



California Public Utilities Commission

ADVICE LETTER UMMARY



LIVEROTOTIETT			
MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)			
Company name/CPUC Utility No.:			
Utility type: ELC GAS WATER PLC HEAT	Contact Person: Phone #: E-mail: E-mail Disposition Notice to:		
EXPLANATION OF UTILITY TYPE ELC = Electric GAS = Gas WATER = Water PLC = Pipeline HEAT = Heat WATER = Water	(Date Submitted / Received Stamp by CPUC)		
Advice Letter (AL) #:	Tier Designation:		
Subject of AL:			
Keywords (choose from CPUC listing):			
AL Type: Monthly Quarterly Annu-			
if AL submitted in compliance with a Commissi	on order, indicate relevant Decision/Resolution #:		
Does AL replace a withdrawn or rejected AL?	f so, identify the prior AL:		
Summarize differences between the AL and the prior withdrawn or rejected AL:			
Confidential treatment requested? Yes No			
If yes, specification of confidential information: Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:			
Resolution required? Yes No			
Requested effective date:	No. of tariff sheets:		
Estimated system annual revenue effect (%):			
Estimated system average rate effect (%):			
When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).			
Tariff schedules affected:			
Service affected and changes proposed ^{1:}			
Pending advice letters that revise the same ta	riff sheets:		

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102

Email: EDTariffUnit@cpuc.ca.gov

Name: Title:

Utility Name: Address: City:

State: Zip:

Telephone (xxx) xxx-xxxx: Facsimile (xxx) xxx-xxxx:

Email:

Name:

Title:

Utility Name: Address: City:

State: Zip:

Telephone (xxx) xxx-xxxx: Facsimile (xxx) xxx-xxxx:

Email:

ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtailable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	



November 19, 2021

California Public Utilities Commission Energy Division 505 Van Ness Avenue, 4th Floor San Francisco, California 94102-3298

Advice Letter PCE 20-E

Re: Peninsula Clean Energy Authority Election Advice Letter 20-E Election to Administer Energy Efficiency Program

TIER DESIGNATION

Pursuant to General Order ("<u>GO</u>") 96-B, Energy Industry Rule 5.3, and Decision ("<u>D.</u>") 14-01-033, Peninsula Clean Energy Authority ("<u>PCE</u>") submits this Advice Letter with a Tier 3 designation.

EFFECTIVE DATE

This advice filing will become effective upon approval by the California Public Utilities Commission ("Commission") via the resolution process for Tier 3 Advice Letters.

PURPOSE

D.14-01-033, *Decision Enabling Community Choice Aggregators to Administer Energy Efficiency Programs* ("Decision") established the rules for Community Choice Aggregators ("CCAs") to submit advice letters to administer energy efficiency ("EE") programs for their own customers under California Public Utilities Code Section 381.1(e)-(f). PCE hereby submits this Advice Letter ("AL") to seek Commission certification under Sections 381.1 (e) and (f) to administer one EE program – PCE's Market Access Program ("MAP"). Supporting documentation for this request is attached hereto.

BACKGROUND

PCE is a California Joint Powers Authority formed in 2016 for the purposes of implementing and operating a Community Choice Aggregation program called Peninsula Clean Energy.² As the official electricity provider of San Mateo County, PCE currently provides electric generation service to

All subsequent references to statute are to the California Public Utilities Code unless otherwise noted.

All subsequent references to Peninsula Clean Energy or PCE refer to both the Peninsula Clean Energy Authority and its CCA program, Peninsula Clean Energy.

approximately 295,000 customers. Beginning in 2022, PCE will also provide electric service to customers in the city of Los Banos.

PCE was formed for the express purpose of providing electric generation service that meets the unique needs and reflects the specific values of the communities it serves. Driven by these needs and values, PCE has adopted two strategic organizational priorities:

- 1) To deliver 100% renewable energy within each and every hour of the day
- 2) Contribute to the service territory reaching the State's goal to be 100% greenhouse gas-free ("GHG") by 2035.

As discussed in PCE's Energy Efficiency Program Plan ("Plan"), provided as Attachment A to this Advice Letter, PCE has adopted a comprehensive approach to achieving these goals, implementing a range of relevant programs and policies.³ PCE views EE as a critical element to this comprehensive approach moving forward. Given its role as a public agency and its close relationship with the communities it serves, PCE is in a unique position to implement locally-focused EE programs for – and in close collaboration with – its member communities.

With this advice letter, PCE requests to become an administrator using funds collected from PCE ratepayers through a non-bypassable charge authorized by the Commission for EE and conservation programs. PCE plans to use these funds to implement its MAP, as described in its Plan. Pursuant to Section 381.1, the Plan was approved by PCE's governing board on November 18, 2021.

SUMMARY OF PLAN

As set forth in detail in PCE's Plan, PCE's proposed MAP (also commonly referred to as the "FLEXmarket Program") is a market-based program structure for delivering EE and power demand flexibility to support grid needs. The market structure allows: (a) setting a price-point for distributed energy services provided by companies working locally (service providers); and (b) paying the service providers according to that price-point based on the service providers' actual performance yield, as measured by industry-standard meter data analysis.

Through the MAP, PCE seeks to achieve the following outcomes:

- Peak load reduction benefits
- Avoided GHG emissions
- Customer utility bill savings
- Energy savings

Under the MAP, PCE would offer financial incentives in exchange for proven electricity usage reductions for PCE generation customers. Service providers would enroll in MAP and qualify for

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³ See. Attachment A at 3.

MAP payments. These service providers would then work with PCE customers to maximize the customers' overall EE improvements and peak load reduction. Service providers would receive an incentive payment for proven EE gains, calculated using the open-source CalTRACK methodologies for Normalized Metered Energy Consumption ("NMEC") analysis of portfolios of treated sites. Customers' current power usage is compared against a counterfactual (that is, the estimated consumption of energy if the EE improvements had not taken place). This methodology has several benefits. It is low-cost; it accounts for a range of factors, including weather, that affect power usage; and it "smooths out" the natural variability found from building to building. PCE MAP incentive payments would only be offered for actual EE benefits provided (calculated as reduced usage compared to this counterfactual), so this program is inherently cost-effective.

PCE's MAP is also *inherently scalable*. PCE estimates that there are at least 5,782,052 kWh in cost-effective EE gains that are reasonably achievable using current technology EE that can be made within its service area under the MAP. Because MAP is technology-agnostic, PCE will pay only for actual proven EE benefits, and leverage service providers to identify and educate customers that would benefit from EE and implement the actual EE improvements. As a result, PCE will be able to scale up its MAP based on the available budget.

In addition to seeking funding for its MAP through the ETA process and budget, PCE also plans to seek additional funding from the pool of Emergency Market Access Program ("EMAP") funds proposed in the Commission's October 29, 2021 *Proposed Decision on Energy Efficiency Actions to Enhance Summer 2022 and 2023 Electric Reliability* ("PD"), if the PD is approved. As such, PCE proposes a single MAP program, with two slightly different program "options." Option 1, PCE's "Standard Program," is PCE's proposal for a MAP that uses ETA funds only. Option 2, PCE's "Emergency MAP Enhanced Program," is PCE's proposal for a MAP that uses both ETA funds and EMAP funds and satisfies the specific budget and program requirements for both ETA and EMAP. PCE intends to implement the Option 2 budget if the PD is approved and PCE is granted EMAP funding. Otherwise, PCE intends to implement the Option 1 budget.

OPTION 1

Deliverables

PCE's Option 1 MAP would provide market participants with incentive payments for EE improvements achieved by enrolled PCE customers. These payments will consist of two elements: 1) an "EE Market" element, which assigns an hourly value based on the avoided cost associated with the energy use reduction attributable to the EE investment; and 2) a "Peak Kicker" that will provide an additional incentive on top of the EE Market element to strongly incentivize reductions during peak times. As discussed in detail in PCE's Plan, the exact EE Market and Peak Kicker incentive amounts will be adjusted to ensure that the MAP as a whole provides the maximum possible EE and peak load reduction benefits while meeting the 1.0 cost-effectiveness requirement. The EE Market payouts will be higher during summer months to reflect the additional value of load reduction during this period.

The EE Market payouts may be adjusted downward to accommodate the Peak Kicker while remaining at 1.0 total resource cost ("TRC").

Commencement Date

PCE proposes to implement Option 1 if it does not receive additional MAP funding under the PD. PCE anticipates that the PD will be adopted as a final decision in December, 2021. If the final decision makes clear that PCE is not eligible for MAP funding, PCE proposes to begin implementing Option 1 as soon as this Advice Letter is approved, with service providers recruited beginning two months after the Advice Letter is approved, and the first customer enrollment beginning three months after the Advice Letter is approved.

Cost Effectiveness Analysis

Option 1 would use ETA funds exclusively. Unless greater flexibility on the use of these funds is granted by the Commission, the Option 1 program will require service providers to meet cost-effectiveness targets as a prerequisite of payouts. Payouts will only be provided for actual, measured energy saved, and the payout structure will be designed to make sure that the program meets or exceeds the 1.0 TRC threshold over its three-year term, creating a sustainable ongoing program in accordance with the methodologies included in the California Standard Practices manual.

Demand Reduction, Energy Savings, and Other Measures of Success

PCE's MAP will only provide payouts for actual, measured EE savings. As set forth in Table 1 below, PCE projects that over its 3-year program term, Option 1 will create a net peak demand impact of 831 kW, and a gross energy savings of 5,658,165 kWh.

The success of Option 1 will be measured based on the actual energy savings and peak load reductions achieved, calculated using on the demonstrated usage reductions and program payouts.

Budget – Option 1

The Option 1 budget is provided in Table 1, below, and discussed in detail in the Plan. As Table 1 demonstrates, under Option 1 PCE is requesting a 3-year program budget of \$4.678 million.

Table 1: Option 1 Summary Budget and Yield

Metric	Standard Program - Annual	Standard Program Full Term
Term	1 Year	3 Years
Total Budget	\$1,559,521	\$4,678,563
Gross kWh Savings	\$1,886,055	5,658,165
Net kWh Savings	1,697,450	5,092,350
Peak kW Demand Impact (Gross)	308	924
Peak kW Demand Impact (Net)	277	831
Total System Benefit (TSB)	\$2,160,879	\$6,482,637

Total Resource Cost (TRC)	n/a	1.02
Program Administrator Cost (PAC)	n/a	1.39

OPTION 2

Deliverables

PCE's Option 2 MAP would include funding from two sources subject to two distinct sets of requirements – the PD's EMAP funding and ETA funding. PCE proposes these distinct funding sources be siloed, with each going to a different sub-program with a different set of incentives.

Under Option 2, PCE would use the first two years of ETA funds for an incentive structure like the structure PCE proposes to use under Option 1, with one key difference. While the Option 1 incentive structure would provide payouts for EE savings by all customer classes, the Option 2 ETA funds would be used for payouts for residential customers only. All Option 2 ETA-funded incentives would meet or exceed the required 1.0 TRC. For year 3 of Option 2, PCE would use the ETA funds in the same manner specified for year 3 of Option 1, with payouts available for EE savings from all customer classes.

Under Option 2, PCE would use EMAP funds, which are not subject to a cost-effectiveness requirement, to provide significantly more aggressive Peak Kicker payouts to maximize summer peak load reduction. Payments to service providers will be anchored on the Total System Benefit⁴ ("TSB") avoided cost curve, with a 2.5X multiplier applied to peak hours. Value is subtracted from non-peak hours to offset the increase in value of peak hours. This multiplier is projected to increase the summer weekday peak hour average value from \$230/MWh to \$576/MWh (see Figure 1 below), providing ample incentive for service providers to target peak hour reductions. To offset the increase in peak hour value, the value of all non-peak hours throughout the year is reduced by approximately 21.3% in the projected model. This incentive will be available to service providers enrolling non-residential customers.

Commencement Date

PCE intends to begin implementing Option 2 as soon as this Advice Letter and its EMAP funding request are approved. Once these approvals are secured, PCE will begin enrolling service providers within two months, and service providers will begin enrolling customers within three months.

Cost Effectiveness Analysis

For all ETA funding, the Option 2 MAP will provide an incentive that is designed to ensure that the total payouts provided to market participants for residential customer EE savings meet or exceed the

[&]quot;Total system benefit" is a new metric established by the CPUC that provides an expression, in dollar value, of the lifecycle energy, capacity, and GHG benefits of an energy efficiency program portfolio. https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-better-aligns-energy-efficiency-programs-to-reduce-ghg-emissions-and-increase-grid-stability

required 1.0 TRC. PCE projects that for years 1-2, the ETA-funded portion of Option 2 will achieve a TRC of 1.02.

Unless the PD is significantly modified prior to adoption by the Commission, PCE's EMAP funding will not be subject to cost-effectiveness requirements. PCE will use this funding to provide aggressive incentives for EE savings during summer peak load. Given the critical emergency need for such load reductions, PCE believes that the total public good created by these load reductions more than outweighs the cost of the additional incentives, even if these incentives fall below a 1.0 TRC.

Demand Reduction, Energy Savings, and Other Measures of Success

PCE's MAP will only provide payouts for actual, measured EE savings. As set forth in Table 2 below, PCE projects that in program years 1-2 of Option 2 it will achieve a 1.378 MW net peak demand reduction, and a total gross energy savings of 5,782,052 kWh.

The success of Option 2 will be measured based on the actual energy savings and peak load reductions achieved, calculated using on the demonstrated usage reductions and program payouts.

Budget

The Option 1 budget is provided in Table 1, below, and discussed in detail in the Plan. As Table 1 demonstrates, under Option 2 PCE is requesting a 2-year program budget of \$5.469 million. Of this, \$3.119 million would consist of ETA funding, and \$2.350 million would consist of EMAP funding.

Table 2: Option 2 Summary Budget and Yield-Years 1-2

Metric	Program Funding from ETA (Years 1-2)	Additional EMAP Budget Funding	Total Option 2 Budget
Total Budget	\$3,119,042	\$2,350,000	\$5,469,042
Gross kWh Savings	\$3,772,110	2,009,942	5,782,052
Net kWh Savings	3,394,900	1,808,948	5,203,848
Peak kW Demand Impact (Gross)	615	916	1,531
Peak kW Demand Impact (Net)	554	824	1,378
Total System Benefit (TSB)	\$4,321,757	\$2,153,739	\$6,475,496
Total Resource Cost (TRC)	1.02	0.67	n/a
Program Administrator Cost (PAC)	1.39	0.92	n/a

COLLABORATION

PCE is the generation provider for its customers. PCE is a local government agency that is overseen by elected officials who are democratically accountable to their constituents. PCE exists for the public, and that is reflected in its relationships with the communities it serves. PCE's trust, local knowledge, and connections with its member communities make it the ideal entity to implement a locally focused MAP. PCE is not aware of any other entities that offer similar programs, and PCE seeks to become the sole MAP provider for its customers.

While PCE intends to offer its MAP exclusively to its customers, to the extent that the MAP has an impact on other non-MAP EE program offerings that are available to its customers, PCE stands ready to collaborate with Pacific Gas and Electric Company ("PG&E") and the Bay Area Regional Energy Network ("BayREN").

STATUTORY AUTHORITY

Assembly Bill ("<u>AB</u>") 117 (2002) and Senate Bill ("<u>SB</u>") 790 (2011) contain specific provisions relating to administration of energy efficiency programs by CCAs. AB 117 established the formal application option, allowing CCAs to file an application for administration of energy efficiency programs on essentially the same terms as the investor-owned utilities ("<u>IOUs</u>").

SB 790 modified Section 381.1 to give CCAs another option for energy efficiency program administration, adding subsections (e) and (f) to Section 381.1. These newer subsections allow a CCA to invoke an alternative Commission review process (as opposed to a formal application) for programs funded by (and offered to) the CCA's customers.

D.14-01-033 established the rules governing CCA submission of advice letters to administer energy efficiency programs for their own customers under Section 381.1(e)-(f). This second option allows a CCA such as PCE to "elect" to become an administrator for cost-effective energy efficiency and conservation programs, subject to Commission certification of a plan. This is the option PCE is pursuing through the submittal of this Advice Letter.

RULES AND REQUIREMENTS GOVERNING PLAN CERTIFICATION

Per D.14-01-033, the Commission must first make a funding determination (that is, establish whether the funding requested in the CCA's proposed plan is within the forecasted maximum amount of funds the CCA would be eligible to collect). Next, the Commission must certify that a CCA plan meets six criteria, specified in paragraphs (1)-(6) of Section 381.1(f). These requirements are addressed on a cursory level below and in detail in the Plan.

FUNDING DETERMINATION

Commission Resolution E-4518 states that "funding collection and program periods do not always correspond" and that there is no statutory requirement for funding collection to begin subsequent to

Commission certification of the plan. Marin Energy Authority (now referred to as MCE) was provided a collection period starting on the original draft submittal date. Based on this precedent, PCE finds it reasonable to request the Commission direct the transfer of energy efficiency funds collected from PCE's ratepayers beginning on the submittal date of this Advice Letter.

For the ETA funds that would form the sole funding source under Option 1 and more than half of the Option 2 funding, the Commission must establish whether the funding requested in the CCA's proposed plan is within the forecasted maximum amount of funds the CCA would be eligible to collect. Commission staff must determine the actual and forecasted amounts of non-bypassable charges likely to be collected from the CCA's customers over a reasonable collection period to fund energy efficiency programs. The Commission is to use the following formula:

CCA maximum funding = total electricity energy efficiency non-bypassable charge collections from the CCA's customers – (total electricity energy efficiency non-bypassable charge collections from the CCA's customers x % of the applicable IOU portfolio budget that was dedicated to statewide and regional programs in the most recently authorized program cycle)

PCE staff have determined:

- Total PCE non-bypassable charge funds to be collected in 2021 = \$46,276,590
- 96.63% of PG&E's total EE funds to be collected in 2021 are to be dedicated to statewide and regional programs.
- PCE's first year not-to-exceed value = Total non-bypassable funds collected by CCA customers less statewide and regional programs ((\$46,276,590*[1-% excluded IOU budget (96.63%)]) = \$1,559,521
- PCE's yearly ETA funding not-to-exceed value = \$1,559,521
- PCE's three-year ETA funding not to exceed value =\$4,678,563

SECTION 381.1(f) REQUIREMENTS

Pursuant to Section 381.1(f), the Commission must certify that this Plan meets six criteria, specified in paragraphs (1)-(6), which provide:

The commission shall certify that the plan submitted does all of the following:

- (1) Is consistent with the goals of the programs established pursuant to this section and Section 399.4.
- (2) Advances the public interest in maximizing cost-effective electricity savings and related benefits.
- (3) Accommodates the need for broader statewide or regional programs.

- (4) Includes audit and reporting requirements consistent with the audit and reporting requirements established by the commission pursuant to this section.
- (5) Includes evaluation, measurement, and verification protocols established by the community choice aggregator.
- (6) Includes performance metrics regarding the community choice aggregator's achievement of the objectives listed in paragraphs (1) to (5), inclusive, and in any previous plan.

Consistency with Commission Goals

PCE's MAP proposal is fully consistent with the Commission's EE program goals. MAP will only provide payouts for actual measurable peak load reduction and EE savings. MAP will result in GHG emissions reductions and improve electric system reliability. Further, consistent with the Governor's Emergency Declaration and the Commission's statements in the EE Rulemaking, PCE's MAP would provide critical, targeted peak load reductions during the summers of 2022 and 2023.

Cost-Effectiveness

As set forth above, PCE will design its ETA-funded MAP payouts to ensure that all ETA funds used in PCE's MAP will achieve a TRC of 1.0 or greater. For potential EMAP funding under Option 2, PCE will follow any relevant cost-effectiveness guidance or requirements provided by the Commission.

Accommodation of Statewide and Regional Programs

PCE's MAP does not have any functional overlap with existing statewide and regional EE programs. PCE seeks to offer its MAP only to its customers within its service area and does not anticipate that this will have any impact on Statewide and Regional EE Programs. PCE intends to continue robust coordination with Statewide and Regional EE Program providers to maximize the EE and peak load reduction benefits through multi-program coordination. As other entities enact their own MAPs, PCE intends to coordinate closely with other MAP implementers to avoid customer confusion and dual enrollment.

Auditing and Reporting

PCE performs annual financial audits using generally accepted accounting principles specific to government entities. These reports are publicly available and are currently accessible on PCE's website. As a Joint Powers Authority, once PCE's Plan is certified and the MAPs begin, current auditing procedures will be extended to include program administration data. This will ensure appropriate accounting controls for program funds.

In keeping with the requirements under the Governmental Accounting Standards Board Statement No. 34, the management's discussion and analysis will be included in the report to supplement the basic financial statements. To evaluate the effective use of resources and management procedures,

PCE will also complete all regulatory filings and reports as directed by Commission staff. These documents will provide the results of program efforts that can be evaluated against the performance metrics identified by PCE, including adherence to cost-effectiveness requirements.

PCE will take all necessary actions to remain compliant with additional auditing and reporting requirements.

Evaluation, Measurement, and Verification Protocols

PCE will contract with an independent third-party to perform process evaluation or market studies to assess the effectiveness of program implementation activities and evaluate challenges and opportunities in the PCE service territory. The studies will be performed according to the Commission's oversight process of IOU Evaluation Measurement and Verification ("EM&V") projects as detailed in the Energy Efficiency EM&V Plan. PCE will be subject to the same protocol as IOUs for Commission-directed impact evaluations to determine actual energy savings, benefits, costs, and goal achievement as directed in D.05-01-055.

The EM&V methods are open source and publicly available. Savings will be determined through the CalTRACK 2.04 Hourly methods executed via the OpenEEmeter (both CalTRACK and the OpenEEmeter codebase are curated within Linux Foundation Energy), along with the GRIDMeter methods for comparison group adjustment. The CalTRACK methods quantify the weathernormalized, occupancy-dependent change in energy use for each hour compared to past usage. Background on the development of CalTRACK and the OpenEEmeter can be accessed through www.caltrack.org.

Evaluations directed by PCE will focus on market conditions and needs, program design flaws or opportunities for improvement, and solutions to address those challenges. PCE will avoid duplication and build on existing efforts by referring to existing EM&V studies led by IOUs and the Commission to:

- Compare PCE's program to other similar program offerings.
- Evaluate successes, failures, and replicability of the program.
- Evaluate the unique challenges and opportunities of the PCE market and determine viable solutions.
- Compare ex ante and ex post data.
- Assess value to supply-side planning and costs.

Performance Metrics

The overall performance target for the program is delivery of the following assuming proposed budgets of \$4,678,563 and \$5,469,042 respectively:

• Term (years) 3 2

• Net kWh Savings 5,092,349 5,203,848

• Peak kW Demand Impact (Net) 831 1,378

The following Performance Metrics will indicate progress toward meeting the goals and objectives of the Commission objectives, especially for summer reliability, and PCE goals. The specific objective of Section 381.1(f) that each metric addresses (if applicable) is included in parenthesis.

- Program energy savings (381.1(f)(2))
- Tracking the Program cost-effectiveness annually (381.1(f)(2))
- Number of projects referred to other EE or other Distributed Energy Resource ("<u>DER</u>") programs (381.1(f)(3))
- Total participating customers by segment (381.1(f)(4))
- Percentage of customers who receive electrification measures
- EM&V process, tracking, and incorporation into program design (381.1(f)(5))
- EM&V of project energy savings forecasts and energy savings realized (381.1(f)(5))
- Market penetration of the FLEXmarket Program
- Supply-side generation cost reductions

REQUEST

The PCE MAP Plan comports with all requirements as outlined by relevant statutory authority as well as Commission decisions and resolutions. Therefore, PCE requests that the Commission certify the Plan via resolution. PCE further requests that this certification be expedited to ensure that PCE has an opportunity to participate in any potential MAP funding for Summer 2022-2023 peak load reduction authorized by the Commission.

ATTACHMENTS

A. PCE's Market Access Program Plan

NOTICE

In accordance with GO 96-B, Section IV, a copy of this advice letter is sent electronically to parties shown on the attached service list in Appendix C.

As required in the Decision, PCE is serving copies of this Advice Letter to the relevant parties shown on the A.17-01-013 service list, and also serving copies of this Advice Letter as a courtesy to the EE

proceeding, R.13-11-005. For changes to these services lists, please contact the Commission's Process Office at (415) 703-2021, or by electronic mail at Process_Office@cpuc.ca.gov.

PROTESTS

Anyone wishing to protest this Advice Letter may do so by letter via U.S. mail, facsimile, or electronically, any of which must be received no later than twenty days after the date of this Advice Letter. Protests or responses to this Advice Letter must be submitted to the Commission's Energy Division and served on the same day. Protests should be mailed to:

Energy Division

Attention: Tariff Unit

California Public Utilities Commission

505 Van Ness Avenue

San Francisco, California 94102

E-mail: EDTariffUnit@cpuc.ca.gov

Copies should be mailed to the attention of the Director, Energy Division, Room 4004 (same address above). In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted electronically to the attention of:

Jeremy Waen Director of Regulatory Policy Peninsula Clean Energy Authority 2075 Woodside Rd. Redwood City, CA 94601

Phone: 650-247-8026

jwaen@peninsulacleanenergy.com

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

///

CORRESPONDENCE

For questions, please contact Jeremy Waen at 650-257-8026 or by e-mail at jwaen@peninsulacleanenergy.com.

Dated: November 18, 2021 Sincerely,

/s/ Jeremy Waen

Director of Regulatory Policy Peninsula Clean Energy Authority

2075 Woodside Rd. Redwood City, CA 94601 Phone: 650-247-8026

jwaen@peninsulacleanenergy.com

Copy (via e-mail): Service List – A.17-01-013

Service List – R.13-11-005

Energy Division Tariff Unit (EDTariffUnit@cpuc.ca.gov)

PG&E Tariffs (<u>AdviceTariffManager@pge.com</u>)





Peninsula Clean Energy Authority's Market Access Program Plan

Prepared: November 17, 2021

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1 INTRODUCTION

Peninsula Clean Energy Authority ("Peninsula Clean Energy") issues this Program Plan for the purpose of increasing grid reliability, advancing building decarbonization, and aligning power demand with renewable power supply.

This document provides:

- General background on Peninsula Clean Energy
- Detail on the Peninsula Clean Energy Market Access program
- An outline on how the program will comply with state requirements

1.1 About Peninsula Clean Energy Authority

Peninsula Clean Energy is a Community Choice Aggregation agency. It is the official electricity provider for San Mateo County and, beginning in 2022, for the City of Los Banos. Founded in 2016, the agency serves 295,000 customers by procuring approximately 3,500 gigawatt hours annually of electricity that is 100% renewable or carbon-free and at a lower cost than PG&E.

As a community-led, not-for-profit agency, Peninsula Clean Energy's mission is to reduce greenhouse gas emissions by expanding access to sustainable and affordable energy solutions. The agency has earned investment grade credit ratings from Moody's and Fitch. For more information on Peninsula Clean Energy, please go to www.peninsulacleanenergy.com.

1.1.1 Organizational Priorities & Current Programs

Peninsula Clean Energy has two strategic organizational priorities:

- 1) To deliver 100% renewable energy within each and every hour of the day
- 2) Contribute to the service territory reaching the state's goal to be 100% greenhouse gas-free by 2035

Peninsula Clean Energy has in progress a spectrum of existing programs which complement the Market Access program described in this plan including:

- Used Electric Vehicle incentives, which include up to \$4,000 for low-income residents
- EV charging incentives and technical assistance, which include a special emphasis on the needs of multi-unit dwellings
- Municipal and residential solar and storage programs
- Heat pump water heater incentives and a forthcoming on-bill finance program
- Low-income turnkey home upgrade program
- Reach code program for new and existing building codes
- Pilot for an advanced combined space and water heating system

1.2 Overview of Program

Peninsula Clean Energy's Market Access Program, also commonly referred to as FLEXmarket, is a market-based program structure for delivering energy efficiency and power demand flexibility to support grid needs. The market structure allows a) setting a price point for distributed energy services provided by companies working locally (service providers) and b) paying the companies according to that price point based on their actual performance yield as measured by industry-standard meter data analysis.

The yield measurement is based on the open-source CalTRACK methodologies for Normalized Metered Energy Consumption (NMEC) analysis of portfolios of treated sites and compares them against a counterfactual - the estimated consumption of energy as if the intervention had not taken place. This methodology is both low-cost and "smooths out" the natural variability found from building to building.

The program is designed to provide <u>ongoing</u> support for peak demand reduction and improving grid reliability with special <u>emphasis</u> on the immediate two-year period covered under the Governor's July 30th, 2021 Proclamation of a State of Emergency and the CPUC's associated Market Access Program ("Emergency MAP" or "EMAP") under the Energy Efficiency Actions to Enhance Summer 2022 and 2023 Electric Reliability proceeding's Proposed Decision (PD).

Through the Market Access Program, Peninsula Clean Energy seeks to achieve the following outcomes:

- Peak load reduction benefits
- Avoided GHG emissions
- Customer utility bill savings
- Energy savings

1.2.1 Summary Yield and Budget

The FLEXmarket program is inherently scalable. Two budgets are proposed in Table 1 below. Option 1 ("Standard Program") is a three-year program based on Elect to Administer ("ETA") program budget allocation and requirements. Option 2 ("Emergency MAP Enhanced Program") reflects greater impact with additional funding and program design in accordance with the CPUC Market Access Program ("EMAP") outlined in the October 29, 2021 Proposed Decision (PD) in Rulemaking 13-11-005.

If the PD is approved PCE intends to apply for EMAP funding to complement ETA funding. If both funding requests are granted, Peninsula Clean Energy plans to combine the Standard Program with the additional EMAP funding, implementing a single FLEXmarket program using the combined program funding. This Emergency MAP Enhanced Program will meet the requirements and criteria for both ETA-implemented programs and EMAP programs. At the expiration of the 2-year EMAP period, if the Commission has not authorized additional EMAP funding PCE plans to revert from the Emergency MAP Enhanced Program to the Standard Program. The summary budgets and yields are shown in Table 1 and Table 2 below.

Should the CPUC propose an alternate budget or program design requirements, the metrics will be updated accordingly. Further detail may be found below in Sections 2 and 3 on approach and costs.

Table 1: Option 1 Summary Budget and Yield

Metric	Standard Program - Annual	Standard Program Full Term
Term	1 Year	3 Years
Total Budget	\$1,559,521	\$4,678,563
Gross kWh Savings	\$1,886,055	5,658,165
Net kWh Savings	1,697,450	5,092,350
Peak kW Demand Impact (Gross)	308	924
Peak kW Demand Impact (Net)	277	831
Total System Benefit (TSB)	\$2,160,879	\$6,482,637
Total Resource Cost (TRC)	n/a	1.02
Program Administrator Cost (PAC)	n/a	1.39

Table 2: Option 2 Summary Budget and Yield—Years 1-2

Metric	Program Funding from ETA (Years 1-2)	Additional EMAP Budget Funding	Total Option 2 Budget
Total Budget	\$3,119,042	\$2,350,000	\$5,469,042
Gross kWh Savings	\$3,772,110	2,009,942	5,782,052
Net kWh Savings	3,394,900	1,808,948	5,203,848
Peak kW Demand Impact (Gross)	615	916	1,531
Peak kW Demand Impact (Net)	554	824	1,378
Total System Benefit (TSB)	\$4,321,757	\$2,153,739	\$6,475,496
Total Resource Cost (TRC)	1.02	0.67	n/a
Program Administrator Cost (PAC)	1.39	0.92	n/a

1.3 Consideration Requested to the California Public Utilities Commission

Peninsula Clean Energy is electing to become an administrator of ratepayer funds collected by the California Public Utilities Commission ("CPUC") for cost-effective energy efficiency and conservation programs. Peninsula Clean Energy submits this program plan to the CPUC for certification under California Public Utilities Code 381.1 (e) and (f) to administer one program: a Market Access Pay-for-Performance program, also known as FLEXmarket.

Peninsula Clean Energy has deep connections to the communities it serves and is fully qualified to provide energy services to our customers. Peninsula Clean Energy puts forth this energy program plan pursuant to Public Utilities Code 381.1:

- (e) The impartial process established by the commission shall allow a registered community choice aggregator to elect to become the administrator of funds collected from the aggregator's electric service customers and collected through a non-bypassable charge authorized by the commission, for cost-effective energy efficiency and conservation programs, except those funds collected for broader statewide and regional programs authorized by the commission.
- (f) A community choice aggregator electing to become an administrator shall submit a plan, approved by its governing board, to the commission for the administration of cost-effective energy efficiency and conservation programs for the aggregator's electric service customers that includes funding requirements, a program description, a cost-effectiveness analysis, and the duration of the program. The commission shall certify that the plan submitted does all of the following:
 - 1) Is consistent with the goals of the programs established pursuant to this section and Section 399.4.
 - 2) Advances the public interest in maximizing cost-effective electricity savings and related benefits.
 - 3) Accommodates the need for broader statewide or regional programs.
 - 4) Includes audit and reporting requirements consistent with the audit and reporting requirements established by the commission pursuant to this section.
 - 5) Includes evaluation, measurement, and verification protocols established by the community choice aggregator.
 - 6) Includes performance metrics regarding the community choice aggregator's achievement of the objectives listed in paragraphs (1) to (5), inclusive, and in any previous plan.

2 Peninsula Clean Energy Market Access Program

2.1 Approach

2.1.1 Program Structure

The FLEXmarket is a market-driven resource program that assigns an hourly value to measured, behind-the-meter ("BTM") load reduction impacts. The FLEXmarket is supported by a robust evaluation, measurement, and verification ("EM&V") plan, and a program platform that will be regularly updated with smart meter data covering Peninsula Clean Energy's entire service area.

The FLEXmarket platform typically includes two major mechanisms: a) energy efficiency market, and b) peak market. Typically, the Energy Efficiency Market assigns an hourly value based on avoided costs and the Peak market integrates an hourly value for peak hours. One of the primary attributes of a price-signal driven program is that it enables the FLEXmarket to remain technology agnostic. It is a program framework with the tools to measure and value hourly reductions in energy use.

This has several strategic benefits:

- Providing greater flexibility to adapt to market conditions by avoiding prescriptive solutions;
- Dramatically reducing risk to program funding, as program payments are made entirely on a performance basis;
- Allowing rapid program scaling and expansion by avoiding the administratively burdensome process of launching direct contracts with service providers;
- Seamless integration with existing programs.

Customers and/or service providers can participate under the market with a full spectrum of offerings including traditional efficiency, demand response, load shaping tactics, and other solutions that generate verifiable results. These can all be accommodated without administrative requirements. By offering a payment for energy reductions that values a range of resources equally, the FLEXmarket ensures that incentives flow to projects with verifiable impacts and allows for different behind-the-meter solutions to work together in a coordinated way.

2.1.2 Summer Reliability and Source of Funds Design Considerations

To support Summer 2022 and 2023 reliability needs, Peninsula Clean Energy will utilize the FLEXmarket with price signals optimized for permanent load reduction and load shift. The price signals will include an increased incentive ("peak kicker") that will strongly favor reductions during the critical summer peak periods. The effect will be to deliver efficiency and permanent peak shifts through a unified mechanism (Energy Efficiency Market).

The application of specific program funds which may be allocated, ETA and EMAP, will be in accordance to the CPUC requirements associated with those specific funds. EMAP funds will be deployed under the terms of the forthcoming Final Decision associated with Rulemaking 13-11-

005 but anticipated follow the Proposed Decision to offer very elevated "peak kickers" and relaxed cost-effectiveness which support accelerated project velocity.

Unless otherwise allowed by the CPUC, ETA funds will meet cost-effectiveness requirements over the three-year term and also have elevated "peak kickers" though the exact incentives will be determined in a design phase. If both sources of funds are authorized per Option 2, Peninsula Clean Energy will direct EMAP funds to the commercial sector and ETA funds, for the two-year Emergency MAP Enhanced Program period, will be directed to the residential sector. Application of ETA funds for FLEXmarket in the residential sector would constitute a novel pilot as discussed below.

2.1.3 Program Enrollment

Program enrollment is available to any service provider. It is expected that a broad range of service providers will enroll from large energy services administrators, startup technology companies, non-profit service providers, and small independent firms. In addition, large individual customers may themselves directly participate to increase their direct economic benefit and motivation to deliver.

Service providers enroll by signing a "Flexibility Purchase Agreement," which outlines the key terms of participation and requirements. Service providers may then submit participating meters to the FLEXmarket, where they are pre-screened for data sufficiency, potential dual program enrollment, and other factors that may impact eligibility. Once eligibility is confirmed, a service provider's customer portfolio is tracked, and compensation is provided based on demonstrated performance.

Existing programs at MCE and East Bay Community Energy have demonstrated market participation from service providers who are new to grid serving programs. These partners have now been presented with a value proposition for demand flexibility, which can be incorporated into new project specifications and incentive structures in ways not previously available given current complex and difficult to join alternative existing programs.

2.1.4 Payment/Incentive Structure

Overall, the Peninsula Clean Energy FLEXmarket will provide higher incentives for energy benefits delivered during the Summer peak periods. Under the Emergency MAP Enhanced Program, EMAP funds would follow CPUC requirements for Market Access programs. If the CPUC Final Decision codifies the PD, payments to service providers will be anchored on the Total System Benefit¹ (TSB) avoided cost curve, with a 2.5X multiplier applied to peak hours. Value is subtracted from non-peak hours to offset the increase in value of peak hours. This kicker is projected to increase the summer weekday peak hour average value from \$230/MWh to \$576/MWh (see Figure 1 below), providing ample incentive for service providers to target peak hour reductions. To offset the increase in peak hour value, the value of all non-peak hours throughout the year is reduced by approximately 21.3% in the projected model.

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¹ "Total system benefit" is a new metric established by the CPUC that provides an expression, in dollar value, of the lifecycle energy, capacity, and GHG benefits of an energy efficiency program portfolio. https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-better-aligns-energy-efficiency-programs-to-reduce-qhq-emissions-and-increase-qrid-stability

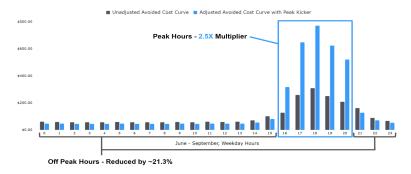


Figure 1: "Peak Kicker" Avoided Cost Curve Adjustment

The price points will be subject to refinement based on CPUC direction and result data from existing FLEXmarket implementations.

For ETA funds, Peninsula Clean Energy will design an incentive structure expected to be substantially similar or potentially identical to the incentive structure defined in the PD. The specific structure will depend on whether the CPUC approves Option 1, the Standard Program, or Option 2, the Emergency MAP Enhanced Program. If in addition, the CPUC grants greater cost-effectiveness flexibility on ETA funds, this may also affect the final incentive design. The incentive design will be developed as part of the tasks outlined in Section 2.3.

2.1.5 Evaluation, Measurement, & Verification

The measurement and verification methods to be deployed in the FLEXmarket are open source and publicly available. Energy impacts will be determined through the CalTRACK methods, paired with a comparison group adjustment.² The methods are distinct for efficiency and permanent peak reduction (event-only flexibility participants also have distinct methods but are not planned in 2022-2023).

Within the FLEXmarket, determining demand flexibility impacts begins with a thorough assessment of a customer's baseline. First, up to a full year of baseline data is collected to develop a counterfactual that is normalized for weather. Additionally, the comparison group adjustment generates further confidence in measured impacts through a "difference of differences" calculation. As a result, the FLEXmarket can credit both savings and the energy impacts generated. In summary, the FLEXmarket's methods demonstrate a substantial improvement over commonly used DR baseline methodologies, which undervalue DR impacts and thus discourage deeper engagement from providers and customers.³ These methods also provide Peninsula

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² A comparison group is a group constructed after participants have been enrolled in a program, wherein the purpose is to compare energy consumption changes from program participants against non-participants with otherwise similar usage characteristics. Comparison group analysis can help determine net savings by accounting for externally driven changes or trends that affect energy usage across all customers or all customers within a segment. (NMEC Rulebook at 21.)

³ See U.S. Department of Energy and National Renewable Energy Laboratory "Study of Demand Response during the California August 2020 blackouts" (December 2020), pp. 6-7, (explaining the drawbacks of prevailing DR baseline methodologies and noting that "current baseline methods understate performance on the days when the grid has the greatest need for demand response, resulting in reduced incentive to support the grid in future events. More accurate methods for measurement and verification will help companies…bring more flexible demand from local distributed energy resources to help balance

Clean Energy with a pathway to integrate demand flexibility reliably and verifiably into its portfolio of programs and, importantly, supply side planning.

2.1.6 Incremental Value

The FLEXmarket is geared nearly exclusively towards new project development and recruiting new customers into the program. As noted previously, one of the program's most promising attributes is that it is drawing interest from service providers and customers who have never participated in DR programs or worked to incorporate the value of demand flexibility into their projects.

As a general rule, dual participation in more than one program is not allowed and FLEXmarket participants must disclose participation under any other program when enrolling in FLEXmarket. Further detail is provided below.

2.2 Segments and Measures

2.2.1 Specific Measures or Technologies

The FLEXmarket is technology and measure agnostic by design. It can integrate a wide range of measures including traditional efficiency such as lighting, appliances, and behavioral strategies, as well as demand response and load shaping tactics utilizing batteries, smart thermostats, building load controls, or managed electric vehicle chargers. Other solutions that generate verifiable results can also be accommodated without administrative requirements.

By offering a payment for energy impacts that value technologies and strategies equally, the FLEXmarket ensures that program incentives are directed towards the technologies and providers that can deliver energy impacts most effectively, thereby minimizing performance risk to the program and optimizing the deployment of demand flexibility solutions.

2.2.2 Customer Market Segment

The FLEXmarket operates best when largely agnostic to building types and customer market segments, but it can also be tailored through participant requirements to be segment specific if necessary. This may be done for reasons of measurement methodology or administrative considerations, such as ensuring there is no overlap with other programs in the territory.

Methodologically it is best applied to customer segments with consistent load shapes, for whom a comparison group can readily be drawn per the program's current EM&V Plan.⁴ Customers with highly unique load shapes (e.g., large industrial customers) are not an optimal fit for the FLEXmarket at present.

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the grid."), accessible at <a href="https://assets.website-files.com/5cb0a177570549b5f11b9550/6050a2a48c39eb09319c9382_Quantifying%20The%20OhmConnect%20Virtual%20Power%20Plant%20During%20the%20California%20Blackouts%20(1).pdf.

⁴ For commercial customers, the primary strategy to assemble the comparison group will be to weight the number of meters by business type (determined by NAICS codes) such that the comparison group has the same proportionality as the treatment group. Residential comparison groups will be created using distance-based matching or stratified sampling.

The commercial sector traditionally provides greater cost-effectiveness with fewer large projects that provide for lower marketing and acquisition costs, greater financial motivation and more elastic loads. However, the residential sector is a larger percentage of Peninsula Clean Energy's overall load.

The Peninsula Clean Energy FLEXmarket is envisioned to cover single-family residential and medium and large commercial as preventing dual enrollment is administratively straightforward. Other segments such as multi-family and small commercial may be considered based on coordination discussions with BayREN and PG&E. Please see Section 5 for detail on preventing dual enrollment.

For the Standard Program it is anticipated that no distinction will be made across included segments. However, for the Option 2 Emergency MAP Enhanced Program, EMAP funds would be targeted at large and potentially medium commercial sectors. It is anticipated that this will provide the fastest results. For Option 2, the ETA funds would be targeted at segments not served by the EMAP funds such as the residential sector.

Applying FLEXmarket to the residential sector with ETA cost-effectiveness requirements would be a novel application of the FLEXmarket. The reduced administrative costs may enable service providers to deliver greater benefits at a faster pace. One specific likely target is converting resistance electric water heaters to heat-pumps. Peninsula Clean Energy has over 40,000 all-electric accounts and the bulk of these accounts are believed to use resistance electric water heaters. Converting these to heat-pumps would deliver major customer and evening peak benefits. It is anticipated that Peninsula Clean Energy would assist providers in reaching these customers. In addition, success in the residential sector will require targeting service providers that serve the segment and may require recruitment of smaller service providers as well.

2.3 Program Tasks and Schedule

The program is anticipated to launch within three months of CPUC approval and will run on an on-going basis with pricing aligned to CPUC direction. If the Emergency MAP Enhanced Program is authorized, it will run for a minimum of two years or as otherwise specified by the CPUC. Below is a high-level schedule of tasks for the initial program launch. Once the program is enrolling customers, tasks 1-4 will be continuously operational. Time brackets identified around tasks 3 and 4 represent estimated time for a single project (i.e., measurement begins with project interventions but continues a full 14 months following project completion).

The following are expected program tasks.

1. Contracting & Administrative Setup (Months 1-2)

Peninsula Clean Energy is leveraging existing contracting discussions with Peninsula Clean Energy billing and data service provider Calpine and their partner Recurve as well as our experience and existing resources from current initiatives, which should support the timely and efficient launch of the proposed program.

2. Refinement, Coordination and Forecasting (Month 2)

Significant expertise has already been established in the existing FLEXmarket programs. The initial step will be to confer with the CPUC and other stakeholders regarding pricing strategy. By reviewing existing FLEXmarket program results, other programs, available budget, service territory potential and anticipated summer needs, a refined pricing strategy will be established for ETA funded program. EMAP funded program, if any, will be aligned to the CPUC Final Decision.

Peninsula Clean Energy will also confer with BayREN and PG&E to review possible program overlaps, evaluate segments best omitted and, where appropriate, determine procedures to ensure no dual participation. See below Section 5 for more detail.

3. Service Provider Recruitment (Months 2-4)

As noted above, service providers will be recruited to the market on the basis of the determined price points and benefits. This will begin through direct relationships Peninsula Clean Energy already has with numerous service providers such as CLEAResult, TRC, OhmConnect, Swell, Ecology Action and others. Peninsula Clean Energy will also leverage media releases to industry channels, social media, and peer agencies to notify other service providers. Finally, through existing key account relationships large commercial customers will be encouraged to participate.

In addition to the market program structure and direct benefits, Peninsula Clean Energy offers a supportive service, Data Connect. Data Connect is a free, secure, easy-to-use software tool built on the UtilityAPI data exchange platform, available at no cost to third-parties and energy contractors in the service territory. The data exchange provides ready access to energy bill data for customers with an easy method for service providers to request access by their clients, the participating accounts. This dramatically reduces the complexity for service providers to readily get the data necessary for broad based energy programs.

4. Interventions (starting at 3 months)

Participating service providers will be encouraged to promptly begin scoping, enrolling and implementing interventions in advance of the summer season. Efficiency and permanent load shifts are expected begin delivering impacts soon after implementation.

5. Measurement (Months 5+)

Once a project has been performed on a property, the actual meter-based consumption post-intervention will be compared against the expected baseline in a "no-intervention" scenario, and the difference will be attributed to the project and will become the basis of incentive payments. Individual project impacts will be calculated by comparing the treatment group (i.e., participating customers) to the control group (i.e., non-participating customers), using 14 months of pre- and post-project data to minimize the noise from non-routine events. If there are lingering impacts associated with the novel coronavirus pandemic, modifications may be

made to the control and treatment group selection and measurement as developed in the CalTRACK methodology.⁵

6. Incentive Processing and Reporting (Month 19)

When a project is successfully submitted to the program, it must pass verification checks (QA/QC) that include review of all documents (scopes of work, photos, etc.) to confirm eligibility, then the meter will be assigned to a control group for the purposes of tracking incentive payments. Incentives will be paid on the project following final verification of program impacts, no less than 14 months following project completion. Service providers will provide monthly submissions of project enrollments, including anticipated energy savings impacts of the project, and this information will be captured for the purposes of program reporting, incentive reservations, and final incentive payment verification.

Completed projects are submitted with information on participating accounts, measures, and costs. This data can be used for future complementary offerings such as building electrification and distributed generation.

Once the measurement and verification of savings has been completed, Peninsula Clean Energy will issue incentives on portfolios of projects to service providers. While initial incentives aren't expected to be processed for a full 17 months following approval of the program, eventually Peninsula Clean Energy envisions this settlement occurring on a quarterly basis.

7. Peninsula Clean Energy Validation (Month 19)

Because the market model remains relatively novel, Peninsula Clean Energy will apply its own analytics to a sampling of projects. The purpose will be to verify at a high level that the reported results are consistent with Peninsula Clean Energy's own data.

8. Supply-side forecasting (Month 19+)

Once complete data is available after the first year, the data will also be assessed based on the yield and costs to evaluate supply-side implications. The analysis may inform seasonal and time frame targeting and price points for the second year. It will also be used to inform supply-side forecasts and the potential for increased benefits with increased scale or refined targeting.

Given the necessary lag in quantifying program impacts from pay-for-performance programs, the initial savings results will not be available until a minimum of 14 months following program rollout, and the final savings figures and incentive spend from the initial two-year implementation will not be available until 14 months after the final project is completed.

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⁵ https://grid.recurve.com/

3 Maximizing Savings & Related Benefits

3.1 Budget

The FLEXmarket program is inherently scalable. Detail on the two budgets is shown below in Table 1 and Table 2 below. Option 1 ("Standard Program") is a three-year program based on Elect to Administer program budget allocation and requirements. Option 2 ("Emergency MAP Enhanced Program") reflects greater assessed potential and presumes additional funding and reflects a program design in accordance with the October 29, 2021 Proposed Decision in Rulemaking 13-11-005.

- Option 1 Standard Program: The three-year \$4,678,563 budget reflects prospective allocation based on Peninsula Clean Energy's ETA filing using previously approved formulas (percentage allocated for ETA from total electricity energy efficiency nonbypassable charge collections from the CCA's customers). See Table 3 below.
- 2. Option 2 Emergency MAP Program Enhanced Program: The second option for \$5,469,042 over two years reflects the potential impact with added budget from the prospective CPUC EMAP and ETA funds but focused over the emergency period. Analysis of the service territory indicates over 5,000 commercial customers have load shapes with twice the average peak usage of the sector and additional potential exists in the residential sector, particularly with resistance electric water heaters i.e. significant potential for efficiency and peak load reduction. The proposed EMAP budget reflects a funds allocation as a percentage of the total proposed \$150 million in the PD equivalent to Peninsula Clean Energy's load as a fraction of total Investor-Owned Utility territory load. See Table 4 below.

EMAP and ETA funds would be deployed each in accordance to CPUC requirements associated with price points and cost effectiveness as discussed in Section 2 and 3.2. A breakout of by cost category is shown in Table 5 below. If Option 2 is authorized, the program would revert to the Standard Program in the third year unless the CPUC EMAP program is extended. In both cases, the program is envisioned to continue in subsequent years with CPUC approval at budget levels associated with ETA allocations at that point in time.

Should the CPUC propose an alternate budget or program design requirements, the metrics will be updated accordingly.

Metric **Standard Program Standard Program** - Annual **Full Term** 1 Year 3 Years Term Total Budget \$1,559,521 \$4,678,563 Gross kWh Savings \$1,886,055 5,658,165 Net kWh Savings 1,697,450 5,092,350 308 924 Peak kW Demand Impact (Gross)

Table 3: Option 1 Summary Budget and Yield

Peak kW Demand Impact (Net)	277	831
Total System Benefit (TSB)	\$2,160,879	\$6,482,637
Total Resource Cost (TRC)	n/a	1.02
Program Administrator Cost (PAC)	n/a	1.39

Table 4: Option 2 Summary Budget and Yield- Years 1-2

Metric	Program Funding from ETA (Years 1-2)	Additional EMAP Budget Funding	Total Option 2 Budget
Total Budget	\$3,119,042	\$2,350,000	\$5,469,042
Gross kWh Savings	\$3,772,110	2,009,942	5,782,052
Net kWh Savings	3,394,900	1,808,948	5,203,848
Peak kW Demand Impact (Gross)	615	916	1,531
Peak kW Demand Impact (Net)	554	824	1,378
Total System Benefit (TSB)	\$4,321,757	\$2,153,739	\$6,475,496
Total Resource Cost (TRC)	1.02	0.67	n/a
Program Administrator Cost (PAC)	1.39	0.92	n/a

The budget breakdowns are shown below.

Table 5: Budget Breakdowns by Option

Cost Category	Option 1: Standard Program (3-year)	Option 2: Emergency MAP Enhanced Program (2-year)	% of Total Budget
Non-Incentives			25%
Administration	\$467,856	\$546,904	10%
Direct Implementation - Non Incentive	\$701,784	\$820,356	15%
Incentives			
Direct Implementation - Incentives	\$3,508,923	\$4,101,782	75%
Total Budget	\$4,678,563	\$5,469,042	100%

Notes on the budget:

1. **Administration**: Administration includes: (i) Administrative Labor, (ii) Reporting, (iii) Data Request Responses, (iv) Ad-hoc support, (v) Platform Setup, and (vi) Targeting Support. In

addition, the Administration and EM&V costs are combined as part of a unified cost with the service provider. The meter-based analysis that determines the payout is the same platform that generates the EM&V reports. As a result, these costs are combined. Peninsula Clean Energy Authority does not plan to factor its own administrative costs into the budget.

- 2. **Direct Implementation Non-Incentive**: Direct Implementation includes: (i) Processing project submittals, (ii) quality control (QA/QC), (iii) Aggregator Outreach, Education/Training of service providers, (iv) Project Management, and (v) Ongoing Savings Tracking.
- 3. Marketing, Education and Outreach: There are no direct marketing costs anticipated to Peninsula Clean Energy. Service providers are responsible for their own marketing and outreach and those costs are captured within the performance-based payouts to those providers. Low administration and marketing costs are inherently encouraged due to the payment structure.

If the budget for the program is allocated at a different level, the yield for the program will be adjusted accordingly.

3.2 Cost Effectiveness

3.2.1 FLEXmarket Benefits for Cost-Effectiveness

Peninsula Clean Energy is committed to deliver a cost-effective program. The FLEXmarket model is highly cost-effective for the state, administrators, and service providers. Overall non-incentive costs will be kept to 25%, far below conventional programs.

Service providers participating in the FLEXmarket have their administrative costs significantly reduced compared to traditional programs, which often involve measurement protocols, assessment tools, and analysis – including spreadsheets with hundreds of rows to fill out, considerable paperwork, heavy post inspections that disrupt the jobsite, and more. The FLEXmarket eliminates most of these costs by streamlining project enrollment and measuring savings at the meter after project installation, rather than burdening service providers and customers with bottlenecks up front. In this sense, the FLEXmarket adds very little administrative cost to service providers' existing business models, and instead offers a new revenue stream tied directly to grid value that was not accessible before.

3.2.2 Program Specific Cost-Effectiveness

For ETA funds, unless greater flexibility is granted by the CPUC, the FLEXmarket program will require service providers to meet cost-effectiveness targets as a prerequisite of payouts including meeting or exceeding the 1.0 TRC threshold over the three-year term, creating a sustainable ongoing program in accordance with the methodologies included in the California Standard Practices manual. If the Emergency MAP Enhanced Program is approved, the FLEXmarket will be deployed to address a novel segment for ETA funded FLEXmarket programs, residential, which may necessitate close monitoring and adaptation of the program over the full term. For this reason, Peninsula Clean Energy plans to report cost-effectiveness metrics annually but targets meeting the 1.0 threshold across the full 3-year portfolio.

For EMAP funds the CPUC has proposed lifting the traditional cost-effectiveness metrics due to the urgency of ensuring grid reliability in the immediate timeframe. Flexibility in cost-effectiveness allows for increased incentives which will motivate project velocity. This is critical to ensure that the extreme consequences and costs of blackouts are prevented, with costs not captured in the traditional cost-effectiveness metrics. For EMAP funds the forecasted TRC is below 1.0 due to anticipated participant cost and adaptation of program design to meet the parameters described in the PD. TSB benefits calculated and forecasted for the program are based on the original, unadjusted TSB avoided cost curve. For this reason, the forecasted Program Administrator Cost⁶ (PAC) is 0.92 for the EMAP funded program.

The projected program results are highly aligned with the State needs for summer reliability as indicated by the forecasted savings load shapes and system benefits shown below.

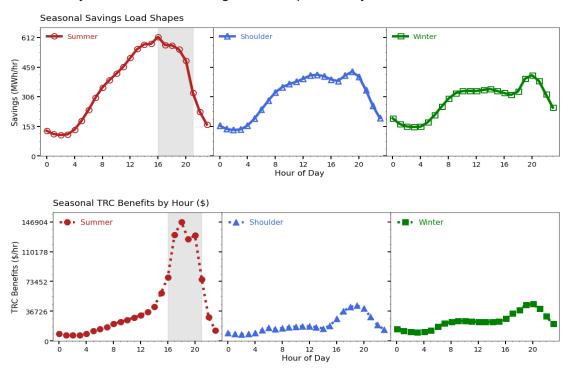


Figure 2: Forecasted Savings Load Shapes and System Benefits

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⁶ The Program Administrator Cost Test measures the net costs of a demand-side management program as a resource option based on the costs incurred by the program administrator (including incentive costs) and excluding any net costs incurred by the participant. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-electricity_and_natural_gas/energy_programs/cpuc-standard-practice-manual.pdf

4 Consistency with Commission Requirements

Peninsula Clean Energy's programs will deliver cost-effective energy savings to our customers while remaining consistent with CPUC goals and supporting Peninsula Clean Energy's Organizational Priorities.

Peninsula Clean Energy has and will continue to prioritize advancing the public interest as aligned with Public Utilities Code sections 399.4 and 381.1. Peninsula Clean Energy's programs are consistent with broader regional or statewide energy efficiency programs and are designed to integrate demand side management activities in a way that will value stack the deployment of distributed energy resources. This will support relevant rulings and decisions such as, but not limited to, D.07-10- 032 and D.12-11-015.

Peninsula Clean Energy's Plan is consistent with the "elect to administer" pathway for CCA program administration as defined in D.14-01-033. Peninsula Clean Energy's plan also conforms to recent guidance from CPUC in D.21-05-031 that directs all PAs to segment their portfolios based on primary program purpose into three categories: resource acquisition, equity, and market support. Peninsula Clean Energy's Market Access Program is focused on resource acquisition. Peninsula Clean Energy's resource acquisition program meets a 1.0 TRC on a forecasted basis as directed by CPUC in D.21-05-032.

D.21-05-031 also directs PAs to report on a new Total System Benefit (TSB) metric,⁸ which Peninsula Clean Energy has estimated for our portfolio and included in our Plan.

Peninsula Clean Energy's programs will fully follow Public Utilities Code Section 399.4 requirements that participants comply with applicable permitting requirements. Participating contractors will be required to pull permits as required by code. Peninsula Clean Energy will comply with Section 399.4(b)(1) by requiring all installing contractors or non-residential and residential customers who receive a rebate or incentive to certify that they have complied with Title 24.

Peninsula Clean Energy's Plan will show that it complies with Section 399.4(c) by prioritizing local and regional interests in our program portfolio design, and by proposing to incorporate local governments, community-based organizations, and energy efficiency service providers as participants in program implementation where appropriate.

Peninsula Clean Energy's proposed Market Access Program supports the mandate set forth in Section 399.4(d)(2) by providing incentives that are linked to measured energy savings. Peninsula Clean Energy programs will fulfill the Section 399.4 requirement that incentives be based on values and methodology stated in customer agreements and derived from measured results. Peninsula Clean Energy understands that cost-effectiveness calculations require specific inputs: costs (project costs and incentives) and benefits (energy savings). Peninsula Clean Energy is

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⁷ D.21-05-031 OP 2 at 81

⁸ Ibid, OP 1 at 80

committed to accurately forecasting portfolio averaged incentive values to ensure costeffectiveness calculations are accurate, achievable, and based on realistic and timebound values.

Compliance with Section 399.4(d)(2) will also support the goals noted in D.07-10-032 for overcoming barriers to more widespread adoption of energy efficiency and capturing longer- term savings, and the roadmap for energy efficiency beyond 2020 as established in the subsequent California Long-Term Energy Efficiency Strategic Plan (Strategic Plan) adopted in D.08-09-040.

By acting as point of contact for our customers, Peninsula Clean Energy will simplify the goals set forth in Section 381.1 ensuring that local and statewide goals are met, such as those associated with Senate Bill 350. The proposed Plan also supports the State's goals to decarbonize California as detailed in the 2021 Integrated Energy Policy Report ("IEPR") Final Scoping Order. The California Energy Commission is committed to advancing building decarbonization incentive programs, while assessing existing and future policies and programs in an equitable manner. Peninsula Clean Energy's Plan aligns with such goals as we enroll customers into Energy Efficiency incentive programs that save customers money and reduce emissions.

5 Accommodation of Statewide and Regional Programs

5.1 Collaboration with Existing Programs

Peninsula Clean Energy is a public agency and is committed to supporting the best interests of our customers and constituents. To that end, Peninsula Clean Energy will consistently recommend leveraging statewide and regional programs when and where they are staged to provide the best service to our customer base.

Examples of Peninsula Clean Energy coordination with other state and regional programs include:

- Heat Pump Water Heaters: Peninsula Clean Energy's residential Heat Pump Water Heater incentives are directly integrated with BayREN's Home+ program and will be on its forthcoming On-Bill Finance Program. Customers can access both BayREN and Peninsula Clean Energy incentives through a unified BayREN Home+ application process which reduces complexity for customers and contractors.
- 2. **Home Upgrade Program**: Peninsula Clean Energy program administrators coordinate with programs such as the PG&E Energy Savings Assistance and Peninsula Minor Home Repair programs to deliver the maximum benefits for low-income homeowners.
- 3. Used EV Incentives: Peninsula Clean Energy program administrators guide low-income applicants to the state-wide Clean Vehicle Assistance Program and Bay Area Air Quality Management District Clean Cars for All program for incentives, accepts customer verifications from those programs, and offers added stackable incentives.
- 4. EV Charging Incentives: Peninsula Clean Energy co-funds the CALeVIP incentive program with the California Energy Commission and provides a separate complementary incentive program for segments not well served by CALeVIP. Peninsula Clean Energy technical assistance administrators provide technical guidance including selecting and applying for one or more incentive programs to best benefit customers.

Additional cooperation includes data sharing with PG&E on gas data, efficiency projects as well as participation in working groups on program coordination.

5.2 Coordination for Non-Dual Enrollment

Peninsula Clean Energy's Market Access Program has the potential to overlap with programs offered by both BayREN and PG&E. To address this potential concern Peninsula Clean Energy will make every effort to differentiate our locally administered program from PG&E's and BayREN's. In addition, Peninsula Clean Energy will continue to work to bring regional and statewide programs to our constituents as noted above.

Peninsula Clean Energy plans to coordinate closely with BayREN and PG&E to encourage collaboration between selected third-party vendors – particularly those whose programs have not yet launched – and to minimize customer confusion to the greatest extent possible.

Peninsula Clean Energy will provide program delivery information to both organizations through the assigned representatives. Peninsula Clean Energy will also provide both organizations all necessary information regarding locally funded programs and statewide and regional program referrals. Peninsula Clean Energy plans to maintain strong partnerships to collectively direct customers to the very best service, while reducing confusion at every step.

In the instances of program overlap with existing regional programs (for example, BayREN Home+ and the PG&E commercial pay-for-performance program), Peninsula Clean Energy plans to work directly with program staff at each program administrator to develop systems for verifying that customers have not dual enrolled in programs (preliminary discussions have already been held with BayREN). These processes are expected to include the following:

- 1. **Provider Education and Certification**: In all cases, service providers will be educated on the range of available programs and must certify that their projects are not enrolled in or receiving incentives for multiple programs.
- 2. Efficiency Customer Lists: For single-family efficiency and electrification, processes are already in place to ensure dual-enrollment is not occurring on potentially overlapping residential incentives. This is being handled through Peninsula Clean Energy's incentive processing system's existing integration with BayREN's Home+ program administrator's system. These existing processes can be extended to ensure the FLEXmarket does not pay incentives on projects that have already received incentives through existing programs by comparing project lists before FLEXmarket payments are issued. The same approach will apply to other segments.
- 3. **Peak and Rule 24**: For load control strategies, we will compare project lists against Rule 24 customer lists and verify there is not program overlap.

Peninsula Clean Energy will coordinate with PG&E and BayREN on an ongoing basis to ensure that both PAs understand what Peninsula Clean Energy is offering to our customers, and to ensure Peninsula Clean Energy's information on PG&E/BayREN programs is up to date. This will enable all PAs to help navigate which offerings may be best suited to serve potential customers. In the instances where Peninsula Clean Energy receives program applications from non-CCA customers who are not eligible for enrollment in the CCA product, Peninsula Clean Energy will work with BayREN and/or PG&E staff to help those customers find the best suited program for their needs.

6 Auditing and Reporting

6.1 Audits and Financial Controls

Peninsula Clean Energy performs annual financial audits using generally accepted accounting principles specific to government entities. These reports are publicly available and are currently accessible on our website. As a Joint Powers Authority, once Peninsula Clean Energy's Program Plan is certified and programs begin, current auditing procedures will be extended to include program administration data. This will ensure appropriate accounting controls for program funds.

In keeping with the requirements under the Governmental Accounting Standards Board Statement No. 34, the management's discussion and analysis will be included in the report to supplement the basic financial statements. To evaluate the effective use of resources and management procedures, Peninsula Clean Energy will also complete all regulatory filings and reports as directed by CPUC staff. These documents will provide the results of program efforts that can be evaluated against the performance metrics identified by Peninsula Clean Energy, including adherence to cost-effectiveness requirements.

Peninsula Clean Energy will take all necessary actions to remain compliant with additional auditing and reporting requirements.

6.2 Evaluation, Measurement and Verification Protocols

Peninsula Clean Energy will contract with an independent third-party to perform process evaluation or market studies to assess the effectiveness of program implementation activities and evaluate challenges and opportunities in the Peninsula Clean Energy service territory. The studies will be performed according to the Commission oversight process of IOU Evaluation Measurement and Verification (EM&V) projects as detailed in the Energy Efficiency EM&V Plan. Peninsula Clean Energy will be subject to the same protocol as IOUs for CPUC-directed impact evaluations to determine actual energy savings, benefits, costs, and goal achievement as directed in D. 05-01-055.

The EM&V methods are open source and publicly available. Savings will be determined through the CalTRACK 2.04 Hourly methods executed via the OpenEEmeter (both CalTRACK and the OpenEEmeter codebase are curated within Linux Foundation Energy), along with the GRIDMeter methods for comparison group adjustment. The CalTRACK methods quantify the weather normalized, occupancy-dependent change in energy use for each hour compared to past usage. Background on the development of CalTRACK and the OpenEEmeter can be accessed through www.caltrack.org.

Evaluations directed by Peninsula Clean Energy will focus on market conditions and needs, program design flaws or opportunities for improvement, and solutions to address those challenges. Peninsula Clean Energy will avoid duplication and build on existing efforts by referring to existing EM&V studies led by IOUs and the CPUC to:

Compare Peninsula Clean Energy's program to other similar program offerings.

- Evaluate successes, failures, and replicability of the program.
- Evaluate the unique challenges and opportunities of the Peninsula Clean Energy market and determine viable solutions.
- Compare ex ante and ex post data.
- Assess value to supply-side planning and costs.

7 Performance Metrics

The overall performance target for the program is delivery of the following assuming proposed budgets of \$4,678,563 and \$5,469,042 respectively:

• Term (years) 3 2

Net kWh Savings 5,092,349 5,203,848

Peak kW Demand Impact (Net)
 831
 1,378s

The following Performance Metrics will indicate progress toward meeting the goals and objectives of the CPUC objectives, especially for summer reliability, and Peninsula Clean Energy goals. The specific objective of Public Utilities Code Section 381.1(f) that each metric addresses (if applicable) is included in parenthesis.

- Program energy savings (381.1(f)(2))
- Tracking the Program cost-effectiveness annually (381.1(f)(2))
- Number of projects referred to other EE or other DER programs (381.1(f)(3))
- Total participating customers by segment (381.1(f)(4))
- Percentage of customers who receive electrification measures
- EM&V process, tracking, and incorporation into program design (381.1(f)(5))
- EM&V of project energy savings forecasts and energy savings realized (381.1(f)(5))
- Market penetration of FLEXmarket program
- Supply-side generation cost reductions