

PG&E

Market Access Program

Implementation Plan

Program Manual

Measurement and Verification Plan

PGE_MKTACCSS

June 2, 2022

Version 1.0

Table of Contents

Table	of Contents2					
Progra	m Overview					
Prog	gram Budget and Savings					
Impler	nentation Plan Narrative 4					
1.	Program Description 4					
2.	Program Delivery and Customer Services					
3.	Program Design and Best Practices					
4.	Innovation					
5.	Metrics					
6.	To-Code Savings					
7.	Pilots					
8.	Workforce Education and Training9					
9.	Workforce Standards					
10.	Disadvantaged Worker Plan9					
11.	Additional information9					
Suppo	Supporting Documents					
1.	Program Manuals and Program Rules10					
2.	Program Theory and Program Logic Model10					
3.	Process Flow Chart11					
4.	Incentive Tables, Workpapers, Software Tools12					
5.	Quantitative Program Targets12					
6.	Diagram of Program					
7.	Evaluation, Measurement & Verification (EM&V)13					
8.	Normalized Metered Energy Consumption (NMEC)13					

PG&E Market Access Program

Note: The Market Access program is part of the CPUC 2022/2023 Summer Reliability programs and is incremental to PG&E's other EE programs.

Program Overview

Program Budget and Savings

- 1. Program and/or Sub-Program Name: Market Access Program
- 2. Program / Sub-Program ID number: PGE_MKTACCSS
- 3. Program / Sub-program Budget Table:

Program ID Budget Category	2022 Budget
Administration	-
Marketing, Education, and Outreach	-
Implementation (Direct Implementation Non-Incentive)	-
Incentives	-
Total	\$23,000,000

4. Program / Sub-program Gross Impacts Table:

Metric	2022
Annual kWh Savings (Gross)	23,914,758
Annual kWh Savings (Net)	22,719,020
Peak Demand Savings (kW) (Net)	3,723
Net Peak Demand Savings (kW) (Net)	4,329
Lifecycle GHG Savings (tons)	80,434
Program TSB (\$)	\$23,000,000

- 5. Program / Sub-Program Cost Effectiveness (TRC): N/A
- 6. Program / Sub-Program Cost Effectiveness (PAC): N/A
- 7. Type of Program / Sub-Program Implementer: Third-Party Delivered
- 8. Market Sector(s): Commercial
- 9. Program / Sub-program Type: Resource Acquisition
- 10. Market channel(s): Downstream

Implementation Plan Narrative

1. Program Description

The Market Access program is designed to scale up quickly with an open market of qualified aggregators delivering energy efficiency and demand flexibility solutions designed to target the peak and net peak demand windows. The goal of the program is rapid deployment of projects that will result in peak and net peak demand savings through 2022/23 and beyond in support of grid reliability. The Market Access program opens up a new opportunity for aggregators to capture savings and decarbonization benefits from a wide array of interventions. Its primary objective is to simplify the path for PG&E to translate allocated budgets for energy efficiency into actual results in their service area in the most streamlined and scalable manner possible - by combining pay-for-performance with an aggregator marketplace designed to deliver savings impacts with an upfront price signal, consistent, transparent meter-based quantification of impacts and an auditable performance payment structure. The program is inherently designed to be rapidly scalable for delivering peak impacts in time for summer 2022 and 2023 to support grid reliability.

The rationale for this new model is to overcome the barriers of entry for qualified aggregators, ensure that PG&E pays only for grid benefits delivered, and validate the impacts for both customers and the grid. This will enable a tighter connection of energy efficiency program investments with the grid impacts that drive significant value for PG&E in increasing summer reliability, meeting climate goals, and improving the lives and livelihoods in the communities they serve.

Under the program, all aggregator payments are tied to the delivery of savings. Aggregators will leverage capital up front to deliver the savings and the program will only pay market management costs in the form of an administrative fee and monthly project completion payments based on the expected benefits from forecasted projects. Aggregator payment will be based on TSB delivered, net of the marketplace management fees for their projects, and adjusted for kicker values. Marketplace management costs include general and administrative (G&A) overhead, direct implementation non-incentive (DINI), M&V, and marketing, education and outreach. These management costs are forecasted at 37% of the total program budget.

Program Implementers will recruit and contract with multiple qualified aggregators and will support them directly with eligibility and prioritization analytics to identify and engage the highest value customers based on the aggregators' business model. Aggregators recruit customers and install projects. Implementers will then track the NMEC verified impacts and pay aggregators quarterly, based on the impacts achieved and the auditable record of performance for each aggregator's portfolio.

The core objectives of this program are as follows:

- Shifting to incentive payments based 100% of measured savings performance and total system benefit delivered (after peak kicker adjustment detailed in the accompanied M&V plan), incentivizing aggregators to pursue projects and measures that produce the most savings, particularly during peak periods.
- Ensuring that program spending does not exceed the total system benefit delivered.
- Reducing procurement and transaction costs for aggregators, PG&E, and end customers.
- Improving diversity in the vendor pool that provides demand flexibility services.

- Customer targeting to drive outsized impacts during gross and net peak periods.
- Flexibility to participate in energy efficiency and separate demand response programs simultaneously, while avoiding dual compensation.

See flow diagram in Supporting Documents Section 3. Process Flow for more detail Pricing, payments, and incentives are included in Supporting Documents, Section 4.

2. Program Delivery and Customer Services

The core strategy of this program is simplification and flexibility to quickly bring grid assets online to address the emergency 3.5 GW shortfall.¹ Qualified aggregators will have the flexibility to meet commercial customers where they are at in terms of energy needs, technology fit, and project cost. Rather than a prescriptive set of program offerings, aggregators will develop their offerings around a core set of targeted solutions (HVAC, Lighting, Heat Pumps, Water Heaters, Building Shell, Refrigeration, and controls) and optimize the meter-based performance to maximize benefits to the grid and to the customer.

This is a commercial marketplace solution, with the opportunity to expand to residential in the future. Aggregators will focus on specific sub-categories of the market that they anticipate will respond to the solutions and technologies they offer with the price signal pushing them to deliver significant system benefit and peak savings. The strategies and ideas will come into the marketplace by way of aggregator's business model descriptions, estimates of savings potential, and synergies with customers in the PG&E service area.

The range of services, products and tools that are provided by the aggregators is diverse. They will have full flexibility to propose any kind of service, tool, or intervention to customers to encourage adoption, effectuate consumption changes, and manage energy. Implementers will provide core services and tools to PG&E and aggregators in the form of software resources to identify, enroll, track, and settle the energy efficiency and load modification resources delivered through this program.

This program is not designed to address hard-to-reach customer segments, but it is flexible and is a viable program for doing so. If aggregators have a business model that can target this customer segment effectively, they will be highly valuable participants in the marketplace.

3. Program Design and Best Practices

The key program strategies and tactics to reduce barriers for targeted customers are:

- Reducing technical and administrative barriers associated with traditional deemed, custom, and site-specific NMEC project development pathways. These delivery pathways are not only burdensome for aggregators and contractors, but also for customers, who may also bear risk in the traditional incentive application process.
- Matching customers with aggregators who are best equipped to meet their needs and tying those needs to grid-optimized solutions (as valued in the avoided costs adopted by the Commission).
- Leveraging a key benefit of population-level NMEC programs the inclusion of to-code savings opportunities and thereby reducing so-called "stranded" savings opportunities, while simultaneously removing the administrative challenges of excluding to-code

¹ California Proclamation of a State of Emergency - July 30th, 2021. <u>https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf</u>

impacts.

The program anticipates that a specific set of technologies will be best suited to maximizing the avoided costs, but their adoption (and appropriate incentive levels) will be a function of the customer needs, financing requirements, and other funding mechanisms available to the aggregator to promote adoption through financing options or shared costs.

PG&E is adopting a best practice of focusing on market design rather than program design to draw in the maximum number of solutions from aggregators, setting the price for energy savings based on total program value delivered net of marketplace management cost and managing risk by only paying for the value delivered. Program value is defined as the total system benefit adjusted for gross and net peak kickers. This strategy protects the rate-payer risk of investing in programs that may not deliver value and creates the proper incentives for aggregators to mobilize and deliver the maximum benefit possible.

Implementer platforms are critical to the strategy, administration, and implementation of the Market Access Program. These resources provide the necessary analytic tools to bridge the flow of information between PG&E, aggregators, and evaluators. The primary elements of the Implementer-provided software will allow Aggregators to:

- Scope and Analyze projects by analyzing historical energy usage against weather or time periods to support opportunity identification.
- Target and Track building performance by uploading utility bill data for buildings, defining building characteristics, creating a portfolio or population of buildings for the program, and tracking energy performance over time as projects are implemented and measured;
- Generate Program Documents such as applications, reports, and proposals.
- Perform Measurement & Verification of completed projects using a population-based NMEC savings methodology.

4. Innovation

The core innovation principles of the Market Access Program are **simplification**, **flexibility**, and **scale**. The program has been designed specifically to rapidly deploy resources in this emergency.



Figure 1: Market Access Concept

The innovation in this model involves overcoming the barriers of entry for qualified aggregators, ensuring that the program pays only for grid benefits delivered, and validating the impacts for both customers and the grid. This will enable a tighter connection of energy efficiency program investments with the grid impacts that drive significant value in increasing summer reliability, meeting climate goals, and improving the lives and livelihoods in the communities they serve.

The program brings **simplification** by reducing or eliminating common technical and administrative barriers associated with traditional prescriptive programs. These delivery pathways are not only burdensome for aggregators, but also for end customers. With the Market Access delivery model, project and customer enrollment is streamlined while still retaining the necessary QA/QC checks on paperwork. The program reduces transaction costs and friction by measuring savings at the meter after project installation, paying only for delivered value, rather than burdening aggregators with administrative bottlenecks and extensive reviews up front to receive a rebate.



Figure 2: General Aggregator Process for Market Access

The Market Access program brings **flexibility** by allowing qualified aggregators to meet the individual needs of end customers in terms of energy savings, comfort, technology fit, and project cost. Rather than a prescriptive set of program offerings, aggregators will deliver solutions oriented around peak savings and total system benefit delivered. By leaving the solution set open-ended but fixing the price to savings delivered and providing consistency in tracking impacts, the range of possible solutions is determined by optimizing between cost and benefits, rather than prescribing a fixed program solution to a customer.

Scale is achieved by leveraging the growing number of aggregators participating in the marketplace. Qualified aggregators can join any marketplace after signing an Aggregator Agreement and agreeing to program rules. This increases competition and vendor diversity that will create scale in the marketplace to ensure that stranded opportunities are addressed and efficiency potential is realized.

The other key innovation is that payments to aggregators will be based on the TSB of the portfolio of projects they deliver, net of the marketplace management costs. Marketplace management costs include general and administrative (G&A) overhead, direct implementation

non-incentive (DINI), M&V, and marketing, education and outreach. These management costs are forecasted at 37% of the total program budget. Aggregators will target customers and optimize their budget by increasing savings impacts and finding the right shared cost point for customers to "say yes" to a project. It is in the hands of the aggregator to maximize their performance payments across their portfolio by achieving the greatest benefits (savings and demand impacts).

By focusing on the total system benefit delivered (both as presented through analytics and motivated through price), aggregators will have the tools and resources to improve their portfolio over time, manage risk and be paid for the actual value delivered to PG&E. Underperformance by an aggregator will likewise signal either modifications to their delivery model or exit from the marketplace with no additional risk to ratepayers to support a marginal program.

5. Metrics

The primary metrics for tracking program progress will be the energy savings (kW, kWh) and the time valuation of the savings, all of which are included in the reporting requirements. The achieved cost effectiveness of the portfolio and the actual load shapes delivered will be part of the metrics that are monitored and valued using Implementer software.

PG&E proposes the tracking of the following program metrics in the monthly reports for enrolled and completed projects:

- Total program savings (kWh);
- Average peak savings (4:00 p.m. 9:00 p.m.), peak savings (4:00 p.m.- 7:00 p.m.), and net peak (7:00 p.m. – 9:00 p.m.) savings;
- Total Program TSB Value Generated (\$) (without adjustments to avoided cost values);
- Total Program TSB Value Generated (\$) (with adjustments to avoided cost values);
- Program payment recommendations for aggregators;
- Forecasted peak (4:00 p.m. 7:00 p.m.) and net peak (7:00 p.m. 9:00 p.m.) savings from both enrolled and installed projects;
- Forecasted kWh savings;
- Total Budget Reserved;
- Number of project enrollments per month; and
- Number of project installations per month.

These metrics may be modified based on Commission staff input and final program reporting requirements.²

6. To-Code Savings

The Market Access program is a population NMEC program. All savings will be demonstrated against an existing conditions baseline including to-code savings.

Capturing to-code savings may be part of any given project that is implemented as part of this program, for any number of technologies. S.B. 350 has authorized programs to capture below code savings to limit stranded potential. Meeting customers "where they are at" is how aggregators will be able to identify and accelerate equipment turnover and overall adoption of solutions to achieve energy savings and decarbonization.

7. Pilots

This section is not applicable to this program.

² See D.21-12-011 at p.58.

8. Workforce Education and Training

The Market Access program does not have a direct component for workforce education and training, but it indirectly addresses the objectives of growing job opportunities and on-the-job training.

9. Workforce Standards

Aggregators that join the Market Access program will adhere to all requirements for workforce standards established by the Commission3. As part of the intake and review process, aggregators will provide all necessary qualifications and licensure to perform the proposed work.

10. Disadvantaged Worker Plan

The Market Access program does not have a direct component for targeting disadvantaged workers, but it indirectly addresses the objectives of growing job opportunities and on-the-job training.

11. Additional information

This section is not applicable.

³ D.18-10-008.

Supporting Documents

1. Program Manuals and Program Rules

A program manual containing rules for participation is provided with this implementation plan and is also integrated into the program web page, found at https://www.pge.com/marketaccess.



2. Program Theory and Program Logic Model

The essence of the program theory for the Market Access program is price signaling. The primary role of Implementers is to establish flexible structures (i.e., market designs) by which aggregators can offer direct value from energy efficiency investments, and PG&E can then purchase that value directly.

Unlike a traditional program, PG&E is not buying the service, but the commodity - a stream of net benefits - from the aggregator. Historic barriers to program implementation have included rigid program designs with fixed technology incentives and pre-payment for program services which risked program savings delivered. In the Market Access model, the program theory holds that the aggregators will act to optimize the value they can deliver, based on the price offered.

Aggregators are typically already familiar with the barriers for their targeted customer groups and have the flexibility to devise solutions to address those barriers for the customer groups that are likely to adopt the similar technologies offered by the aggregators.

PG&E gets the benefit of the value delivered at a price aligned with the Commission's established value and with a protection against exceeding spending thresholds by only paying for value delivered above and beyond the marketplace management costs.



Market Access Program Logic Model

3. Process Flow Chart

The following graphic illustrates the process flow for Market Access projects and portfolios.



Step 1: Aggregator Submits Application

Aggregators must submit basic qualifications indicating the types of customers and measures they plan to target for participation in MAP.

Step 2: Aggregator Agreement

The Aggregator will sign the Aggregator Agreement which becomes a contract with the Implementer. This agreement defines the delivery and documentation requirements, payment terms, and the process to qualify for and achieve payable savings.

Step 3: Aggregator Customer Acquisition

As a pay-for-performance program, MAP offers Aggregators flexibility with respect to how they identify, qualify, and enroll eligible customers in MAP.

Step 4: Third-Party Quality Assurance

Third-party quality assurance is conducted by the Lead Implementer upon project intake, or M&V period, or both.

Step 5: Payments to Aggregator

Payments will be made on a quarterly basis after the savings and stream of benefits have been established with 12 months of performance data and based on the terms of the Aggregator Agreement. The Implementer will develop a payment recommendation. Once approved by PG&E, the Implementer will make payments directly to the Aggregator.

4. Incentive Tables, Workpapers, Software Tools

Market Access is a Population NMEC program and does not have fixed measures or incentives. Workpapers are not part of the program plan. The program-level Population NMEC M&V plan describes the approach and associated software tools for calculating actual payable and claimable savings.

Savings estimates from aggregators will be reviewed by the associated Implementer. Since savings forecasts are not foundational to the Aggregator payments, review is focused on ensuring customers are getting reasonable estimates of savings potential, aggregators are appropriately applying EULs, and that PG&E can have confidence in forecasted impacts and manage performance payment budgets.

For payable savings, the value per unit for electricity is grounded in the climate zone of the project, the metered load shape, the ACC adjustments such as peak and net peak kickers, and the weighted Effective Useful Life.

Incentives and costs presented to the customer are at the discretion of the aggregator. Energy project costs and incentives provided to the customer will be documented and reported to the appropriate Implementer by the aggregators for each project, although they are not integral to payment.

5. Quantitative Program Targets

During program years 2022 and 2023, PG&E anticipates this program will deliver savings of 22,719,020 in net kWh. We project over 10 aggregators will be active by the end of 2022. The program has a goal of 3,723 kW in peak impact and 4,329 in net peak impact during the June-September, 4:00 – 9:00 p.m. peak window for the 2022 program year.

6. Diagram of Program

	Eligibility	Qualification	Enrollment Pre- Intervention	Enrollment Post- Intervention	Performance Tracking	Quality Assurance
Aggregator	Identify most appropriate measures to meet the requirements of the program. Identify and engage eligible customers for program.	Review baseline analysis for eligible customers to determine appropriate measures and develop savings estimates.	Enroll customer and add project / status to Implementer software.	Complete intervention and provide final paperwork to lead implementor .	Examine program performance to see if projects performed as expected.	
Lead Implementer	Pull authorized customer, site, and historical meter data into Implementer software. Verify eligibility with meta data	Group projects to create cohorts. Review cohorts of eligible projects to see suggested measures and info for each customer.	Review scheduled projects for eligibility. Remove customer from eligibility table.	Review completed projects.	Measure ongoing portfolio performance.	Review project data to detect Non-Routine Events and identify outliers.

7. Evaluation, Measurement & Verification (EM&V)

No process evaluation or other evaluation effort will be undertaken to identify evaluation needs for this program. This program employs a robust embedded M&V strategy (as described in the NMEC Population-Level M&V plan).

8. Normalized Metered Energy Consumption (NMEC)

The Market Access Program Population-Level NMEC M&V Plan is posted separately from this implementation plan on CEDARS.