100
Expression of Interest (a) benefit of 18% discount (b) willing to go through existing enrollment process	83%	83
Can be made aware with a strong outreach effort	71%	59
Connects discount availability with own eligibility	57%	34

 Based on survey data

The nature of the legislatively established household income eligibility criteria makes it impossible for the IOUs to know who is eligible and challenging to communicate eligibility thresholds easily for audiences. This means that, while the IOUs can establish a high rate of overall awareness in income-based rate discounts, it is challenging for them to focus marketing on eligible populations efficiently or accurately. Relatedly, it is challenging for customers that receive FERA marketing to easily know whether they are personally eligible. This distinction motivated our choice to split awareness-related factors into two parts, as noted above.

Additionally, we think it is relevant to note that customers with household incomes in the FERA-eligible range may experience high rates of income volatility. According to Census Mobility, Opportunity, and Volatility (MOVS) data from 2019,¹⁶ 45 percent of low-income households in California experience either a 25 percent one-year growth or loss in annual income. This means that customers may find it difficult to accurately predict or calculate their annual income due to the unpredictable nature of their earnings, therefore making it difficult for them to determine if they are eligible for the program. See Appendix B for more details about income volatility.

¹⁶ United States Census Bureau. *Mobility, Opportunity, and Volatility Statistics (MOVS)*. Retrieved 5/14/25.
<https://www.census.gov/library/visualizations/interactive/movs.html>

To put this in perspective for FERA, we note that the FERA eligibility bands¹⁷ encompass just 50 percentage points of the federal poverty range for any given household size, which amounts to a range of \$15,000 to \$20,000 for most households. That means a downward change of \$10,000 will cause more than half of eligible customers to become eligible for CARE instead of FERA, and an upward change of the same amount will cause half of eligible customers to lose eligibility for any income-based rate discount.

4.6 Follow-Through on Intentions

The three factors discussed above—interest, awareness, and perceived applicability—combine to cause an eligible household to choose to participate, choose not to participate, or not be able to make a choice at all. The final consideration we built into the achievable enrollment framework represents the final step for an eligible household that has decided to apply for the rate. That step is to apply.

While following through on a decision to apply may seem trivial, we chose not to take it for granted. Personal to do lists, missed appointments, and various good intentions that are slow to turn into reality all point to the imperfect follow-through rate that stands between intention and action. In contrast to the other indicators of likely achievable enrollment, we do not have a strong empirical metric for the follow-through rate to build into the framework. Based on professional intuition by the study team, we chose to apply an 85 percent follow-through rate (Table 9). Others who use the framework in the future may choose to use their own assumption.

¹⁷ FERA income guidelines, available at <http://www.pge.com/fera>. Income should be before taxes and are valid through May 31, 2025.

Table 9: Follow-Through Level Impact on Achievable Enrollment

Enrollment Target Calculator	Rate	Customers
Number of Eligible Customers		100
Expression of Interest (a) benefit of 18% discount (b) willing to go through existing enrollment process	83%	83
Can be made aware with a strong outreach effort	71%	59
Connects discount availability with own eligibility	57%	34
Follow-through adjustment	85%	29

■ Based on survey data
■ Based on assumptions and professional judgment

4.7 Applicability to One- and Two-Person Households

The California Legislature expanded future eligibility for FERA to one- and two-person households in Senate Bill 1130 during its 2023-24 legislative period. Until this change goes into effect in 2025, only households with three or more people were eligible. While this change affects the percentage of households eligible for FERA, it does not affect our estimates of long-term achievable enrollment levels. The survey from which we based all estimates other than the follow-through rate showed similar responses from households with one or two people within the eligible income band of 200 to 250 percent of FPL as it had for households with three or more people. The one difference for the smaller households that needs to be considered is that there likely will be a ramp-up period during which the newly eligible households will realize that there has been a change and begin to enroll. Therefore, targets for smaller households need to allow for an adjustment period. Once the ramp-up is completed, we would not expect the addition of one- or two-person households to affect the estimated achievable enrollment rate presented above, as the primary data for those estimates already includes consideration of these newly added households and their responses to our survey questions.

4.8 Recommendation and Discussion

We recommend that PG&E use the framework presented here in considering FERA enrollment levels that are achievable and which aspects of the implied enrollment pathway can be affected by program activity. We also suggest that the CPUC consider the framework in establishing future enrollment targets.

4.8.1 Recommended Enrollment Target

We believe that enrollment of approximately 30 percent is achievable based on current program requirements and processes. We recommend that PG&E advocate for a 30 percent enrollment target to the CPUC and plan around such a level of participation internally.

As described in more detail in previous sections of this report, we developed an estimate of achievable enrollment of 29 percent of eligible households. This enrollment rate is based on the framework we established and has a program-specific empirical basis for each parameter used to build up the achievable enrollment rate except for the customer follow-through rate. We are recommending a 30 percent rate rather than 29 percent simply to use the nearest round value and to avoid implying more precision in our estimate than is warranted.

4.8.2 Alternative Assumptions about Follow-Through Rate

There is uncertainty around the rate with which eligible customers will follow through on an intent to apply to FERA. We applied an 85 percent follow-through rate, and various alternate assumptions would be reasonable as well. Table 10 presents the achievable enrollment results we would have obtained with a range of assumed follow-through rates from 75 percent to 95 percent.

Table 10: Achievable Enrollment for Varying Assumptions about Follow-Through

Assumed Follow-Through Rate	Resulting Achievable Enrollment
75%	26%
80%	27%
85%	29%
90%	31%
95%	32%

4.8.3 Using the Framework to Identify Ways to Increase Adoption

The framework we describe above can also be used to identify approaches to increase rate adoption and to bound the maximum potential effect those tactics might provide. We briefly describe how PG&E's program team, the CPUC, and other stakeholders might use the framework to think about program tactics and strategy in this way.

For any component of the framework (such as interest or awareness, for example), interested parties can:

- Identify applicable interventions that could maximize retention of eligible households to the next step of the process;

- Identify who has the ability to affect those interventions; and
- Estimate the maximum potential impact of reducing attrition.

Take, for example, interest and willingness to participate. Eligible households' interest is based on the appeal that an 18 percent discount has and the application process. Each of these components can be considered separately.

An 18 percent discount on electric rates for the duration of one's enrollment has appeal, but not to everyone. One could consider why the offer might not appeal to some eligible households and brainstorm adjustments that could be made to increase the appeal. The most obvious factor is the amount of the discount itself. Higher discounts are likely to have more appeal. Indeed, in the PG&E customer survey we fielded, we asked FERA-eligible respondents what level of discounts would motivate them to enroll in an income-based rate discount. The median response was 29 percent, even as some respondents indicated that they would enroll with an 18 percent discount in response to a later question. Hence, one would surmise that a larger discount would increase the appeal and enrollment rate.

Alternatively, a longer duration for the discount would make the reduced electricity rate more attractive too. This would increase the expected value of the discount for households that may be eligible for only a short period.

Because the FERA discount rate and eligibility requirements are established by legislation, it would require an act of the California Legislature to increase the discount rate or broaden eligibility requirements so that households with variations in income over time are eligible for a longer period. While the CPUC and individual IOUs could choose to advise a change in the discount rate or eligibility parameters, neither has control or could take direct action.

Similarly, the enrollment process requires action on the part of eligible households, which can be perceived as a "cost" or hassle factor that partially offsets the benefit of the discount. The mere need to enroll may be a concern or the need to self-report income to self-attest eligibility may concern some eligible households enough to hinder enrollment. We do note that the enrollment process for FERA is easier than the vast majority of means-tested programs. Nevertheless, it may be feasible to identify ways to reduce the perceived hassle factor or cost to eligible participants and increase interest in the discounted rate further. If any tactical solutions identified this way involve adjustments to the enrollment process, they could be within the purview of the IOUs that administer FERA. However, if solutions involve the loosening of any standards for enrollment or even the requirements for participants, regulators or policymakers would probably need to approve them.

The combined effect of any change in offer or requirement for enrollment could reduce the attrition from this step by as much as 17 percentage points, increasing the willingness-to-

participate rate from 83 percent to as much as 100 percent. If it did and all other components of the framework stayed the same, the overall achievable enrollment rate would increase by a factor of 20 percent (computed by dividing 100 by 83), resulting in an increase in the overall achievable enrollment rate from 29 percent to as much as 34 percent.

Similar assessments could be made for awareness, self-awareness, and follow-through. In addition, expansion of eligibility would increase the pool of potential participants, thereby increasing total numbers, but not enrollment rates.

Although we have not examined each of the elements of the framework for potential adjustments systematically, we have initial observations on the parties with the most control over each element. We summarize these observations in Table 11. As shown, it seems plausible that much of the control over adjustable factors lies with the California Legislature because the details of the program are narrowly defined in law. Adjustments to key elements would require legislation. These key elements include how eligibility is structured (which affects both who is eligible and how easily eligible households can be made aware of the applicability of programs to their circumstances, which we call perceived applicability), as well as how attractive the offer is (which affects interest).

Table 11: Mapping of Framework Elements to Entities that Have Control or Influence

Framework Element	Primary Entity with the Greatest Control	Secondary Entities with Some Potential Control
Eligibility	Legislature	CPUC
Interest	Legislature	IOUs, eligible households
Awareness	IOUs	CPUC, eligible households
Perceived eligibility	Legislature	IOUs, eligible households
Follow-through	Eligible households	n/a

5 Policy Considerations

In this section, we discuss the policy factors we see driving and impeding FERA enrollment among eligible households, factors that affect the IOUs' abilities to meet FERA enrollment targets, and the implications of recent statutory changes that affect eligibility. We offer several suggestions for policymakers that we believe can improve alignment of policy objectives with program structures and result in more meaningful tracking of program achievements and challenges.

As noted previously in Sections 3 and 4, our assessment of PG&E's efforts to engage FERA-eligible households and to increase enrollments revealed that IOUs have influence over only some of the drivers that determine ultimate enrollment. As noted previously (see Figure 1), ultimately enrollment is a function of three main factors:

1. Utility efforts to generate awareness among eligible customers and to create enrollment pathways without unnecessary barriers;
2. Customer action to enroll in FERA if they so choose based on their interest, perceived benefits and needs, and willingness; and
3. Policy structures that drive eligibility, program benefits, and structural barriers.

5.1 Difference Between Household Practices and Policy Orientation

Our review of barriers that the IOUs face in identifying and engaging FERA-eligible households also points to a disconnect between customer realities and the policy mechanism through which California is seeking to alleviate energy affordability concerns for lower income households. As noted in prior research such as the 2016 Low Income Needs Assessment,¹⁸ households trying to make ends meet address basic needs holistically. Home energy costs are part of a larger group of expenses that need to be managed on an ongoing basis against existing resources. Household options to manage energy bills include reducing energy consumption, making efficiency improvements, enrolling in lower rates, making payment arrangements, and seeking energy-related emergency assistance.

Households address affordability of basic needs holistically across cost categories. Policy solutions are siloed and offered as disparate programs, resulting in the need to navigate separate offerings.

¹⁸ Evergreen Economics. 2016. *Needs Assessment for the Energy Savings Assistance and the California Alternate Rates for Energy Programs Volume 1 of 2* (the 2016 Low Income Needs Assessment [LINA] Study). CALMAC Study ID: SCE0396.01. https://www.calmac.org/publications/2016_LINA_Final_Report_-_Volume_1_of_2.pdf

In contrast, policy-related offerings to California residents tend to focus separately on the varying costs and needs that households manage holistically (such as housing, food, energy, etc.), and policy-initiated offerings result in disparate programs to address bill management options. CARE, FERA, Energy Savings Assistance (ESA), federally funded weatherization, the Low Income Home Energy Assistance Program (LIHEAP), bill payment arrangements, and budget billing are all distinct programs rather than a holistic approach that aligns with household efforts to make ends meet.

Furthermore, with the advent of income-graduated fixed charges for utility bills, there is the potential for another divergence in processes that affect customer bills. That divergence could be a difference in the mechanism by which CARE- and FERA-enrolled households qualify for the lowest fixed charges and the mechanism applied to all other customers, or it could be a divergence for low-income households in what they need to do to receive rate discounts through CARE and FERA and what is asked of them to qualify for the lowest fixed charges.

We think these general misalignments between household practices and policy solutions contribute to the challenges FERA implementers have faced in engaging eligible households (and may well affect other efforts to assist households with their basic needs).

5.2 Relationship Between CARE and FERA

From the perspective of eligible households, FERA is considered to be an extension of the CARE program. The distinction between the two offerings as separate programs with separate goals are rooted in law and administration, but the differences are artificial to households seeking to alleviate energy cost burdens. Marketing of the rate discounts are likely most effective holistically with messaging that appeals to households below a given income limit rather than as two separate offerings. In addition, as noted elsewhere in this report, there is reason to believe that some FERA-eligible households end up enrolled in the CARE rate, either intentionally or inadvertently. This likelihood results in misrepresentations of how effective the programs are when CARE and FERA enrollments are considered separately rather than jointly.

Furthermore, we note that the manner in which IOUs are directed to report FERA and CARE enrollment rates leads to misleading statistics. According to PG&E's annual report for ESA, CARE, and FERA,¹⁹ CARE and FERA enrollment rates are based on the estimated share of the customer base eligible for each of these rate discounts based on the household incomes. However, a share of households eligible for FERA based on income is also eligible for CARE based on categorical enrollment pathways. Substantial shares of CARE enrollees apply based on categorical eligibility, and some of the most-used categorical programs allow participation from individuals whose

¹⁹ See, for example, page 70 of the annual report covering the 2023 program year available here: https://liob.cpuc.ca.gov/wp-content/uploads/sites/14/2024/06/A.19-11-003_PGE-ESA-CARE-2023-Annual-Report_5-1-2024.pdf (last retrieved May 22, 2025).

households have incomes above the CARE income threshold. We discuss this scenario and the likelihood that it affects a materially meaningful number of customers in Appendix A.

As a result, some households are eligible for both FERA (based on income) and CARE (based on categorical eligibility). We expect that these households are more likely to enroll in CARE because of the greater benefits offered by CARE. If they do enroll in CARE, they are counted in the numerator of the CARE enrollment rate computation, but they are counted in the denominator of the FERA enrollment rate computation. This way of computing enrollment rates will result in program participants being counted as CARE enrollees who are not counted as CARE eligible. Conversely, these same households count toward the FERA enrollment rate even though these customers are unlikely to choose to enroll in FERA.

5.3 Legislative Adjustments in 2024

As noted in prior sections of the report, the California Legislature passed Senate Bill 1130 during the 2023-24 legislative session, and the state's utility code was modified to make two changes to FERA.

The first change is that the California Legislature revised the standard to which the IOUs should be held accountable for their efforts to enroll eligible households in FERA, specifying that the CPUC “shall review each electrical corporation’s report to ensure it has made *reasonable efforts* to enroll eligible households in the FERA program *commensurate with the proportion of households the commission determines to be eligible* within the electrical corporation’s service territory.” (emphasis added)

The second change is that the California Legislature expanded eligibility for FERA to include one- and two-person households.

5.4 Suggestions and Recommendations

With these overall observations in mind, we have suggestions for policymakers when considering future action concerning rate discount programs, broader energy assistance, and public assistance for basic needs. Specifically, **we suggest the following:**

- **Broaden the FERA enrollment metric** to focus on the combined share of CARE- and FERA-eligible households enrolled in an income-based rate discount program so that categorical or inadvertent enrollments in CARE by FERA-eligible customers are accounted for;
 - **Alternatively, if programs are not combined, update the enrollment rate computation to more accurately reflect the program in which customers are likely to enroll** if they are eligible for both CARE and FERA.
- **Allow some time for enrollments of one- and two-person households into FERA to catch up** with levels achieved for currently eligible households of three or more people;

- **Consider combining CARE and FERA into a single low-income rate discount offering** with a single outreach effort that targets households below 250 percent of federal poverty level, offers a single enrollment process, and provides the appropriate discount for the customer's income level;
- **Consider using a single, comprehensive approach to applying rate discounts and the new income-based fixed service charges** so that customer classifications into tiers for base service charges and their access to rate discounts (CARE and FERA) are based on the same information, the same process, and the same degree of rigor;²⁰ and
- **Link rate discounts, energy-saving programs for lower income households, payment arrangements, other forms of energy assistance, and reciprocal expectations on customers to manage their usage and costs as much as possible** so engagement with customers on energy support is as comprehensive and holistic as possible rather than piecemeal.

²⁰ The shift in California to an income-graduated base services charge (also known as the income-graduated fixed charge) will develop a process by which a component of utility bills is based on customer income. Under the charge's initial rollout, CARE and FERA enrollees are assigned into the lowest charges by default, but there is interest among some members of the working group exploring the next phase to make the income verification process more holistic for all income groups. If this were to happen, there would be an income classification system for customers of all incomes to designate their appropriate income-specific base services charge. If income verification is applied to the base services charge, applying the same classifications to rate discounts would reduce customer confusion and ensure consistency in policy.

Appendix A: Enrollment and Eligibility

The estimated enrollment rate for CARE of around 100 percent has understandably contributed to the aggressive enrollment targets for FERA. It is perfectly reasonable to expect high enrollment for FERA to be possible if CARE has been so successful at engaging eligible households. However, there are two separate structural reasons for why one might expect some households that should be counted against the FERA enrollment targets to end up enrolled in CARE instead, explaining the divergence in enrollment rates for the two discount offerings.

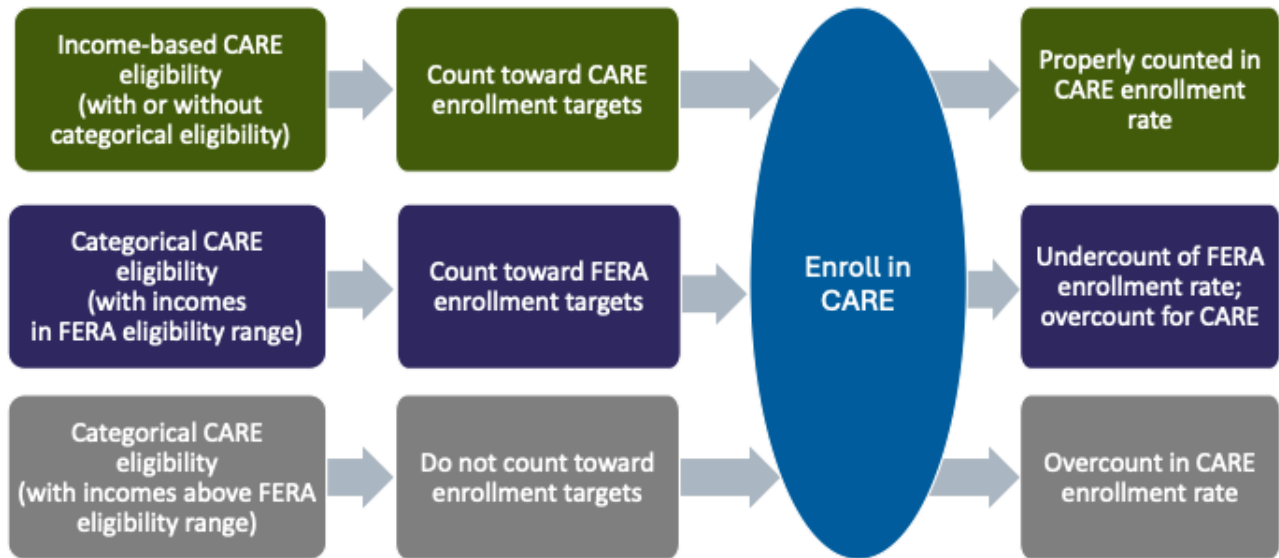
One of the reasons is rooted in which households are counted toward enrollment goals; the other is based on which program households enroll in. Both of these factors are related to the way in which enrollment rates are computed, which follows the simple division shown below.

$$\text{Enrollment Rate} = \frac{\text{Households enrolled}}{\text{Households estimated to be eligible based on their income}}$$

Categorical Eligibility

While enrollment rates are based on the share of households estimated to be eligible based on their incomes, CPUC directives allow households to enroll in the CARE program regardless of income if they are participants in one of nine other means-tested programs under an enrollment pathway known as categorical eligibility. The initial intention of categorical eligibility was to simplify the process for households in the specified income ranges. Eligible customers could either self-report an eligible income range or self-report participation in a program with similar eligibility requirements during enrollment and any subsequent verification processes. However, the programs approved and specified for categorical eligibility include some that enroll households (or household members) whose incomes exceed the income ranges specified in the authorization legislation for CARE.

As a result, some households are eligible to enroll in CARE even though their incomes exceed 200 percent of the federal poverty level (FPL). Some of these households are FERA eligible and count toward FERA enrollment calculations, as shown in blue in Figure 5 below.

Figure 5: Effect of CARE Categorical Enrollment on FERA Enrollment Calculations


We do not have enough information to quantify the extent to which households in the FERA income ranges are enrolling in CARE through categorical eligibility. A study of categorical eligibility in 2022 suggests that there is a substantial potential for households outside the CARE income ranges to qualify for CARE through categorical eligibility.²¹ Table 12 summarizes the degree of alignment between categorical eligibility programs currently in use for CARE, the study’s assessment of how well those programs align with CARE’s income-based eligibility standards, and the number of statewide CARE enrollments based on the categorical eligibility program at the time of the study. As noted, Medi-Cal accounts for a substantial share of CARE enrollments (more than 10 percent of the statewide total). However, the categorical eligibility study noted that some enrollees in Medi-Cal could have incomes as high as 317 percent of the FPL. Other programs, such as the National School Lunch Program, aligned with CARE income limits but offered substantial alternative pathways to eligibility that could result in participation by households that do not fall in the legislatively-specified income ranges.

²¹ Evergreen Economics. 2023. *2022 Categorical Eligibility Study – Final Report*. <https://pda.energydataweb.com/#!/documents/2814/view>

Table 12: Alignment Between Categorical Eligibility Programs for CARE and Specified Income Ranges

Categorical Eligibility Program	Alignment with CARE Income-Based Eligibility	Number of CARE Enrollments Statewide
AIAN Head Start	Partial alignment	2,000
BIA General Assistance	Unable to vet	712
CalFresh	Alignment	247,000
CalWORKs	Partial alignment	32,000
LIHEAP	Functional alignment	36,000
Medi-Cal	Partial alignment	483,000
National School Lunch Program	Partial alignment	96,000
SSI	Partial alignment	83,000
WIC	Alignment	83,000

Mis-Enrollment

It would be easy for households that were intended to enroll in FERA based on the legislatively-specified income ranges to enroll in CARE instead for reasons beyond the mismatch of income-based qualifications and categorical eligibility. Several factors contribute to the possibility that households intended to enroll in FERA would end up enrolled in CARE instead:

- FERA and CARE enrollments are intentionally light on customer expectations with an emphasis on convenience. This process functionally enables customers to self-report an estimate of their income without needing to look up or prove actual income, which could lead to intentional or unintentional tendencies toward reporting CARE-eligible incomes.
- Many households do not know their current income with much precision, leading to estimates if there is no request for a specific value to be identified and reported.
- Fewer than 5 percent of CARE applicants annually are asked to provide any direct proof of their income. This factor reduces the precision of specified incomes.
- Changes in actual incomes are common, causing both ambiguity on what income a household is to self-report (e.g., current, last pay period, last tax year) and flexibility in which of multiple income values or estimates they could choose to report.
- The enrollment form asks for a single whole-home income value without prompting applicants to treat their estimate with any rigor. That is, the application does not prompt applicants to think in a structured way about the incomes of individual household

members, to consider the full range of income types, or to specify the time period one is reporting.

Combined Effect of Categorical Eligibility and Mis-Enrollment

The combination of the categorical eligibility exception to the income requirements and mis-enrollment between CARE and FERA that is likely to favor enrollment into CARE contributes to the following indications that we believe are related to the challenges the FERA program has had in meeting anticipated enrollment levels:

- PG&E's enrollment rate for CARE for 2023 was just about 100 percent; the other IOUs reported enrollment rates of 98, 110, and 112 percent.²² Clearly, either the population estimates of eligible households are wrong or at least some ineligible households are enrolled. While categorical enrollment (see above) is likely a substantial cause of these enrollment rates, mis-enrollment would explain the remainder.
- When prompted to recertify, only 56 percent of PG&E's CARE enrollees responded successfully in 2024; when prompted to provide verification of income or categorical eligibility during that same year, only 28 percent successfully completed the verification process. Low responsiveness to verification requests and low success rates at verifying income suggest that some enrolled households are not qualified, while others may just not be able to prove eligibility or be motivated to do so.²³
- PG&E marketing staff reported that FERA-specific outreach results in CARE enrollments at a much higher rate than FERA enrollments (by an 8:1 ratio), which is plausible only if (a) PG&E's direct outreach is completely ineffective at distinguishing between CARE and FERA-eligible households or (b) some FERA-eligible households that receive the material choose to enroll in CARE.
- It seems implausible that interest and enrollment in CARE is at 100 percent for the entire spectrum of households with incomes ranging from 0 to 200 percent of FPL but then drop to 25 percent for those between 200 and 250 percent of FPL despite a somewhat similar program offer and extensive marketing efforts.

²² See annual reports for ESA, CARE, and FERA available here (as of June 6, 2025): <https://liob.cpuc.ca.gov/monthly-annual-reports/>. Enrollment rates for CARE reported by the other IOUs were 98% by SCE, 110% by SoCalGas, and 112% by SDG&E.

²³ We provide these statistics to highlight that there is a reason to believe that some households enrolled in CARE do not meet the eligibility requirements. We note that this is a qualitative, directional finding. Results from recertification and post-enrollment verification requests are not fully representative of CARE enrollees because the probability of selection for verification is not evenly distributed, and some households are asked to recertify at a faster rate than others.

Implications

We point out these likely dynamics concerning CARE enrollment due to their effects on FERA. If some households with income ranges specified by the California Legislature for FERA enroll in CARE due to categorical eligibility or due to mis-enrollment, CARE will receive credit for enrollments that are counted toward FERA targets and contribute to the seeming disparity in enrollment levels between the two programs.

We present this possibility using hypothetical values in Table 13. In this particular example, FERA enrollment would appear to be 25 percent while 75 percent of FERA-eligible households are actually enrolled in an income-based rate discount.

Table 13: Conceptual Scenario Illustrating Potential CARE “Interference” in FERA Enrollment

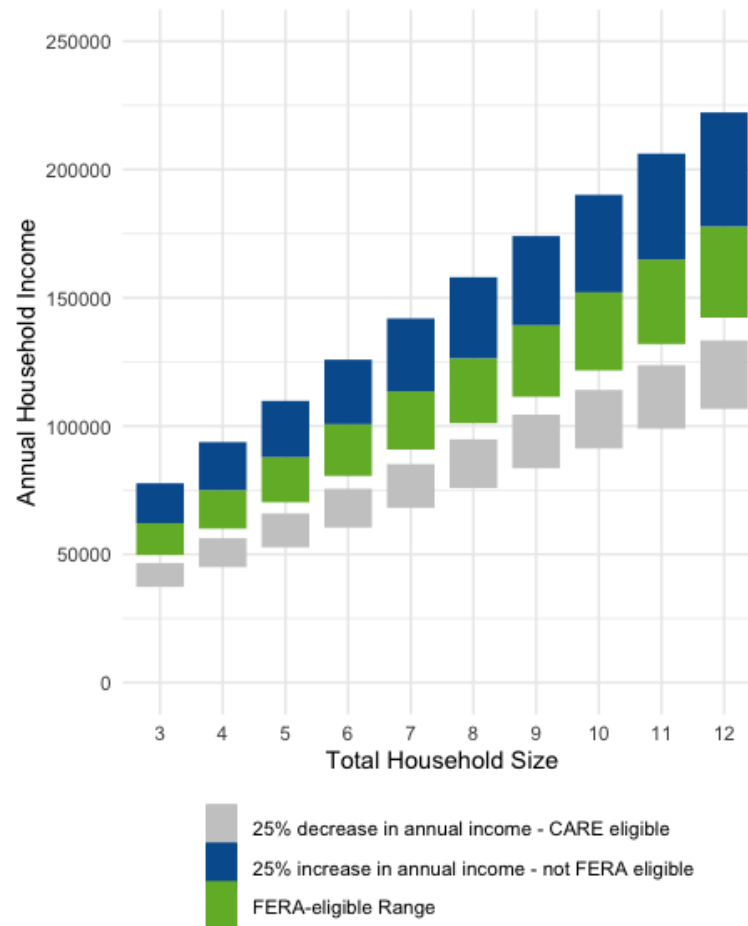
	CARE	FERA
Number of eligible households based on income	1,000,000	200,000
Enrollment by households with CARE- level incomes	750,000	0
Enrollment by households with FERA- level incomes	120,000	50,000
Enrollment by households with incomes above FERA levels	130,000	0
Total enrollment	1,000,000	50,000
Computed enrollment rate	100%	25%
Share of households deemed eligible based on income that are enrolled in an income-based discount program	75%	75%

Appendix B: Eligibility Persistence

As part of this study, we looked for evidence on eligibility persistence over time. Eligibility persistence has a hypothetical effect on interest and willingness to engage with FERA by eligible customers. We hypothesized that households would view FERA as more attractive if they believed they would benefit from the rate for a longer time period and be less inclined to enroll if they thought their income-based eligibility is short-lived. Relatedly, income variability can make it more difficult for households to easily determine whether they qualify for FERA and to accurately self-report their income. We present the insights we gained on eligibility persistence here.

The best resource we found to estimate income variation among eligible households is the Census Mobility, Opportunity, and Volatility (MOVS) data from 2019. According to MOVS data, 45 percent of low-income households in California experience either a 25 percent one-year growth or loss in annual income. For this analysis, low-income refers to individuals in the second income decile, which most closely approximates the moderate-income households who would be eligible for FERA.

This level of income variability can move customers in and out of the FERA-eligible income range as visualized in Figure 6. The green bars represent the FERA-eligible income range for each household size. The blue bars represent what happens when eligible households experience a 25 percent income increase, while the grey bars show what happens when eligible households experience a 25 percent income decrease. A spike in income of 25 percent will make any FERA-eligible household, even one with an income at the lower bound, no longer eligible for FERA. Similarly, an income dip of 25 percent will make any FERA-eligible household, even one with an income at the upper bound, no longer eligible for FERA, and now eligible for CARE.

Figure 6: Income Volatility

Appendix C: Customer Survey Materials

Customer Survey Instrument

Landing Page - Web

Pacific Gas and Electric Company is asking for your help to better understand how well energy affordability programs are working and how to improve them. **Please give us two minutes of your time to complete this short survey!**

Approximately every 20th respondent will be offered a \$25 gift card to answer additional questions after they complete the core survey. If you are selected for this offer, the survey will let you know and offer you a chance to proceed to some follow-up questions.

[For more information]

Text for a pop-up box associated with the words “For more information”:

The survey asks about your awareness of several programs and household characteristics. All individual responses will remain confidential. For more information about PG&E’s privacy policy, please visit <https://www.pge.com/en/privacy-center/privacy-policy.html>. Questions? Email the survey lead Liandra Chapman at chapman@evergreenecon.com or the PG&E study contact [PG&E contact person name and email].

Intro – Telephone

Pacific Gas and Electric Company (PG&E) is conducting a study to understand customers' eligibility and awareness of programs developed by state policymakers to make electricity more affordable.

Telephone version: I have a privacy statement I can read, would you like me to read it to you? Survey responses will be reported as overall group trends and will be used for improving utility programs and services for Californians. Please be assured that all of your responses will remain confidential. For more details including PG&E’s policy on how they use personal information, please visit <https://www.pge.com/en/privacy-center/privacy-policy.html>.

If you have any questions about this study, please reach out to Liandra Chapman at chapman@evergreenecon.com.

Context-Setting and Awareness

Q1. Do you recall seeing information of any kind about the following energy-related offerings in the past five years? [matrix question: yes/no/maybe; random ordering for the question items below]

- a) Energy efficiency equipment rebates from PG&E
- b) Rate discounts for PG&E customers with low incomes *[Internal note only: This response will count toward program awareness]*
- c) Incentives to reduce energy use during times of high demand
- d) Free home energy efficiency upgrades for households with low incomes

Telephone version: I would like to begin with four questions about different kinds of energy-related offerings that you might or might not have heard about. Do you recall seeing information about [fill in a, b, c, or d] in the past five years? [Repeat to cover each subquestion.]

Explaining this question: We are interested in awareness of rate discounts. We are asking about that awareness as part of a multi-item question for two reasons. First, it reduces overstatement of awareness if we just ask about one item. Second, it gives us the ability to compare and put awareness of rate discounts in a larger context.

[For respondents who have heard of LI rate discounts; if Q1b = yes]

Q2. As best as you remember, where did you see information about rate discounts for PG&E customers with low incomes? Please select all that you recall.

- a) Letter or electronic mail from PG&E
- b) Information included with my energy bills
- c) PG&E website
- d) PG&E customer representative
- e) Word of mouth (friend, relative, or acquaintance)
- f) News / media
- g) Advertising (TV, radio, web ads, social media ads)
- h) Referral from a social service program
- i) Other – please specify if you remember: _____

Telephone version: Ask as shown above without reading the response options. Then code the responses provided. If the respondent hesitates, say: Let me provide a list of eight possibilities. Stop me at each one where you think you have seen information about rate discounts for PG&E customers with low incomes.

Explaining this question: We ask about sources of awareness to better gauge what is working and not working in outreach so we can speak to that in the report if awareness is lower than desired for FERA eligible customers.

[For respondents who have not heard of LI rate discounts; if Q1b = maybe or no]

Q3. Before this survey, were you aware that Californians with low incomes can get reduced rates for electricity and natural gas?

- a) Yes *[This response will count toward program awareness]*
- b) No
- c) Not sure

FERA Eligibility

Explaining this logic behind this section. We are getting at FERA eligibility in one of several ways, so respondents will see different questions here depending on their answer to the first one.

- *If respondents think they qualify (Q4), we will ask them whether they are on a discounted rate (Q5) with various follow-ups to assess whether it is FERA (Q6, Q7, Q8).*
- *If respondents do not think they qualify (Q4) or report that they are not on a discounted rate (Q5), we will ask them various follow-ups to assess whether their household size and income are in the FERA-eligible range. Depending on whether they provide their household size (Q7), we do this in one of two ways:*
 - *If they provide their household size in Q7, we use Q9 and Q10 to establish eligibility for discounted rates and whether that eligibility is for FERA.*
 - *If they do not provide their household size in Q7, we ask them to self-report eligibility after looking up their household size and income in a table (Q11).*

Q4. As far as you know, do you qualify for discounted energy rates based on your household's income?

[Programming note: If possible separate out the "I have no idea" option specially or distinguish it with font or shading so respondents can clearly see it as separate from the progression from yes to no.]

- a) Yes, I think we do
- b) We might, but I am not sure
- c) We probably don't, but I can't say for sure
- d) No, I do not think we do
- e) I have no idea

Telephone version: Do not read the response options. Code as closest category to what respondent says (i.e., I think so = a, maybe = b, probably not = c, I don't think we do = d, I don't know = e).

[For respondents who self-report qualifying for a discounted rate; if Q4 = yes, I think we do]

Q5. Do you currently receive an income-based discount on your electric or natural gas rates?

- a) Yes *[This response will count toward program awareness]*
- b) No
- c) Not sure

[For respondents who self-report receiving a discounted rate; if Q5 = yes]

Q6. Do you receive the CARE or FERA discount? (CARE is the California Alternate Rates for Energy program. FERA is the Family Electric Rate Assistance program.)

- a) CARE
- b) FERA *[This response will prompt respondents to be classified as FERA-eligible.]*
- c) Not sure
- d) Neither – We receive some other discount

Q7. How many people live in your household? (Include yourself.)

- a) _____ Adults
- b) _____ Children

•

[For respondents who self-reported receiving a discount but did not know which one; if Q6 = Not sure and Q7 > 2]

Q8. Given your household size, you may be on a FERA discount if your income is between \$[lower income limit for FERA for household size] and \$[upper income limit for FERA for household size] or on a CARE discount if your income is below \$[lower income limit for FERA for household size]. Based on that information, which discount do you think you receive?

- a) FERA *[This response will prompt respondents to be classified as FERA-eligible.]*
- b) CARE
- c) Still not sure *[telephone version: do not read this option]*
- d) Neither *[telephone version: do not read this option]*

[For respondents who do not currently receive the CARE or FERA discount or do not think they are eligible and who gave us their household size; if (Q7a + Q7b) > 0 and (Q4 <> yes I think we do or Q5 <> yes or (Q6 <> CARE and Q6 <> FERA)). Ask version “a” for households of 3+ people (if (Q7a + Q7b) >= 3) and version “b” for households of 2 or fewer people (Q7a + Q7b) < 3.]

Q9a. Let’s check whether you qualify for a discounted rate. These rates are available to households with [Q7] people if their total annual income is between \$0 and \$[upper limit for FERA]. Does your income fit in this range?

[Show in unobtrusive way on survey page; read on telephone survey if respondent seems hesitant:]

Why are we asking this question? PG&E wants to understand whether qualifying customers know they are eligible. Your response will not affect your rate or be used for marketing purposes. All of your responses will remain anonymous, as our survey team will not share your *individual* responses with PG&E or anyone else.

- a) Yes
- b) No
- c) Don't know
- d) Prefer not to answer

Q9b. Let's check whether you qualify for a discounted rate. As a result of legislation just signed by Governor Newsom, discounted rates may be available next year to households with [Q7] people if their total annual income is between \$0 and \$[upper hypothetical income limit for FERA]. Does your income fit in this range?

[Show in unobtrusive way on survey page; read on telephone survey if respondent seems hesitant:]

Why are we asking this question? PG&E wants to understand whether qualifying customers know they are eligible. Your response will not affect your rate or be used for marketing purposes. All of your responses will remain anonymous, as our survey team will not share your *individual* responses with PG&E or anyone else.

- a) Yes
- b) No
- c) Don't know
- d) Prefer not to answer

[For respondents who indicated in Q9 (either a or b) that they qualify for a discounted rate; if (Q9a or Q9b) = yes. For these respondents, ask version "a" for households of 3 or more ((Q7a + Q7b) > 2) and version "b" for households of 2 or fewer ((Q7a + Q7b) < 3)]

Q10a. Rate discounts come in two tiers. Bigger discounts are available for those with incomes between \$0 and \$[upper income limit for CARE]. Smaller discounts are available for those with incomes between \$[lower income limit for FERA] and \$[upper income limit for FERA]. For which of these do you qualify?

- a) Bigger discounts (Income below \$[upper income limit for CARE])
- b) Smaller discounts (Income between \$[lower income limit for FERA] and \$[upper income limit for FERA] *[This response will prompt respondents to be classified as FERA-eligible.]*
- c) Neither
- d) Don't know

Q10b. Households with 1 or 2 people are currently eligible for a rate discount if their income is between \$0 and \$[upper income limit for CARE]. They may become eligible for a future discount if their incomes are between \$[lower income limit for FERA] and \$[upper income limit for FERA]. For which of these do you qualify?

- a) Current discounts (Income below \$[upper income limit for CARE])
- b) Future discounts (Income between \$[lower income limit for FERA] and \$[upper income limit for FERA]) *[This response will prompt respondents to be classified as FERA-eligible.]*
- c) Neither
- d) Don't know

[For respondents who did not give us their household size and who do not currently receive the CARE or FERA discount or do not think they are eligible; if Q7 was not answered and (Q4 <> yes we do or Q5 <> yes or (Q6 <> CARE and Q6 <> FERA))]

Q11. Eligibility for discounted rates depends on household size. Please see the table below. What is the lowest rate available for your household size and income?

[Show in unobtrusive way on survey page; read on telephone survey if respondent seems hesitant:]

Why are we asking this question? PG&E wants to understand whether qualifying customers know they are eligible. Your response will not affect your rate or be used for marketing purposes. All of your responses will remain anonymous, as our survey team will not share your *individual* responses with PG&E or anyone else.

[Telephone version: Do not ask this question. If respondent did not provide household size, go to short version thank you at this point.]

Your household size	Your annual household income	Lowest available rate
1	\$0 – \$40,880	CARE
	\$40,881 and up	Standard
2	\$0 – \$40,880	CARE
	\$40,881 and up	Standard
3	\$0 – \$51,640	CARE
	\$51,641 – \$64,550	FERA
	\$64,551 and up	Standard
4	\$0 - \$62,400	CARE
	\$62,401 - \$78,000	FERA
	\$78,001 and up	Standard

5	\$0 - \$73,160	CARE
	\$73,161 - \$91,450	FERA
	\$91,451 and up	Standard
6	\$0 - \$83,920	CARE
	\$83,921 - \$104,900	FERA
	\$104,901 and up	Standard
7	\$0 - \$94,680	CARE
	\$94,681 - \$118,350	FERA
	\$118,351 and up	Standard
8	\$0 - \$105,440	CARE
	\$105,441 - \$131,800	FERA
	\$131,801 and up	Standard
9	\$0 - \$116,200	CARE
	\$116,201 - \$145,250	FERA
	\$145,251 and up	Standard
10	\$0 - \$126,960	CARE
	\$126,961 - \$158,700	FERA
	\$158,701 and up	Standard
If more than 10 household members	Income no higher than: a base of \$126,960 for the first 10 household members plus \$10,760 for each additional person	CARE
	Income higher than the CARE limit described above and below a FERA limit of: a base of \$158,700 for the first 10 household members plus \$13,450 for each additional person	FERA
	Income higher than the ranges shown above	Standard

- a) Standard rate
- b) CARE rate
- c) FERA rate *[This response will prompt respondents to be classified as FERA-eligible.]*
- d) Don't know our income
- e) Prefer not to answer

Additional Questions for FERA-Eligible Households

Note: FERA-eligible households will be offered to continue with additional survey questions in exchange for an incentive; respondents who did not self-report FERA eligibility will end here.

[For FERA eligible respondents; if Q6 = FERA or Q8 = FERA or Q10a = smaller or Q10b = future discount or Q11 = FERA]

Q12. Given your responses so far, it would be very valuable to PG&E to hear a bit more from you about low-income rate discounts. We'd like to offer you a \$25 Amazon e-gift card for another five minutes of your time to answer an additional 5-10 survey questions. Your responses will help us better gauge customer awareness and interest in programs for which they qualify. Your responses will not be associated with you, and you will not be added to any marketing lists. PG&E will receive only aggregated data from our survey team.

- a) Yes, I will continue for another 5 minutes → Go to Q13 *[if not self-reporting as receiving FERA (Q6<>FERA and Q8<>FERA)]* or Q18 *[if self-reporting as receiving FERA (Q6=FERA or Q8=FERA)]*.
- b) No, I want to stop now → Go to short version thank you.

[For respondents who are not FERA-eligible and for FERA-eligible respondents who decline to continue; if Q12 = No or (Q6 <> FERA and Q8 <> FERA and Q10 <> smaller and Q11 = FERA)

Short version thank you: Thank you for completing this short survey. Those are all of the questions we have. Aggregated results will be used to ensure effective and useful programs for PG&E customers. We will not retain or use your individual responses for any other purpose.

Q13a. Based on your earlier responses, you may be eligible for rate discounts under the FERA program now or in the future.

At what savings level would you be motivated to take the time to check out information about the rate discount on your utility's website?

- a) 5%
- b) 10%
- c) 20%
- d) 30%
- e) 40%
- f) More than 40%
- g) I would need to know the actual dollar amount to decide
- h) I would not explore the rates further regardless of the discount

[if Q13a = "I would need to know the actual dollar amount to decide"]

Q13b. How much do you think you currently pay for electricity every month (on average)?

- a) Less than \$100
- b) \$101 - \$200
- c) \$201 - \$300
- d) \$301 - \$400
- e) More than \$400
- f) I have no idea

[if Q13a = "I would need to know the actual dollar amount to decide"]

Q13c At what savings level per month would you be motivated to take the time to check out information about the rate discount on your utility's website?

- a) \$10
- b) \$20
- c) \$30
- d) \$40
- e) \$50
- f) Discounts would need to be more than \$50
- g) I would not explore the rates further regardless of the discount

[For respondents who would not explore the rates further regardless of the discount or who expect a higher discount level than 20%; if (Q13a or Q13c) = I would not explore the rates further or Q13a >= 30% (answers d, e, or f) or Q13c >= \$40 (answers e or f)]

Q14. How much time do you think it would take you to enroll? Give us your best guess. (Enrolling involves comparing your income to the eligible income range and completing an enrollment form.)

- a) 1-15 minutes
- b) 16-30 minutes
- c) 31-60 minutes
- d) 1-2 hours
- e) More than 2 hours

[For respondents who would not explore the rates further regardless of the discount; if (Q13a or Q13c) = I would not explore the rates further]

Q15. Why would you not explore the rates? Select all that apply.

- a) We don't need reduced rates
- b) Others need discounts more than we do
- c) I don't trust the offer
- d) I don't think we are eligible
- e) The effort needed would not be worth the savings

- f) We would not be eligible for long enough to make it worthwhile
- g) I worry about the level of documentation the application would ask for
- h) Other – please describe: _____

[Exclude respondents who already told us they would not apply regardless of discount; if Q13a or Q13c = I would not explore the rates further regardless of the discount. Ask version “a” for households with 3 or more people or if we don’t know the household size. Ask version “b” for households with 1 or 2 people.]

Q16a. Assume that you are eligible for a discounted rate of 18 percent on your electric rate based on your current income. How likely would you be to apply for the discounted rate if that meant visiting PG&E's website, completing some information about yourself, reporting your household's income, and indicating that you want the discounted rate?

- a) Very likely
- b) Somewhat likely
- c) Somewhat unlikely
- d) Very unlikely
- e) Don't know

Q16b. Assume that you will be income-eligible for a discounted rate of 18 percent on your electric rate as a result of changes in the program eligibility for 2025. How likely would you be to apply for the discounted rate if that meant visiting PG&E's website, completing some information about yourself, reporting your household income, and indicating that you want the discounted rate?

- a) Very likely
- b) Somewhat likely
- c) Somewhat unlikely
- d) Very unlikely
- e) Don't know

[Exclude respondents who already told us they would not apply regardless of discount; if Q13 = I would not explore the rates further regardless of the discount]

Q17. In a few words, please tell us your thinking behind applying or not applying.

- a) _____

We are interested in understanding how long eligible households tend to remain eligible and how easy it is for people to know their income for the application.

Q18a. When is the last time you remember experiencing an increase in your household's total income of \$10,000 or more from one year to the next?

- 1) Happened within the past year
- 2) A year or two ago
- 3) Three or more years ago
- 4) Too long ago to remember
- 5) Never
- 6) I have no idea

Q18b. When is the last time you remember experiencing a decrease in your household's total income of \$10,000 or more from one year to the next?

- 1) Happened within the past year
- 2) A year or two ago
- 3) Three or more years ago
- 4) Too long ago to remember
- 5) Never
- 6) I have no idea

[For respondents who have experienced a change of \$10,000 or more in the past two years; Q18a = 1 or 2 OR Q18b = 1 or 2.]

Q19. Please think back to the last time your household income changed by \$10,000 or more from one year to the next. Which of the following factors changed in meaningful ways to account for the increase or decrease in income? Select all that apply.

- a) The number of household members working for pay
- b) The number of paid hours we work
- c) The amount we get paid (hourly rate or salary)
- d) The number of people living in our household
- e) Tips or commission we earned
- f) Income from a business we run
- g) Other – please describe: _____
- h) None of these
- i) I prefer not to answer

*[Ask version "a", "b", or "c" depending on household size; if $(Q7a + Q7b) \geq 3$, ask version a; if $(Q7a + Q7b < 3$ and $Q7a + Q7b > 0$), ask version b; if $(Q7a + Q7b) = 0$, ask version c
Exclude respondents who already told us they would not apply regardless of discount; if Q13a or Q13c = I would not explore the rates further regardless of the discount.]*

Q20a. Based on the number of people in your household, your combined income would need to be between \$[lower income limit for FERA] and \$[upper income limit for FERA] to qualify for an

18 percent discount on your electric rate. How would you know whether your income falls in that range?

- a) I know our household income well enough to figure out whether we are in that income range without needing to do anything more
- b) [if Q7a > 1] My fellow household members and I could figure it out by just comparing incomes
- c) I would look up our income on financial or other documents
- d) I would do something other than the options above – please describe: _____

Q20b. With anticipated changes to FERA, households of your size would need incomes between \$[lower income limit for FERA] and \$[upper income limit for FERA] to qualify for an 18 percent discount on your electric rate next year. How would you know whether your income falls in that range?

- a) I know our household income well enough to figure out whether we are in that income range without needing to do anything more
- b) [if Q7a > 1] My fellow household members and I could figure it out by just comparing incomes
- c) I would look up our income on financial or other documents
- d) I would do something other than the options above – please describe: _____

Q20c. Eligibility for an 18 percent discount on your electric rate is based on household size. Please see the table below. How would you know whether your household income falls in the qualifying range?

- a) I know our household income well enough to figure out whether we are in that income range without needing to do anything more
- b) My fellow household members and I could figure it out by just comparing incomes
- c) I would look up our income on financial or other documents
- d) I would do something other than the options above – please describe: _____

Your household size	Lower income threshold	Upper income threshold
3	\$51,641	\$64,550
4	\$62,401	\$78,000
5	\$73,161	\$91,450
6	\$83,921	\$104,900
7	\$94,681	\$118,350
8	\$105,441	\$131,800
9	\$116,201	\$45,250
10	\$126,961	\$158,700

Each additional person	\$10,760 - \$13,450
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[For respondents who would look up their income; if Q20a or Q20b = I would look up our income...]

Q21. What is the first source you would go to for this information? To clarify, this would be so you know whether you qualify; this is not for the application itself.

- a) Paycheck / paycheck stubs
- b) Tax returns
- c) Previous program applications that we have completed
- d) Bank statements
- e) Documentation from our employers
- f) Other – please describe: _____

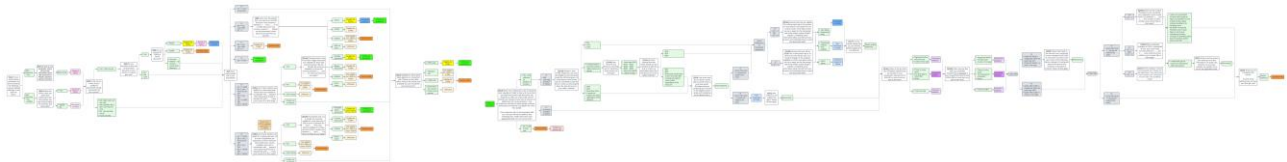
•

Thank you for completing this survey.

Q22. To what email address may we send your \$25 Amazon gift card?

- a) _____

Customer Survey Instrument Flow Chart



Customer Survey Recruitment Materials

This section presents the communications we intend to use in an advance email to sampled customers, the survey invitation, and email and (as needed) telephone follow-ups to non-respondents. We also include a “survey alert” for the PG&E call center.

Pre-Email

Subject: PG&E requests your assistance

Dear [first and last name],

In the next couple of days, you will receive a request to complete a short online survey for PG&E. I ask you to please spend the two or three minutes it will take most customers to answer the questions. The survey will be coming from our research partner, Evergreen Economics, on PG&E’s behalf. Be assured, it is legitimate, highly useful, and private.



Your survey responses will help PG&E ensure that programs designed to keep electricity affordable are provided effectively and efficiently, which is beneficial for all customers.

All responses will be held in confidence, ensuring your privacy. If you have any questions about this survey research, please feel free to reach out to me at [PG&E contact person email] or to Liandra Chapman, who is leading this survey effort on behalf of PG&E at chapman@evergreenecon.com. Or, feel free to call our customer service center at 1 (877) 660-6789.

Regards and thank you,
[PG&E contact person name]
[PG&E contact person email]
Pacific Gas & Electric

Invitation #1 (Email – first batch)

Subject: PG&E requests your assistance (3-minute survey)

Dear [first and last name],

As noted in an email you received from PG&E in the past few days, we are requesting three minutes of your time to complete a short but very helpful survey. The survey is only five questions for most customers.

[survey link]

Survey responses will help PG&E better understand customers' eligibility and awareness of programs developed by state policymakers to make electricity more affordable. Understanding eligibility and awareness helps us serve intended customers more cost-effectively.

All responses will be held in confidence, ensuring your privacy. Evergreen Economics is conducting the survey for PG&E. We will not retain or share any customer-identifiable data.

A small number of customers will be asked to complete an optional set of additional questions and offered a \$25 Amazon e-gift card.

If you have any questions about this survey research, please feel free to reach out to [PG&E contact person name and email] or to me at chapman@evergreenecon.com.

Regards and thank you,
Liandra Chapman
Evergreen Economics (on behalf of PG&E)

Invitation #1 (Email – second batch)

Subject: PG&E requests your assistance (2-minute survey)

Dear [first and last name],

As noted in an email you received from PG&E a few days ago, **we are requesting two minutes of your time to complete a short but very helpful survey. The survey is only five questions for most customers. Your response will help us improve energy affordability.**

[survey link]

Survey responses will help PG&E better understand customers' eligibility and awareness of programs developed by California policymakers to make electricity more affordable.

All responses will be held in confidence and reported to PG&E in aggregate without any information that identifies respondents. A small number of customers will be asked to complete an optional set of additional questions and offered a \$25 Amazon e-gift card for the additional time.

If you have any questions about this survey research, please reach out.

Regards and thank you,
Liandra Chapman
Evergreen Economics (on behalf of PG&E)

Reminder #1 (Email – first batch)

Note: There will be two reminder emails. We will use the text below for the first reminder email. The second email will be identical except for the first paragraph which will read: PG&E requests two minutes of your time for a survey related to its energy affordability efforts. We had sent you a link to a research survey recently. The survey is short (5 questions) and very helpful to PG&E's efforts to better serve you. It will close on [date]. Please consider responding now.

Subject: PG&E requests two minutes of your time (survey request reminder)

Dear [first and last name],

Last week, we sent you a request to complete a short (5-question) survey. Please consider responding now. The survey has taken customers an average of two minutes to complete, and responses are very helpful for PG&E to better serve its customers.

Here is the survey link again: [survey link]

We are fielding this survey to understand customer eligibility and awareness of programs developed by state policymakers to make electricity more affordable. All responses will be held in confidence, ensuring your privacy.

If you have any questions about this survey research, please feel free to reach out to [PG&E contact person name and email] or reply to me at chapman@evergreenecon.com.

Regards and thank you,
Liandra Chapman
Evergreen Economics (on behalf of PG&E)

Reminder #1 (Email – second batch)

Note: There will be two reminder emails. We will use the text below for the first reminder email. The second email will be identical except for the first paragraph which will read: PG&E requests two minutes of your time for a study related to its energy affordability efforts. We had sent you a link to a research survey recently. The survey is short (5 questions) and very helpful for PG&E's efforts to better serve you. It will close on [date]. Please consider responding now.

Subject: PG&E requests two minutes of your time (survey request reminder)

Dear [first and last name],

Last week, we sent you a request to complete a short (2-minute) survey. Please consider responding now. We just have five questions for you.

Here is the survey link again: [survey link]

We are fielding this survey to understand customers' eligibility and awareness of programs developed by state policymakers to make electricity more affordable

Please help us in this effort by completing the survey. All responses will be held in confidence, ensuring your privacy.

If you have any questions about this survey research, please feel free to reach out to [PG&E contact person name and email] or to me at chapman@evergreenecon.com.

Regards and thank you,
Liandra Chapman



Evergreen Economics (on behalf of PG&E)

Reminder #2 (Telephone)

Voicemail version

Hello [customer name]. This is [caller name] calling on behalf of Pacific Gas & Electric Company. Over the past two weeks, we have sent you a request to complete a 5-question survey we are administering for PG&E. I would ask you to please complete the survey at the link provided via email today. The survey closes in the next couple of days, and we would appreciate your participation. You can also call us back at [telephone number] with any questions or to have us run through the survey questions via telephone. Thank you.

Live customer version

Hello. This is [caller name] calling on behalf of Pacific Gas & Electric Company. Could I speak with [customer name] please?

I am calling to follow up on a survey request PG&E sent you last week. The email subject line was PG&E requests your assistance. Your responses would be very helpful. Could I get you to answer the questions quickly by telephone now, or would you prefer me to resend the email request?

Telephone Survey Request to Direct Mail Customers

Hello. This is [caller name] calling from Resource Innovations on behalf of Pacific Gas & Electric Company. Could I speak with [customer name] please?

I am reaching out about a survey that PG&E is conducting of residential customers to better understand awareness, eligibility, and perceptions about some specific energy affordability efforts. Your household was selected randomly for the survey, which takes about three minutes. Could I get you to answer about five questions right now?

- If so, proceed with the survey via telephone.
- If not, explore the following:
 - Is there a better time for me to call you back?
 - Would you prefer to complete the survey online if I send you a link to it? [In this case, obtain customer email address.]

Other talking points if needed:

- Your survey responses will help PG&E ensure that programs designed to keep electricity affordable are provided effectively and efficiently, which is beneficial for all customers.



- The survey is part of research study; it is not a sales call or marketing. Survey responses will not result in any change to respondents' accounts and respondents will not be added to any new marketing lists.
- All responses will be held in confidence, ensuring respondent privacy. The research team will not retain any customer-specific responses and report only aggregate data and results to PG&E.
- The PG&E customer service center can verify the legitimacy of the survey at 1 (877) 660-6789.
- If customers have additional questions, we can have members of the research team contact them. Please get the best telephone number or email address to use and note the nature of the person's question. Then relay the information to Ingo Bensch at ibensch@resource-innovations.com

Telephone Survey Follow-Up to FERA-Eligible Partial Respondents

Hello. This is [caller name] calling on behalf of Pacific Gas & Electric Company. Could I speak with [customer name] please?

I am calling to follow up on a survey you took at PG&E's request in the past few days. The survey was about your awareness and eligibility for a rate discount program. We very much appreciate your response. Based on your responses, you qualify for a \$25 Amazon gift card if you would be willing to complete an additional five to ten survey questions related to PG&E's rate discounts. We want to understand perspectives of customers who qualify; this is not a sales or marketing call, and we will not change anything about your account. Could I interest you in completing those additional survey questions right now or via the web? We would send you the \$25 Amazon gift card within two weeks.

[Depending on response, do one of the following:

- Proceed to telephone implementation
- Get customer email address and send the survey link. Announce the email address from which the customer should expect the link.
- Thank and terminate.]

If Needed: Email Follow-up With Link After Phone Call

Subject line: PG&E Survey Follow-up

Hi [customer name],

Thank you for your time on the phone today!

Here is the link to the web survey I mentioned: [link]



The survey should only take two minutes of your time. PG&E is asking you to answer about five questions to better understand customers' eligibility and awareness of programs developed by California policymakers to make electricity more affordable.

All responses will be held in confidence and reported to the PG&E program team in aggregate without any information that identifies respondents. A small number of customers will be asked to complete an optional set of additional questions and offered a \$25 Amazon e-gift card for the additional time.

If you have any questions, please reach out to Liandra Chapman who is leading this research effort at chapman@evergreenecon.com or to [PG&E contact person name and email].

Best,
[caller name]

[RI signature line]

Appendix D: Future Research

There are multiple potential future research topics that could support FERA-related efforts by PG&E and others that could inform implementation of California policy objectives surrounding energy affordability. Which research topics may be appropriate for future studies depends somewhat on directions that PG&E, other IOUs, and the CPUC take in response to this report and its recommendations.

Options for future consideration include research related to:

Enrollment processes and eligibility vetting for rate discounts

Research could explore the pathway customers follow from initial awareness about rate discounts to enrollment. Observational and cognitive interviews of targeted customers and those who choose to enroll could create better understanding of the following critical parts of the consideration process and enrollment in the CARE and FERA rates:

- Immediate reactions to rate discount descriptions
- The thinking and consideration process in deciding whether to explore the rate discounts further, including why or why not
- Next steps in exploring the rate discounts (information sources sought and information pursued)
- Assessment of whether the household is eligible (based on what sources)
- Completion of the application (including how the household determines its income and the level of precision and accuracy in that determination)

Customer prioritization

While eligibility for rate discounts is determined by a household's relationship to the federal poverty level, households' needs within that spectrum vary greatly. Some households considered low income are getting by just fine, while others are highly stressed financially. Factors that affect financial stress and the need for assistance include non-income assets and family support as well as personal and family challenges, disabilities, medical conditions, related factors, and personal choices. ***A needs assessment*** could identify the characteristics among CARE and FERA eligible households that define elevated needs and opportunities to assist households in sustainable ways so that utilities could prioritize these households for targeting and inclusion in the rate discounts, possibly in conjunction with other services as some arrearage-based pilots have already begun to do. The assessment could complement evaluations of those pilots and also explore how the

household needs could be best addressed in sustainable, permanent ways rather than simply offering perpetual discounts and aid.

Holistic program offers and billing-related accommodations

Utility energy programs for lower income households tend to fall into distinct offerings that customers must navigate separately. There are rate discounts, programs that help customers reduce their energy use through weatherization and energy efficiency, informational and feedback efforts that help customers manage their energy use, and payment-related options such as payment arrangements and budget billing. Further, the energy efficiency programs for low-income customers are offered in two parallel varieties: one administered by investor-owned utilities and one run by the California Department of Community Services and Development. ***A study of how these offerings function in practice from the perspective of eligible households*** could explore whether there are opportunities to better integrate them into holistic offerings and whether doing so could better match solutions to customers based on opportunities to best help them effectively, efficiently, and fairly.

Integration of policy solutions

California has sought to address energy-related needs through ratepayer-funded requirements on regulated utilities. In contrast, the state provides support for basic needs that are not regulated through social safety net programs funded by taxpayers. This model creates a bifurcation of social assistance programs that eligible households need to navigate. ***A policy study*** could explore the benefits and drawbacks of addressing programs to help households with basic needs holistically in a comprehensive cross-sector manner.