

We built it and they didn't come: Insights about low- and moderate-income households

Iris Cheung, Pacific Gas and Electric Company

Ingo Bensch, Resource Innovations

Liandra Chapman, Evergreen Economics

ABSTRACT

“If you build it, they will come” worked for the Field of Dreams. It does not necessarily apply to energy programs, even when the offering is essentially free money. A California utility has been experiencing this conundrum with its rate discount program for moderate-income households where only 25 percent of the eligible population enrolled. This study investigated why extensive marketing efforts did not result in enrollment gains and deployed a large-scale customer survey to understand program awareness and to inform an achievable enrollment framework.

Acknowledging the opt-in nature of the rate discount, the study highlighted that the program administrator only influences two factors: Customer awareness of the program and ease of enrollment. The rest is dependent on customer's choice to enroll, along with interest and perceived eligibility in the offer, which is pre-determined by the program design and structure dictated by legislation. In addition, the program's narrow eligible income-band resulted in imprecise targeting for enrollment and difficulty in communicating eligibility requirements. This observation is supported by the findings that 1) 45 percent of low-income households in California experience high levels of income volatility (a 25 percent annual increase or decrease), and 2) 37 percent of surveyed households do not intuitively know if their income qualifies them for the rate discount. The study recommends that needs-based program offerings (including energy, housing, food, and medical care) be designed as holistically as possible to mirror household needs and reduce enrollment barriers.

Introduction

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)¹ implementation of these bill discounts and sets enrollment goals for the programs. While CARE enrollments are estimated to be close to 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.

This paper investigates the barriers to higher enrollment for a rate discount program like FERA that serves moderate-income households, determines if and how the FERA program structure creates barriers to enrollment, and identifies how the utility could increase enrollment. In addition, the paper

¹ The IOUs consist of Pacific Gas and Electric Company, San Diego Gas & Electric Company, SoCalGas Company, and Southern California Edison Company.

examines what level of enrollment is achievable and what policy options exist to increase participation in FERA by eligible households. The findings and insights derived from this work can be readily applied to similar income-qualified utility rate discount programs in other states. The research also highlights the importance of offering a holistic approach for needs-based programs, to streamline information dissemination and reduce barriers to enrollment.

Background

The CARE and FERA programs use the same application form. Customers apply for the programs by self-certifying their household income (entering their income amount on the application form and signing a declaration). For the CARE program, instead of income certification, an alternative enrollment pathway is to self-certify enrollment in one of nine categorical eligibility programs,² which serve as a proxy for income eligibility. Currently, categorical eligibility is not available for the FERA program, in part because of its unique income requirement structure, which includes both minimum and maximum income thresholds that do not align with other assistance programs.

Most households are eligible for two years before they need to re-certify their income or categorical program enrollment. Both the initial application and re-certification are based on self-attestation and does not require proof of income or categorical program enrollment. Approximately 5 percent of CARE and FERA participants are selected annually for post-enrollment verification (PEV), which requires they verify their income or categorical enrollment through documentation. It is important to note that enrollment processes 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.

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. The CPUC sets enrollment targets and reporting requirements for regulated utilities. Pacific Gas and Electric Company (PG&E) and other IOUs administer the rate discount for their customers.

Enrollment Levels and Goals

In Decision 21-06-015, the CPUC established increasing enrollment targets for all California IOUs, with increasing enrollments from 30 percent of the eligible customer population in 2021 to 70 percent by 2026. As noted in Table 1, actual enrollment has been much lower for PG&E (the other California IOUs see similar if not lower trends). Enrollment targets and levels are monitored separately for FERA and CARE, which is an important nuance that affects the meaning of the enrollment statistics. While the IOUs have not achieved FERA enrollment targets, they have over-subscribed CARE on a statewide basis, with PG&E reporting 95 percent enrollment during program year 2024. The implication of the combined enrollment statistics is that enrollment levels in income-based rate discounts are close to the targets. Rather than suggesting under-enrollment in FERA, the divergent results for CARE and FERA point to a likely combination of dual eligibility and mis-enrollment, which is further discussed in this paper.

² The current list of categorical programs include Bureau of Indian Affairs General Assistance, CalFresh, CalWORKs/Temporary Assistance for Needy Families (TANF) or Tribal TANF, Head Start Income Eligibility (Tribal Only), Low Income Home Energy Assistance Program (LIHEAP), Medicaid/Medi-Cal for Families A & B, National School Lunch Program (NSLP), Supplemental Security Income (SSI), and Women, Infants, and Children Program (WIC).

Table 1. PG&E CARE and FERA Enrollment Targets and Levels

Program Year	FERA Target	Actual FERA Enrollment	CARE Target	Actual CARE Enrollment
2021	30%	25%	93%	107%
2022	40%	21%	93%	105%
2023	50%	23%	93%	100%
2024	60%	25%	93%	95%
2025	65%	-	93%	-
2026	70%	-	93%	-

Methodology

The 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 for determining the factors required for enrollment that 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 paper are the result of ensuing analysis.

The sampled population for the survey consisted of 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 PG&E’s acquisition propensity model. The marketing team has used both sets of bins in its outreach.

Of the 1,789 survey respondents, 116 were FERA-eligible (6%), which mirrors the challenge the marketing team also faces in identifying and reaching eligible customers. Twenty-eight percent of respondents were eligible for CARE. In addition, 52 percent were not eligible for CARE or FERA, and 13 percent of respondents either chose not to disclose their household income or did not know what it was.

Study Results and Findings

Framework for Assessing Enrollment Efforts

In evaluating PG&E’s efforts to enroll FERA-eligible customers and meet CPUC enrollment goals, it is essential to remember FERA is a voluntary program. Enrollment is entirely up to customers and the utility cannot 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, program administrators are expected to control program costs and keep spending balanced with the overall benefits provided, as funds spent encouraging 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. 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. Given that FERA customers have relatively low incomes, it would be reasonable to assume eligible customers would opt in purely based on economic self-interest. 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 Assessment found that interest among eligible households in free weatherization services was far from 100 percent. The study found a participation rate of 59 percent and a willingness-to-participate among non-participants of 52 percent (Evergreen Economics 2013).
- 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.
- The Hood River Conservation Project, an early comprehensive weatherization program implemented in the 1980s in Oregon, aimed at 100% participation among eligible households (when typical participation rates in utility-sponsored conservation programs were on the order of 3% to 6%). Considered highly successful at the time, the project’s measure installation rate could not get above 85% despite concerted efforts (HRCP 1992).

Assessment of Marketing and Outreach Efforts

Having established the utility’s role to ensure program awareness and provide a reasonable path to enrollment, we examined past and current program efforts to promote the FERA rate discount. PG&E has 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 and careful assessment of program activities in 2023 and 2024, we consider PG&E’s efforts to be comprehensive and extensive. The program’s attempts to drive eligible customers toward enrollment in this rate discount 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.³ This assessment is based on the following characteristics of PG&E's efforts:

- Marketing comprehensiveness in approach and breadth of coverage;
- Extensiveness of marketing efforts, reaching multiple cultures and languages;
- High likelihood of eligible customer awareness; and
- Ease of enrollment.

The customer survey data suggests strong awareness among customers of income-based rate discounts, which is a 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. PG&E customers generally learn about income-based rate discounts from IOU messaging (Figure 2). 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 2. Sources of Information About Rate Discounts for Low-Income Households (n=100).

Achievable Enrollment

If it is true PG&E has done all it could reasonably do to increase FERA enrollment, why does the current enrollment of 25% fall short of the 60% regulatory target (Table 1)? To answer this key question, we built upon the concept illustrated in Figure 1 to create a framework that acknowledges the various pieces that need to fall in place for eligible households to participate in FERA. The framework uses different questions from the study's customer survey to estimate eligible customers' interest in and awareness of the program, and their perceived eligibility. The framework 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 3, potential enrollment begins with eligibility. For those who are

³ *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

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 requires customers take action. 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 (referred to as perceived eligibility) 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 acknowledge that alignment of the prerequisites still requires follow-through.

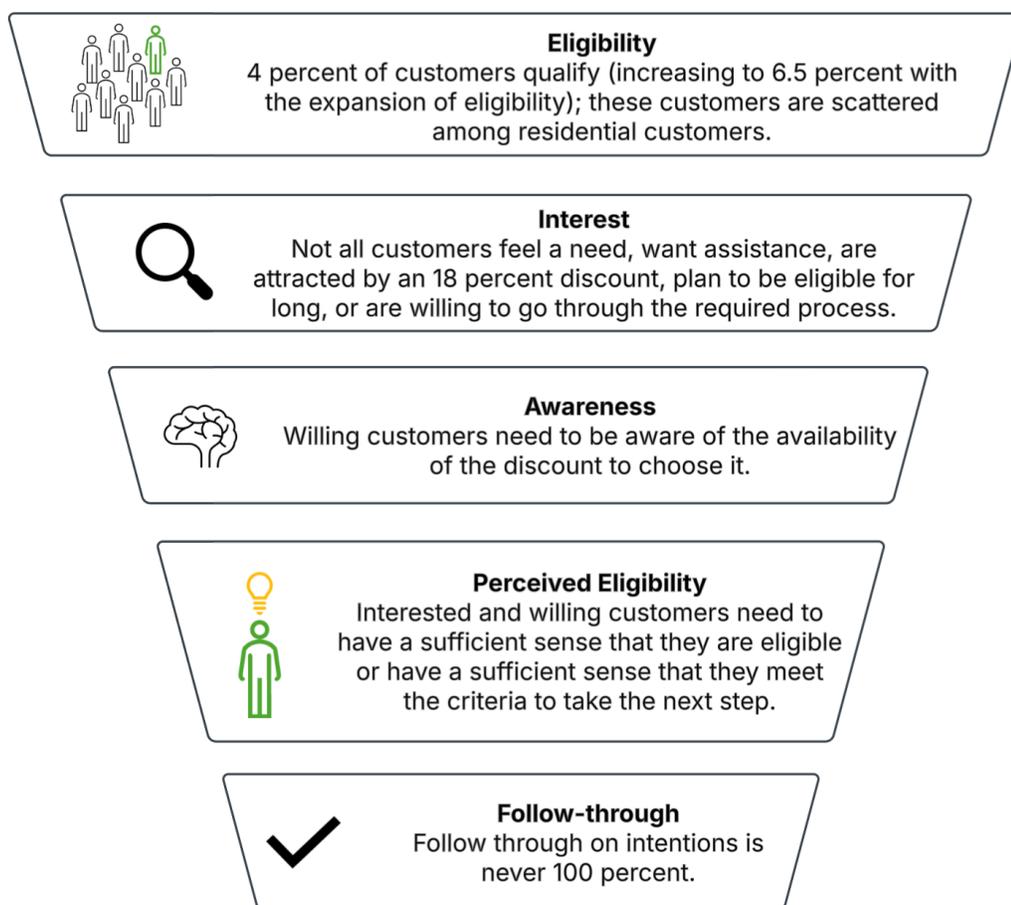


Figure 3: FERA Enrollment Process

Interest. Customer opt-in 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 (Table 2). 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. 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.

Awareness. The customer survey found 71 percent of FERA-eligible PG&E customers (and 76 percent of PG&E customers overall) are aware that rate discounts exist for lower income households. 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. 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 2).

Perceived Eligibility. Awareness of income-based rate discounts itself is not sufficient for customers to know about FERA specifically or be prompted to investigate if the discounts apply to them. Eligible customers with awareness of income-based rate discounts need to have a reason to think the discounts apply to them. This personal sense of eligibility or "perceived eligibility" is accounted for in the achievable enrollment framework. In the same customer survey, 38 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 59 FERA-eligible, interested, and aware customers could connect income-based discounts to their own personal eligibility (Table 2).

Follow-Though 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. The final consideration incorporated 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 should not take it for granted. Personal to-do lists, missed appointments, and various good intentions without follow through all affect a 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 2). Others who use the framework in the future may choose to use their own assumption.

Table 2. 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		

Recommended Enrollment Target. Using the enrollment framework, we believe that FERA enrollment of approximately 30 percent is achievable based on current program requirements and processes, which is much lower than the 60 percent enrollment target for the current program year.

Mapping of Framework Elements and Controlling Entities

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 3. As shown, control over many 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 eligibility and perceived eligibility), as well as how attractive the offer is (which affects interest).

Table 3. 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

Other Contributing Factors to Low Enrollment

Program Structural Issue. Expanding beyond the program enrollment framework, we believe there are other issues at play that contribute to the lower-than-expected enrollment for FERA. For the 2024 program year, the CARE and FERA eligible populations were 1.4M (90%) and 156,000 (10%), respectively, which illustrates the small population and narrow income band that FERA is designed to target. The nature of the established income eligibility criteria makes it difficult 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. For example, the gross annual income for a FERA-eligible household of three members is \$53,301–\$66,625, versus if both CARE and FERA were to combine and serve household incomes of up to 250% FPL, the eligible income band becomes “up to \$66,625 for a household of three”. The latter makes it much easier for the program administrator to communicate and for the customer to recognize their own eligibility.

Income Volatility. 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, 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.

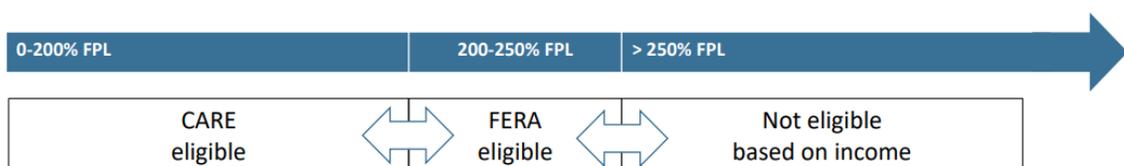


Figure 4: FERA Serves Narrow Income Band with High Rates of Entry and Exit

Mis-enrollments. Finally, we note that the way the IOUs are directed to report FERA and CARE enrollment rates leads to misleading statistics. California has long estimated its participation rate in CARE for households with the lowest incomes to be near or above 100 percent, which helped lead to high enrollment goals for FERA. One key factor that explains at least part of the difference in success between CARE and FERA lies in the way enrollment rates are computed. The short explanation is that some customers are eligible for both programs. Those who can enroll in both programs count toward FERA enrollment targets but are likely to enroll in CARE, leading to misleading enrollment rates for both programs.

To explain this in more detail, enrollment targets for both programs are based on the estimated number of households that are eligible based on their incomes. However, customers enrolled in an approved means-tested program may enroll in CARE regardless of whether their incomes qualify them in CARE or FERA through categorical enrollment. When categorically eligible customers with incomes above 200 percent of the federal poverty level (FPL) enroll in CARE, they count toward CARE enrollment without being counted as CARE eligible, and they become ineligible for FERA (because one can only be enrolled in one rate discount) while continuing to be counted in the estimate of the FERA eligible population.

Conclusions

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 managed on an on-going basis using 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. 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:

- 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.
- Streamline rate discounts, energy-saving programs for lower income households, payment arrangements, and other forms of energy assistance, so engagement with customers on energy support is as comprehensive and holistic as possible rather than piecemeal.

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