

DOCKETED

Docket Number:	22-DECARB-03
Project Title:	Equitable Building Decarbonization Program
TN #:	248477
Document Title:	PG&E Responses to the RFI on Building Decarbonization Program
Description:	N/A
Filer:	System
Organization:	PG&E
Submitter Role:	Public
Submission Date:	1/20/2023 3:00:42 PM
Docketed Date:	1/20/2023

*Comment Received From: PG&E
Submitted On: 1/20/2023
Docket Number: 22-DECARB-03*

PG&E Responses to the RFI on Building Decarbonization Program

Additional submitted attachment is included below.



Licha Lopez
CEC Liaison
State Agency Relations

1415 L Street, Suite 280
Sacramento, CA 95814
(202) 903 4533
Elizabeth.LopezGonzalez@pge.com

January 20, 2023

California Energy Commission
Commissioner Andrew McAllister
Equitable Building Decarbonization Program
Docket Number 22-DECARB-03
Docket Unit, MS-4
715 P Street
Sacramento, CA 95814

Re: Pacific Gas and Electric Company’s Response to the Request for Information on the Equitable Building Decarbonization Program (Docket Number 22-DECARB-03)

Pacific Gas and Electric Company (PG&E) supports the California Energy Commission’s (CEC) efforts to develop and implement an Equitable Building Decarbonization (EBD) Program pursuant to Assembly Bill (AB) 209 and appreciates the opportunity to respond to the CEC’s request for information (RFI) released on December 9, 2022. PG&E understands that this EBD Program includes two primary components: (1) a direct install program focused on low-to-moderate-income residents and (2) a statewide incentive program to accelerate deployment of low-carbon building technologies.

PG&E applauds the CEC’s effort to create direct installation programs for low-to-moderate-income decarbonization. As discussed in PG&E’s Clean Energy Finance Options (CEFO) proposal, enabling programs that offer customers turnkey installations with no upfront funding is key to ensuring customer program accessibility.¹ PG&E also agrees with the CEC that even though \$922 million is a significant amount of funding, it is a small amount relative to the need in the sector.² PG&E is also aware that the Governor recently announced a slight reduction decarbonization funding in the 2023 State budget to \$835 million.³ With that understanding, it is critical that the CEC utilizes these funds as investments that will help to catalyze future investments to achieve the State’s longer-term decarbonization goals.

Planning and targeting for the initial direct installation projects enabled by EBD Program funding should be crafted to lay the foundation for building decarbonization by 2045 and align with California’s climate commitment⁴ to bolster the nascent decarbonization market, as well as coordinate with other funding streams— especially those enabled under the Federal Inflation Reduction Act (IRA). Programs must

¹ PG&E CEFO Proposal, P. 6 [472445076.PDF \(ca.gov\)](#)

² CEC Request for Information, P. 2.

<https://efiling.energy.ca.gov/GetDocument.aspx?tn=248009&DocumentContentId=82299>

³ Governor’s Budget Summary, 2023. P 47. [Budget Summary \(ca.gov\)](#)

⁴ <https://www.gov.ca.gov/wp-content/uploads/2022/09/Fact-Sheet-California-Climate-Commitment.pdf?emrc=7631df>

consider the impacts to customers, installers, manufacturers, and other market actors, especially as the industry grows and capacity becomes available. The CEC should ensure that program administrators work in tandem and do not compete with other taxpayer- and ratepayer-funded efforts.

PG&E recommends that EBD programs focus on energy affordability by prioritizing efforts that maximize the financial and environmental benefits for both participating and non-participating customers. For example, EBD programs should target zonal electrification projects that combine neighborhood-level electrification with the decommissioning of existing natural gas infrastructure, leading to greater long-term gas rate affordability for all customers. The CEC needs to ensure that programs being considered for EBD program funding be required to measure their impact on not only electric system needs, but also on gas system costs and potential net savings. Proposals can do this by ensuring that resulting programs are coordinated with load management programs that reduce energy demand such as real-time pricing, demand response, and other offerings that proactively support future grid needs. These resulting programs also need to ensure that the new electric load from these installations can provide load flexibility including the additional electric need for future winter or summer peaks.

PG&E provides the following additional answers to the questions posed by the CEC in the RFI:

I. Direct Install Program

1. Program Criteria: PG&E suggests the following interrelated program criteria be prioritized when scoring program proposals:

Leverage: To increase the impact for California, the CEC should ensure that programs are able to help deploy private and other sources of public funding. Programs should be designed to both leverage investments today (for example by coordinating with other federal, state, or local programs) and in the future by demonstrating how decarbonization programs can capture value streams, such as the value of flexibility of electric load. PG&E suggests the CEC enable programs that are coordinated with the California Public Utilities Commission's (CPUC) Clean Energy Finance Options (CEFO) proceeding, for which a decision is expected shortly.⁵

Scope: The CEC should ensure that programs are able to make significant progress towards the State's low-income decarbonization goals. The State has very aggressive building decarbonization goals and low-income Californians will require support in electrifying to ensure equitable electrification that is affordable to all Californians. In addition to greenhouse gas (GHG) reductions, PG&E suggests that the EBD Program scope be expanded to include other benefits for low-income communities such as job creation and economic development.

2. Layer Incentives: To optimize program funds and layering incentives or leveraging other programs, the CEC asks what best practices, program elements, or State actions would facilitate layering or leveraging different program offerings.

PG&E recommends the CEC ensure that programs proposed under the EBD funding leverage emerging best practices and lessons learned from other agencies, such as the CPUC and the U.S. Department of

⁵<https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/clean-energy-financing>

Energy, that are exploring how to best layer incentives offered through various state, federal and ratepayer-funded programs. PG&E notes that the CPUC's CEFO proceeding was designed to meet this objective of optimizing program funds and layering incentives. PG&E's proposal in the CPUC's CEFO Rulemaking was designed to enable turnkey programs that layer multiple funding streams.⁶

PG&E recommends that layering and leveraging of other programs be a guiding principle rather than a requirement when scoring proposals. PG&E notes that if the CEC prioritizes the criteria of scale and scope (described above in the Direct Install Program, "Program Criteria" section), the criteria mandating leveraging or layering of other programs may not be necessary. Without consistent guidance across programs clarifying the order in which various funding sources are to be used, mandating that funds be layered or leveraged could create unintended confusion. For example, PG&E's equity electrification programs are expected to also include a layering and leveraging component with a preference that program funds are used last. However, this effort to minimize use of program funds would be undermined if external programs had a similar requirement that their funds had to be used last.

PG&E suggests a generic funding hierarchy that reflects the source of funds and impacts on California's energy rates, as well as on taxpayers. PG&E would recommend the following hierarchy: 1) federally funded rebates and programs; 2) state funded rebates and programs; 3) city/county funded rebates and programs; and 4) utility funded rebates and programs.

3. Tenant Protections: The CEC RFI asks what protections for tenants of participating rental properties should be applicable in all regions of the State, who should enforce them, and whether there are any model programs. PG&E offers lessons learned on this topic from our San Joaquin Valley Disadvantaged Communities (SJV DAC) pilot projects.⁷

PG&E suggests that the CEC carefully consider legal jurisdiction in determining tenant protection requirements. To do so, the State will need to engage with local governments whose local ordinances may vary. This may mean that a statewide one-size-fits-all set of tenant protections would not be possible given local jurisdictions' legal constraints. However, as noted in the discussion below on PG&E's SJV DAC pilots, the role of enforcement may depend in part on the remedies to be enforced.

In PG&E's SJV DAC pilot, tenant protections and enforcement agreements (or split-incentives agreements) were considered and created. In this case, enforcement for breach of contract terms meant banning the violating property owner from future participation in the pilot, while still retaining the tenant's private right of enforcement to seek further damages in the existing legal system. In the CPUC's resolution, it concluded that it is neither the CPUC's nor the IOUs' role to enforce housing policy. However, in the case of the SJV DAC pilots, there was an additional third-party known as a Community Energy Navigator (CEN) acting as a trusted community advisor and responsible for resident education, community outreach, and participant enrollments. The CEN was identified by the CPUC as being best

⁶ PG&E CEFO Proposal, [472445076.PDF \(ca.gov\)](#)

⁷ <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/identifying-disadvantaged-communities>

Resolution E-5043: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M333/K595/333595009.PDF>

positioned to enforce the agreement by gathering facts of a complaint, determining if the agreement was violated by the property owner and, if so, banning the property owner from further participation.⁸

II. Direct Install Third-party Implementers and Solicitation Scoring

1. Workforce Development: In their RFI, the CEC indicates that proposals from third-party implementers that include at least one community-based organization and employ workers from local communities shall be prioritized. The CEC asks about opportunities for workforce development that should be considered, encouraged, or leveraged.

PG&E recommends that the CEC EBD program consider, encourage and leverage the existing training offered through the IOUs' Workforce Education & Training programs including the [Integrated Energy Education & Training \(IEET\) courses](#) and other resources offered through the [Energy Centers](#) with emphasis on training specific to [decarbonization](#). The EBD program may also consider developing program-specific training to enable contractors to participate more effectively, as is done for the Energy Savings Assistance (ESA) contractor training, the TECH incentive program, and other Regional Energy Network (REN) or Community Choice Aggregation (CCA) programs. The EBD program may choose to consider incorporating manufacturer-specific training for participating contractors as it has been implemented by the TECH program. The EBD program may also want to consider requiring implementers to offer Job Readiness or Soft Skills/Customer Service training and requiring implementers to document their internal approach to workforce advancement. The EBD program may also choose to consider implementing workforce standards that require contractor training, certifications, or other qualifications as a prerequisite for program participation.

2. Awareness in Under-resourced Communities: The CEC's RFI indicated that preference for participation in the direct install program shall be given "where the building meets one or more of the following criteria: (1) the building is located in an under resourced community; (2) the building is owned or managed by a California Native American Tribe or a California Tribal organization; (3) the building is owned by a member of a California Native American Tribe."

The CEC asks how they can best facilitate awareness for residents and building owners within under-resourced communities to encourage program participation.

PG&E's experience has been that community-based organizations (CBOs) can be effective partners for both supporting program delivery and mitigating risk in the communities they serve. PG&E also notes that the IOUs have extensive resources to raise awareness for these programs that can be leveraged by program implementers.

3. Funding of Existing Decarbonization Programs: In their RFI, the CEC indicated that while designing the criteria and solicitations for the regional decarbonization programs, the CEC is considering offering an initial phase of the Equitable Building Decarbonization Program to support or expand currently active decarbonization programs with established

⁸ resolution E-5054 at the top of page 15. <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/identifying-disadvantaged-communities>

infrastructure and demand. The CEC states that these programs may be more limited in geographic scope or decarbonization activities than what is expected from the regional programs.

PG&E supports the CEC’s idea of leveraging existing decarbonization program structures, where available, to quickly decarbonize buildings and provide benefits to Californians. However, PG&E notes the great opportunity for these funds—because they are non-ratepayer funds—to tackle measures and ideas outside the scope of traditional utility energy efficiency programs. For example, the CEC could consider using a portion of EBD funds to help customers using propane, wood, or other unregulated fuels participate in existing decarbonization programs. Such residents, who are more likely to live in underserved areas, typically cannot participate in customer-funded natural gas energy efficiency programs. Thus, propane and wood decarbonization efforts provide an opportunity that intersects equity and emission reduction.

Likewise, the CEC could focus on supplementing the list of electric measures that could be addressed by an existing program. For example, the TECH Program’s incentives, which currently only focus on heat pump space and water heating solutions, could be expanded to include induction cooktops to replace natural gas ranges. This may also support the goal of a home being “all-electric,” which requires an entire house to completely retire natural gas. While heat pump technologies achieve a greater level of GHG reductions, adding to that installation of an induction electric range is important to fully decarbonize the home and improve indoor air quality.

PG&E emphasizes the important opportunity to use EBD funds to demonstrate the overall net cost and rate savings that are possible through zonal electrification efforts. As shown in PG&E’s recent application for electrification at California State University (CSU) Monterey Bay (A.22-08-003), utilities have shovel-ready gas repair and replacement projects where instead electrification could be considered. Currently, there are no existing mechanisms for utilities to fund electrification of these projects at scale. The use of the EBD funds towards zonal electrification efforts gives the CEC and ratepayers an unprecedented opportunity to avoid further long-term investments into the gas system that would increase gas customer bills. This is a goal prioritized in the CPUC’s Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and perform Long-Term Gas System Planning (R.20-01-007).

III. Direct Install Eligible Equipment and Measures

1. Energy Efficiency Equipment: The CEC’s RFI provides clarity on the statutory direction on eligible measures as follows: “Projects eligible to be funded through the direct install program include installation of energy efficient electric appliances, energy efficient measures, demand flexibility measures, wiring and panel upgrades, building infrastructure upgrades, efficient air conditioning systems, ceiling fans, and other measures to protect against extreme heat, where appropriate, and remediation and safety measures to facilitate the installation of new equipment.” The CEC plans to require the use of meter data driven analytical tools to inform what measures should be prioritized based on GHG reduction, energy reduction, and bill impacts.

In this context, the CEC asks what specific equipment and measures should be prioritized. PG&E suggests that the CEC enable comprehensive, turnkey solutions that enable targeted customers to participate in the program. The CEC can enable this by allowing certain home upgrade costs (for example electrical panel upgrades) that are likely to be encountered by customers. Additionally, the CEC can enable the costs of offering upgrades “as a service” which can include, but are not limited to, performance guarantees, insurance, and operations and maintenance (O&M).

PG&E’s CEFO proposal contemplates electrification projects deployed under service agreements between the customer and a third-party implementer, with a co-payment collected over time from customers. Assets deployed under a service arrangement will be grid dynamic, as service providers look to maximize value and lower costs over the entire life of the asset. The costs of enabling a service agreement should be eligible measures.

Regarding the question about whether the CEC should consider equipment standards or certifications as requirements, PG&E supports the requirement of standards and certifications. One potential new standard that could help State funding achieve more GHG reductions for less investment might be developing a manual describing how to design efficient projects and select appliance sizes that can avoid a panel upgrade at the home, wherever possible. PG&E also recommends that the CEC align appliance refrigerant standards with similarly focused decarbonization programs by requiring the use of refrigerants with global warming potential (GWP) equivalents of less than 750.⁹

Similarly, PG&E supports the CEC considering unique equipment and measures for different building segments, such as existing single-family, multi-family, and mobile/manufactured homes.

Regarding how the CEC should consider equipment and measures that mitigate impacts from extreme heat, wildfires, or local air pollution but increase individual energy use (e.g., installing a heat pump heating and cooling system in a home that previously did not have an air conditioner), and how this aligns with the legislative direction that the program shall “reduce the emissions of GHG,” PG&E suggests that the CEC should align with efforts to protect Californians from extreme heat.¹⁰

The CEC should also consider enablers of load shifting as eligible costs, such as air sealing and insulation to enable pre-cooling and possibly pre-heating. PG&E recognizes that adding equipment such as air conditioning is an additional complexity that must be considered in the context of the customer’s bill. However, if the air conditioning is optimized for load management, GHG emissions should be minimized.

Regarding the question about whether the CEC should consider unique portfolios, technologies, and measures to reflect California regional diversity, such as different climate zones, electric utilities or community choice aggregator providing service, technology performance, electric reliability, wildfire risk, etc., PG&E supports this approach.

2. Load Flexibility: In its RFI, the CEC indicates that this program offers a significant opportunity to advance load flexibility in the residential sector and across the state. The CEC clarifies that load flexibility or load management provides residents with the ability to shift their energy usage in response to hourly energy prices, GHG emissions, or grid conditions. The CEC

⁹ <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M497/K247/497247444.PDF>

¹⁰ <https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Climate-Resilience/2022-Final-Extreme-Heat-Action-Plan.pdf>

further explains that this can provide savings on consumer bills, as well as provide grid reliability support.

The CEC asks what load flexibility requirements should be included in the direct install program, and which load flexibility measures should be prioritized. PG&E agrees that program participants should be required to be on a time-of-use rate, with special attention given to encourage customers to consider moving to PG&E's new "Electric Home" (E-ELEC) rate¹¹ or our expanded EV2A rate¹². Both of these rates were designed to provide enhanced bill savings opportunities for customers who adopt beneficial decarbonization technologies, including heat pumps, battery storage, and/or electric vehicles. Also, relevant flexible load focused decarbonization programs are self-generation incentive program (SGIP) for heat pump water heaters, and PG&E's Wattersaver program.¹³ For example, PG&E's Electric Home Rate Plan (E-ELEC) is available for customers who have begun to electrify their homes, and lowers the prices paid per kWh, on average, compared to other rate plans.

PG&E considers it imperative to ensure that California proactively builds load management programs into electrification programs, as the state looks at significant load and peak growth due to building and vehicle electrification. Proactive load flexibility built into building electrification programs will provide an additional value stream and potentially increase the scale of programs. Therefore, by prioritizing the criteria PG&E suggested above, the CEC can ensure that program implementers prioritize load management in a way that reduces GHG emissions and lowers energy costs for all Californians.

3. Mobile Homes: The CEC's RFI explains that AB 209 includes mobile homes as eligible buildings. The CEC clarifies that the ability to decarbonize existing mobile and manufactured homes depends on factors such as location (mobile home park or rural), ownership, size, age, condition, access to electricity, and access to appropriately sized efficient-electric equipment.

The CEC asks what programs focused on retrofitting or decarbonizing mobile and manufactured homes or mobile home parks could offer recommendations or lessons.

In response to this question, PG&E offers the experience of the SJV DAC pilots. Even though these pilots were not exclusively focused on mobile and manufactured homes, they did attempt to contact and enroll dozens of mobile and manufactured home residents in the program(s). Indeed, PG&E's 2022 Annual Report on the SJV DAC pilot contains a description of one of the key learnings regarding the challenges of securing a permit for electrification work on mobile and manufactured homes.¹⁴ Although not outlined in the 2022 Annual Report, the SJV DAC Pilots may be able to provide important additional early learnings regarding housing conditions, the types of appliances most appropriate for a mobile or manufactured home, common remediation needs, project costs and necessary lead times, among other things.

¹¹ [Electric Home Rate Plan \(E-ELEC\) \(pge.com\)](https://www.pge.com/energy/our-impact/electric-home)

¹² [Making sense of the rates \(pge.com\)](https://www.pge.com/energy/our-impact/making-sense-of-the-rates)

¹³ [Home - Watter-Saver](https://www.pge.com/energy/our-impact/home-watter-saver)

¹⁴ PG&E 2022 Annual Report for SJV DAC Pilot, P. 10 and 22: <https://efile.cpuc.ca.gov/FPSS/0000188426/1.pdf>

Conclusion

PG&E appreciates the opportunity to provide comments and respectfully recommends that the CEC apply the guiding principles we noted in the Direct Install Program, “Program Criteria” section above (referring to leverage and scope) to guide future discussions furthering the development of the EBD program. PG&E looks forward to working with the CEC and other state agencies to ensure that the EBD program supports reliability during emergency events while also contributing to load management strategies that help shape loads, reduce net peak electrical demand, reduce net electric and gas system costs, and/or provide enhanced resilience to customers.

Please reach out to me with any questions.

Sincerely,

Licha Lopez