



AGENDA
BOARD OF DIRECTORS MEETING
THURSDAY, OCTOBER 3, 2019
8:45 A.M.

50 Santa Rosa Avenue, Fifth Floor, Santa Rosa, California

I. CALL TO ORDER

II. BOARD OF DIRECTORS CONSENT CALENDAR

1. Approve August 1, 2019 minutes of the SCPA Board of Directors meeting (pg. 5)
2. Ratify the Continued Use of Schedules E-19 and E-20 Option R Rates Effective September 1, 2019 (pg. 11)
3. Adopt a New Commercial Rate Structure and Rates for the Remainder of the 2019/2020 Fiscal Year (pg. 15)
4. Adopt the Recommended Contract Goals for SCP's CEO (pg. 21)
5. Adopt Resolution Attesting to the Accuracy of SCP's 2018 Power Source Disclosure Report for CleanStart (pg. 23)

III. BOARD OF DIRECTORS REGULAR CALENDAR

6. Receive Internal Operations and Monthly Financial Report and Provide Direction as Appropriate (pg. 35)
7. Receive Legislative and Regulatory Updates and Provide Direction as Appropriate (pg. 89)
8. Award Construction Contract for the Advanced Energy Center to Low Bidder, Agbayani Construction Corporation and Waive Immaterial Bidding Irregularities; Adopt CEQA Exemption Resolution; and Reject Bid Protest from Arntz Builders, Inc. (pg. 95)
9. Discussion and Provide Direction as Appropriate on the Proposed Draft Successor Program to SCP's NetGreen Program (pg. 109)
10. Approve and Delegate Authority to the Chief Executive Officer to Execute a Contract with the Center for Sustainable Energy to implement a Sonoma and Mendocino County CALeVIP Project in 2020 (pg. 131)

IV. PUBLIC COMMENT ON MATTERS NOT LISTED ON THE AGENDA

Comments are restricted to matters within the Board jurisdiction. Please be brief and limit comments to three minutes.

V. BOARD MEMBER ANNOUNCEMENTS

VI. CLOSED SESSION

The Board of Directors of the Sonoma Clean Power Authority will consider the following in closed session:

11. Conference with Legal Counsel - Existing Litigation (Paragraph (1) of subdivision (d) of Section 54956.9) Name of Case: In re PG&E Corporation, Debtor; Chapter 11; US Bankruptcy Court, Northern District of California San Francisco Division, Case No. 19-30088(DM) and Case No. 19-300889(DM) (pg.137)

VII. ADJOURN

DISABLED ACCOMMODATION: If you have a disability which requires an accommodation, an alternative format, or requires another person to assist you while attending this meeting, please contact the Clerk of the Board at (707) 890-8491, as soon as possible to ensure arrangements for accommodation.

COMMONLY USED ACRONYMS AND TERMS

AER	Advanced Energy Rebuild (A program that helps homeowners affected by the October 2017 firestorms rebuild energy efficient, sustainable homes).
CAC	Community Advisory Committee
CAISO	California Independent Systems Operator
CAM	Cost Allocation Mechanism
CCA	Community Choice Aggregation
CEC	California Energy Commission
CleanStart	SCP's default service
CPUC	California Public Utility Commission
DER	Distributed Energy Resource
ERRA	Energy Resource Recovery Account
EverGreen	SCP's 100% renewable, 100% local energy service
Geothermal	A locally-available, low-carbon baseload renewable resource
GHG	Greenhouse gas
GRC	General Rate Case
IOU	Investor Owned Utility (e.g., PG&E)
IRP	Integrated Resource Plan
JPA	Joint Powers Authority
LSE	Load Serving Entity
MW	Megawatt (Power = how fast energy is being used at one moment)
MWh	Megawatt-hour (Energy = how much energy is used over time)
NEM	Net Energy Metering
NetGreen	SCP's net energy metering program
PCIA	Power Charge Indifference Adjustment (<i>This fee is intended to ensure that customers who switch to SCP pay for certain costs related to energy commitments made by PG&E prior to their switch.</i>)
ProFIT	SCP's "Feed in Tariff" program for larger local renewable energy producers
PSPS	Public Safety Power Shutoff - a term used when it may be necessary for PG&E to turn off electricity for public safety when gusty winds and dry conditions, combined with a heightened fire risk, are forecasted
PV	Photovoltaics for making electric energy from sunlight
RA	Resource Adequacy - a required form of capacity for compliance
REC	Renewable Energy Credit - process used to track renewable energy for compliance in California.
SCP	Sonoma Clean Power
TOU	Time of Use, used to refer to rates that differ by time of day and by season

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**DRAFT MEETING MINUTES
BOARD OF DIRECTORS MEETING
THURSDAY, AUGUST 1, 2019
8:45 A.M.**

50 Santa Rosa Avenue, Fifth Floor, Santa Rosa, California

I. CALL TO ORDER

Chair Landman called the meeting to order at 8:46am

Board members present: Chair Landman and Members Bagby, Glass (alternate), Hopkins, King, Okrepkie, and Torrez

Staff present: Geof Syphers, Chief Executive Officer; Michael Koszalka, Chief Operating Officer; Stephanie Reynolds, Director of Internal Operations; and Jessica Mullan, General Counsel

II. BOARD OF DIRECTORS CONSENT CALENDAR

1. Approve July 11, 2019 minutes of the SCPA Board of Directors meeting
2. Approve Amended and Restated Power Purchase Agreement with Malbec under ProFIT Program
3. Approve Amended Contract with TLCD Architecture for Advanced Energy Center
4. Adopt a Resolution to Allow for the Sharing of Certain Information Disclosed in Closed Session with Member City and Town Councils and the County Boards of Supervisors and their Respective Legal Counsels

Public comment: none

August 1, 2019 Board of Directors Consent Calendar passed with Directors King and Hopkins abstaining

III. BOARD OF DIRECTORS REGULAR CALENDAR

5. Receive Internal Operations and Monthly Financial Report and Provide Direction as Appropriate

Director of Internal Operations Stephanie Reynolds detailed current open positions for a Programs Manager and Commercial Accounts Specialist, and provided a 431 E St. headquarters building update. Chief Executive Officer Geof Syphers updated the Board on a recent communication with the County of Lake regarding their interest in community choice. Director Reynolds then noted the recent adoption of EverGreen by the City of Sebastopol for their municipal accounts and the County of Sonoma's funding allocation for switching select accounts to EverGreen. Director Reynolds' marketing update detailed the following events in which SCP participated: Cotati Kid's Day,

Mendocino County/Good Farm Fund Midsummer Night's Feast, Sonoma Farmers Market, and sponsorship of the Sonoma County Fair's Hall of Flowers. Chief Operating Officer Michael Koszalka updated the Board of total number of eligible accounts in SCP's service territory. Programs Manager Chad Asay then gave an overview of current status on the LEAD Locally grant project.

Director Rogers (Alternate) arrived at approx. 8:59am.

Director Hopkins asked how Board members can assist with EverGreen enrollment efforts and requested staff provide a media kit for outreach. Chair Landman directed staff to develop an action plan.

Director Reynolds noted that there are no Monthly Financials to review this month as the end of year fiscal audit is currently underway. CEO Syphers thanked Director of Customer Service Erica Torgerson for getting staff invited to a recent PG&E Emergency Workshop; he discussed one of the topics at the workshop, which included the fact that Sonoma and Mendocino Counties could be affected by planned power outages for significant periods of time.

CEO Syphers then advised the Board that four CCAs in the most fire-prone areas of the state, including SCP, have made an informal agreement to share office space in the case of long-term outages. He then detailed a recent special feature on SCP by local reporter Mary Fricker in the Sonoma West newspaper.

Director Rogers noted that the City of Santa Rosa and the County of Sonoma are hosting workshops on de-energization events. Director Hopkins detailed fire risks in her District and her support of microgrids for continuity of critical services during a de-energization event. CEO Syphers noted that shutoffs could have major financial implications to the broader economy.

Public comment:

Speaker name unknown, thanked SCP for the organization's work, and then detailed how his company installs heat pump heaters that can be used for energy storage purposes.

Paul Brophy, advised the Board to consider risks from earthquakes in addition to fires.

6. Receive Legislative and Regulatory Updates and Provide Direction as Appropriate

Katherine Brandenburg, SCP Lobbyist, detailed the recent activity at the Capitol. Of the nine bills that SCP was actively working on, five were amended to a point where SCP found acceptable, killed, or held until the next session. She then detailed the following bills: AB 56 (E. Garcia) – Central Procurement; SB 350 (Hertzberg) – Central Buyer; SB155 (Bradford) – Integrated Resource Plan; and AB 1362 (O'Donnell) – CCA Code of Conduct.

CEO Syphers recounted SB 1054 (Holden) which passed both houses and was signed by the Governor on July 12th; the bill creates a \$21 billion insurance fund to address future wildfire liabilities, with portions of the premiums to be paid by ratepayers and shareholders. CEO Syphers then discussed SB 520 (Hertzberg – Provider of Last Resort) and SCP's concerns with the bill.

Director King requested an updated report on SB 1054 as this item progresses. CEO Syphers then detailed a recent CPUC workshop on PG&E rate increases

as well as a meeting with PG&E CEO Bill Johnson in which CEO Johnson asked that CCAs explore the possibility of PG&E exiting the power generation market. Director Okrepkie asked about the appointment of new CPUC President Marybel Batjer; CEO Syphers noted her reputation as a strong manager. Chair Landman asked about SB 1054 and intervenor compensation with groups like The Utility Reform Network (“TURN”); CEO Syphers noted that TURN reviews actions of investor owned utilities and some of the language in SB 1054 is concerning because it could expand the amount of money that SCP ratepayers contribute to intervenor review of CCAs, which is not valuable given CCAs are owned by our ratepayers and governed in open public meetings by elected and accountable public officials.

Public comment: none

7. Receive Update on Alternate Meeting Date for November Board of Directors Meeting and Provide Direction as Appropriate

Director Reynolds stated staff became aware that the November meeting date conflicts with the annual CalCCA conference and requested it be rescheduled to November 14th

Public comment: none

The Board provided direction to staff to convene a special meeting on November 14, 2019.

8. Receive Update Regarding Opening of Recruitments for Community Advisory Committee Openings and Recommendation that the Board Appoint an Ad Hoc Committee to Assist with Selection Process

Director Reynolds recounted past recruitment efforts for Community Advisory Committee openings and detailed how the Board has historically appointed an ad hoc to review applicants and make a recommendation to the full Board.

Public comment: none

Motion to appoint Directors Hopkins, King, Okrepkie, and Slayter to an ad hoc by Director Bagby

Second: Director Rogers

Motion passed: 8-0-0

9. Approve Bill Protection for Customers Transitioned onto the E-TOU-C Rate for a Maximum of 12 Months per Customer

Director of Customer Service, Erica Torgerson, recounted discussions with the Board along with staff’s recommendation that the Board approve bill protection for customers transitioned to the E-TOU-C rate. She noted the anticipated cost for bill protection is expected to be \$11.86 per transitioned customer for a total of \$184,914, and most of this financial impact would be in SCP’s Fiscal Year 2021-2022 budget. CEO Syphers emphasized that this is a one-time cost and will not require a multi-year financial commitment.

Public comment:

Dick Dowd, Community Advisory Committee (“CAC”) Chair, noted the CAC’s unanimous support for this item.

Jay Golden, Sebastopol resident, asked about impacts to EV-TOU rates.

Motion to approve bill protection for customers transitioned onto the E-TOU-C Rate for a maximum of 12 months per customer by Director King

Second: Director Rogers

Motion passed: 8-0-0

IV. PUBLIC COMMENT FOR MATTERS NOT LISTED ON THE AGENDA

Mary Fricker, local journalist, advised the Board that her article on SCP is being published in four local newspapers and expressed her gratitude to CEO Syphers and Director of Public Affairs & Marketing Kate Kelly for their assistance.

V. CLOSED SESSION

The Board of Directors of the Sonoma Clean Power Authority will consider the following in closed session:

10. Public Employee Performance Evaluation – Chief Executive Officer (Gov’t Code Section 54957); Public Employee Labor Negotiations – Chief Executive Officer Position. Authority negotiators: Chair, Mark Landman, Vice Chair, Patrick Slayter and General Counsel, Jessica Mullan (Govt. Code Section 54957.6)

Directors Rogers and Okrepkie left at approximately 11:16am.

The Board reconvened from Closed Session at approximately 11:17am and Chair Landman stated that the Board unanimously approved CEO Syphers merit increase and provided direction to staff on bringing a discussion forward on the CEO’s goals at the next Board meeting.

11. Conference with Legal Counsel - Existing Litigation (Paragraph (1) of subdivision (d) of Section 54956.9) Name of Case: In re PG&E Corporation, Debtor; Chapter 11; US Bankruptcy Court, Northern District of California San Francisco Division, Case No. 19-30088(DM) and Case No. 19-300889(DM)

This item was not considered as announced by Chair Landman prior to convening Closed Session.

VI. BOARD MEMBER ANNOUNCEMENTS

Director Hopkins announced that she and Director Bagby were appointed to an ad hoc by the Northern Sonoma County Air Pollution Control District to explore biomass generation opportunities.

Director King stated that the Petaluma City Council established a Climate Commission, with appointments to be made in early 2020. He also announced

that the City hosted a workshop on REACH codes and that Council's direction was to establish REACH code, which would include a requirement that all new residential construction be all-electric; he thanked Senior Programs Manager Rachel Kuykendall for her assistance throughout this process. Finally, he noted that Petaluma's City Manager is reviewing a cost analysis of switching municipal accounts to SCP's EverGreen service, and that the City is considering purchasing solar arrays for all municipal buildings.

VII. ADJOURN

Chair Landman adjourned the meeting at approximately 11:22am.

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Staff Report – Item 02

To: Sonoma Clean Power Authority Board of Directors

From: Erica Torgerson, Director of Customer Service
Rebecca Simonson, Power Services Manager

Issue: Ratify the continued use of Schedules E-19 and E-20 Option R rates effective September 1, 2019.

Date: October 3, 2019

Requested Board Action:

Ratify the continued use of Schedules E-19 and E-20 Option R rates adopted under the CEO's emergency rate making authority at a 2.0% total bill savings compared to PG&E effective September 1, 2019.

Background:

The Board approved the SCP Customer Rates for September 1, 2019 at the July 11, 2019 meeting based on approved PG&E and PCIA rates (AL 5573-E effective July 1, 2019). Since then, PG&E implemented a rate revision (AL 5573-E-A) to Option R of Schedules E-19 and E-20 effective July 1, 2019 as a result of identified errors. PG&E identified that the generation rates for all Option R rates of Schedule E-19 and E-20 were found to be in error. This error was caused by inadvertently imputing additional revenue in the process of designing the rates. As a result, the generation energy rates, and total energy rates were too high.

Per Section 4.5.2.1.1 of SCPA's Joint Powers Agreement,

"...the Chief Executive Office may change any rate for power sold by the Authority or any charge for services provided by the Authority if (a) the need for the change arises from...(ii) a change in rates or charges imposed on the Authority or its customers by PG&E, the CPUC, or any other regulatory agency...; and (b) the Chief Executive Officer determines, following consultation with the Chair of the Board of Directors, that the change is

reasonably necessary for budgetary reasons or to keep the Authority's rates and charges competitive. Changes in rates or charges made by the Chief Executive Officer under this Section shall be brought to the Board of Directors at the next scheduled meeting for consideration and shall expire after 90 days unless ratified by the Board of Directors."

The CEO consulted the Chair and Vice Chair of the Board of Directors on August 13, 2019 to update Schedules E-19 and E-20 Option R rates to go into effect on September 1, 2019 at a 2% total bill savings compared to PG&E and the decision was made to update the rates.

The updated rates are as follows and were effective September 1, 2019:

		SCP Rates 2% savings		Revision vs Board approved	
Rate Schedule	Unit/Period	Approved September 1, 2019 Rate (\$/kWh)	Updated Rate (\$/kWh)	\$ difference	% difference
E-19-S Option R	Summer Peak	\$ 0.29756	\$ 0.27313	-0.02443	-8.21%
	Summer Part Peak	\$ 0.13382	\$ 0.10938	-0.02444	-18.26%
	Summer Off-Peak	\$ 0.06810	\$ 0.04366	-0.02444	-35.89%
	Winter Partial Peak	\$ 0.09177	\$ 0.06734	-0.02443	-26.62%
	Winter Off-Peak	\$ 0.07550	\$ 0.05107	-0.02443	-32.36%
E-19-P Option R	Summer Peak	\$ 0.28008	\$ 0.25884	-0.02124	-7.58%
	Summer Part Peak	\$ 0.12090	\$ 0.09965	-0.02125	-17.58%
	Summer Off-Peak	\$ 0.05900	\$ 0.03774	-0.02126	-36.03%
	Winter Partial Peak	\$ 0.08060	\$ 0.05934	-0.02126	-26.38%
	Winter Off-Peak	\$ 0.06575	\$ 0.04451	-0.02124	-32.30%
E-19-T Option R	Summer Peak	\$ 0.27760	\$ 0.25191	-0.02569	-9.25%
	Summer Part Peak	\$ 0.12462	\$ 0.09893	-0.02569	-20.61%
	Summer Off-Peak	\$ 0.06322	\$ 0.03753	-0.02569	-40.64%
	Winter Partial Peak	\$ 0.08390	\$ 0.05820	-0.02570	-30.63%
	Winter Off-Peak	\$ 0.06971	\$ 0.04401	-0.02570	-36.87%
E-20-S Option R	Summer Peak	\$ 0.27148	\$ 0.24777	-0.02371	-8.73%
	Summer Part Peak	\$ 0.12519	\$ 0.10149	-0.02370	-18.93%
	Summer Off-Peak	\$ 0.06356	\$ 0.03986	-0.02370	-37.29%
	Winter Partial Peak	\$ 0.08579	\$ 0.06208	-0.02371	-27.64%
	Winter Off-Peak	\$ 0.07052	\$ 0.04682	-0.02370	-33.61%
E-20-P Option R	Summer Peak	\$ 0.28628	\$ 0.26569	-0.02059	-7.19%
	Summer Part Peak	\$ 0.12177	\$ 0.10118	-0.02059	-16.91%
	Summer Off-Peak	\$ 0.06046	\$ 0.03987	-0.02059	-34.06%
	Winter Partial Peak	\$ 0.08228	\$ 0.06169	-0.02059	-25.02%
	Winter Off-Peak	\$ 0.06729	\$ 0.04670	-0.02059	-30.60%
E-20-T - Option R	Summer Peak	\$ 0.28465	\$ 0.26030	-0.02435	-8.55%
	Summer Part Peak	\$ 0.11939	\$ 0.09504	-0.02435	-20.40%
	Summer Off-Peak	\$ 0.06052	\$ 0.03617	-0.02435	-40.23%
	Winter Partial Peak	\$ 0.08082	\$ 0.05647	-0.02435	-30.13%
	Winter Off-Peak	\$ 0.06688	\$ 0.04253	-0.02435	-36.41%

Fiscal Impact

Staff does not believe the fiscal impact warrants a budget adjustment at this time, but the update does result in a projected loss of revenue of \$44,246 over the 2019/2020 fiscal year.

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Staff Report – Item 03

To: Sonoma Clean Power Authority Board of Directors

From: Erica Torgerson, Director of Customer Service

Issue: Adopt a New Commercial Rate Structure and Rates for the Remainder of the 2019/2020 Fiscal Year

Date: October 3, 2019

Requested Action:

Adopt a new commercial rate structure and corresponding rates that preserve a 2.0% savings for customers.

Background:

In 2016, Pacific Gas & Electric (PG&E) filed an application with the California Public Utilities Commission (CPUC) to “Revise its Electric Marginal Costs, Revenue Allocation and Rate Design” (A. 16-06-013). One of the changes proposed was to shift commercial and agricultural peak rates to later in the afternoon and early evening and a second was to shorten the summer season from six months to four months.

These changes closely mirror changes recently approved by SCP’s Board of Directors with the Time-of-Use (TOU) transition of residential customers to TOU rates with a late afternoon, early evening peak period. In addition, the majority of PG&E’s residential rates will also move to a shorten four-month summer season starting in October.

The reasons for the shift in peak period are the same as they were for the residential transition. Retail rates need to better approximate the changes in wholesale costs throughout the day in order to make customer investments in batteries, targeted evening-time efficiency measures, and demand response programs work. Without these changes, climate and rate goals would be harmed because incentives would remain tilted toward net production of mid-day solar rather than evening release of stored energy and other measures to offset high-cost and high-emission energy.

PG&E Implementation:

On November 1, 2019, PG&E will close all current commercial and industrial rates to new customers. These rates include: A-1, A-6, A-10, E-19, and E-20 and their variations. New customers requesting to start service will be placed on a rate under PG&E's new "B" rate structure for "Business" customers.

Table 1.

Current C&I Rates	New C&I Rates	Customer Type
A-1	B-1	Business Low Use
A-6	B-6	Business Low Use Alternative
A-10	B-10	Business Medium Use
E-19	B-19	Business Medium-High Use
E-20	B-20	Business High Use

The new "B" rate structure will have a peak period from 4pm-9pm every day and a partial peak period from 2pm-4pm and 9pm-11pm every day. The remaining hours are off-peak. See Figure 1 below for how it compares to the current Commercial and Industrial (C&I) rate structure.

Figure 1.



Another addition, although not shown above, is a super-off peak period that will be from 9am-2pm every day from March through May only.

The "B" rates have a shorter summer season compared to the current C&I rates. The "B" rate structure has a summer season that only includes June, July, August, and September. Summer season rates are typically higher than winter season rates. In addition, the TOU periods are the same for winter and

summer seasons (with the exception of the super-off peak period) and every day (including weekends).

Optional (Opt In) Period:

The new “B” rates will remain optional for current customers for one year, then will become mandatory in November 2020. At that time, PG&E will shift all C&I customers to the new “B” rates with the exception of certain solar customers based on the customer’s Permission To Operate date (more below).

Figure 2.



Commercial & Industrial Customer Communication & Support:

Figure 2 outlines PG&E’s communication plan for customers. SCP will also include information on our website and for our call center.

Pre-Transition Communication

- Tentative Opt-In outreach to benefitters (direct mail/email)
- Pre-transition education, ~60 days prior to mandatory transition (direct mail/email)
- Pre-transition notice, ~30 days prior to mandatory transition (direct mail/email)
- Most impacted customers receive additional touch (person-to-person)

Post-Transition Customer Communication

- Customer receives first bill on new rates
- On-bill messaging indicates that customer has transitioned and reinforces information about new time periods

Customer Support

- PG&E website updated to include information about transition and new Time-of-Use periods
- PG&E’s “Your Account” platform allows customers to run rate comparison and enroll in new rate

- PG&E Business Customer Service Center hold messaging and CSRs will inform customers about upcoming transition to new time-of-use periods
- Assigned Reps available as a resource for their defaulting customers
- Industry and community outreach partnerships

PG&E's Preliminary Estimates of Customer Impact:

PG&E provided the following preliminary analysis of how the mandatory transition would impact customers across their service territory. As shown in Table 2, the structure should be price neutral or a benefit for most customers, which will help with customer acceptance.

Table 2.

Benefiter	Neutral	Impacted	Most Impacted
22%	77%	<1%	<1%
Sees more than a 5% annual decrease in bills	Sees between a 4.9% decrease and a 2% increase in annual bills on the new time periods	Sees between a 2% and \$100 annual increase and a 7% annual and \$100 increase in bills on the new time periods	C&I customers who see more than a 7% and \$500 annual increase on the new time periods

Time-of-Use Period Grandfathering Terms for Solar Customers:

Based on a settlement of parties, the CPUC issued Decision 17-01-006. This Decision allows solar customers up to 10 years of grandfathering based the customer's Permission To Operate date for customers who completed an interconnection application by July 31, 2017 (non-public agencies) and December 31, 2017 (public agencies). The duration of grandfathering period shall not continue beyond July 31, 2027 for non-public agencies and December 31, 2027 for public agencies.

Although the Time-of-Use (TOU) periods will be grandfathered, PG&E's rates (and subsequently SCP's rates) will adjust to reflect underlying costs starting in March 2021. The effect of this will lessen the difference between peak and off-peak prices. Existing rates with the highest TOU differentials (A-6 and Option R of E-19 and E-20) have "glidepaths" previously approved by the CPUC.

Rates:

PG&E has stated it intends to file the draft "B" rate tariff sheets on September 11th with illustrative prices. It is anticipated by staff (based on past

experience) the final PG&E prices (retail rates) will not be filed until October 31st, effective November 1st.

Staff Recommendation for SCP in Response to PG&E Rate Changes:

Staff requests that the Board of Directors adopt the new commercial rate structure (“B” rates) and corresponding rates for SCP customers as well, which will provide a 2.0% total bills savings for customers compared to the rates PG&E puts into effect on November 1st. This will maintain the savings approved by SCP’s Board of Directors on July 11, 2019 that went into effect on September 1st for SCP customers.

Fiscal Impact:

It is anticipated by staff, the new rates will not have much of a financial impact for SCP for this fiscal year as they do not become mandatory until November 2020. Before the rates and structure become mandatory for customers, SCP will go through another budget and rate cycle to fully evaluate how much the shift in peak period will affect customer usage and conservation during the peak period.

Up Next:

Agricultural customers also be transitioning to later peak periods starting first quarter of 2020. Staff will update the Board on that change in January 2020.

Community Advisory Committee Review:

The Community Advisory Committee unanimously recommended that the Board adopt staff’s requested action at their September 17, 2019 meeting.

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Staff Report – Item 04

To: Sonoma Clean Power Authority Board of Directors
From: Geof Syphers, CEO
Issue: CEO Contract Goals
Date: October 3, 2019

REQUESTED BOARD ACTION:

Adopt the recommended contract goals for SCP's CEO.

BACKGROUND

Each year the Board of Directors evaluates the CEO's performance relative to a set of goals it adopted one year before. The Board recently completed its performance evaluation of the CEO at the August 1, 2019 board meeting, and asked the CEO to revise his proposed contract goals based on their feedback.

The resulting recommended contract goals are for the period ending June 30, 2020:

1. Ensure all customer rates are set annually to provide savings on total electric bills, or otherwise remain competitive for all customer classes relative to PG&E's bundled service.
2. Increase total number of participating customer accounts by 0.25% from the count on October 1, 2019.
3. Increase the total EverGreen monthly load by 15% over the amount in October 2019.

4. Introduce a detailed plan, legislation or regulatory proposal to establish known customer exit fees which SCP can plan around when making long-term procurement decisions.
5. Secure an investment-grade credit rating for SCP.
6. Sign construction contracts and begin construction on SCP's headquarters project and the Advanced Energy Center.
7. Propose a program expansion of the Advanced Energy Rebuild to offer incentives to new homes outside of the fire-affected areas which go far beyond current energy code.
8. Ensure the most recently published and verified emissions factor for CleanStart is below the target adopted in SCP's Integrated Resource Plan.
9. Complete a feasibility analysis of the costs and benefits of providing service to Lake County, and provide briefings of the results to both the SCP Board and to Lake County's Board of Supervisors and the incorporated cities of Lakeport and Clearlake.



Staff Report – Item 05

To: Sonoma Clean Power Authority Board of Directors

From: Carole Hakstian, Risk and Regulatory Compliance Officer

Issue: Adopt Resolution Attesting to the Accuracy of SCP’s 2018 Power Source Disclosure Report for CleanStart

Date: October 3, 2019

Recommendation:

Staff recommends that the Sonoma Clean Power Authority (“SCP”) Board of Directors (“Board”) adopt a resolution approving the 2018 annual Power Source Disclosure Report for SCP’s CleanStart product and attesting to its veracity. The resolution is attached to this staff report as Attachment A and the 2018 Power Source Disclosure Report is Exhibit 1 to Attachment A.

Background:

The California Public Utilities Code requires all retail sellers of electric energy, including SCP, to disclose “accurate, reliable, and simple-to-understand information on the sources of energy” that are delivered to their respective customers each year. SCP submitted its 2018 Annual Power Source Disclosure Report (Exhibit 1 to Attachment A) by the June 1, 2019 deadline this year, which includes specified power purchases, resales, and self-consumption of energy by fuel type. SCP’s 2018 Annual Power Source Disclosure Report includes information that is incorporated into SCP’s annual Power Content Label (PCL), which is mailed to SCP customers in the third quarter each year, posted on SCP’s [website](#) and the California Energy Commission (“CEC”) posts the labels on its [website](#).

Beginning in 2017 (for the prior 2016 reporting year), the CEC required SCP and other retail sellers of electricity provide the CEC with an independent audit report verifying the specific purchases, resales and self-consumption of energy by fuel type for each electricity product offered to utility customers. If

the supplier is a public agency offering more than one product, then the agency's Board can approve the accuracy of the annual report for one of the electricity products. SCP offers two products – Evergreen and CleanStart. SCP engaged Pimenti & Brinker LLP as its outside auditor for SCP's EverGreen product, and SCP has submitted its independent audit to the CEC. No further action from the Board is required relative to SCP's Evergreen product.

Discussion:

Staff recommends that the Board adopt a resolution approving SCP's 2018 Power Source Disclosure Report for SCP's CleanStart product and attest to its veracity. Adoption of the attached resolution as recommended by staff enables SCP to comply with the CEC regulation implementing SB 1305 (California Code of Regulations, Title 20, Article 5, Sections 1390 to 1394).

During the 2018 calendar year, SCP provided CleanStart customers with an energy supply with 49% RPS eligible renewable sources from biomass and biowaste, geothermal, hydroelectric, solar and wind. While preparing SCP's 2018 annual Power Source Disclosure Report for CleanStart, staff performed a detailed review of all power purchases completed for the 2018 calendar year. This review included an inventory of all renewable energy transfers within SCP's Western Renewable Energy Generation Information System (WREGIS) accounts, pertinent transaction records, and requisite independent audits for SCP's EverGreen, 100% renewable energy program, which provides 100% renewable energy to participating customers. Based on staff's review of available data, the information presented in the annual report(s) was determined to be accurate.

Fiscal Impact

Adoption of the attached Resolution will not result in any financial impact to SCP.

Attachments

- Attachment A – Resolution Approving SCP Power Disclosure 2018 (with Exhibit 1)

Attachment A

[NOT YET ADOPTED]

RESOLUTION NO. 2019 - XX

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SONOMA CLEAN POWER AUTHORITY AWARDDING, APPROVING AND ATTESTING TO THE VERACITY OF THE 2018 POWER SOURCE DISCLOSURE REPORT FOR SCP'S CLEANSTART PRODUCT

WHEREAS, Senate Bill 1305 was adopted in 1997, establishing an Electricity Generation Source Disclosure Program, ("Power Source Disclosure Program"), which requires retail suppliers of electricity to annually submit a Power Source Disclosure Report to the California Energy Commission.

WHEREAS, Sonoma Clean Power Authority is a retail supplier of electricity as defined by the Power Source Disclosure Program (Ca. Code of Regs., Title 20, Section 1391(r)).

WHEREAS, the Power Source Disclosure Regulation was updated effective October 31, 2016, requiring an annual audit by an outside certified public accountant of the information in the annual Power Source Disclosure Report, with an exemption from this requirement for one electric service product for public agencies, if the governing body of the public agency approves at a public meeting the submission to the CEC of an attestation of the veracity of the annual report.

WHEREAS, SCP has completed an independent audit for its EverGreen Product.

WHEREAS, the CEC exemption therefore allows the SCP Board of Directors to approve an attestation of veracity in lieu of having the 2018 Power Source Disclosure Report for SCP's other product offering, CleanStart, attached hereto as Exhibit 1.

NOW, THEREFORE BE IT RESOLVED, the Board of Directors of the Sonoma Clean Power Authority hereby:

Section 1. Approves the submission of the attached 2018 Power Source Disclosure Report for SCP's CleanStart Product (Exhibit 1).

[SIGNATURES APPEAR ON FOLLOWING PAGE]

DULY ADOPTED this 3rdth day of October, 2019

JURISDICTION	NAME	AYE	NO	ABSTAIN/ ABSENT
Cloverdale	Director Bagby			
Cotati	Director Landman			
County of Mendocino	Director Gjerde			
County of Sonoma	Director Hopkins			
Petaluma	Director King			
Point Arena	Director Torrez			
Rohnert Park	Director Belforte			
Santa Rosa	Director Tibbetts			
Sebastopol	Director Slayter			
Sonoma	Director Harrington			
Windsor	Director Okrepkie			

In alphabetical order by jurisdiction

Chair, Sonoma Clean Power Authority

Attest:

Clerk of the Board

APPROVED AS TO FORM:

General Counsel,
Sonoma Clean Power Authority



Exhibit 1

Version: April 2019

ANNUAL REPORT TO THE CALIFORNIA ENERGY COMMISSION: Power Source Disclosure Program Schedule 1 and 2, applicable to: Retail Suppliers For the Year Ending December 31, 2018

Retail suppliers are required to use the posted template and are not allowed to make edits to this format. Please complete all requested information.

GENERAL INSTRUCTIONS

RETAIL SUPPLIER NAME	
	Sonoma Clean Power Authority
ELECTRIC SERVICE PRODUCT NAME	
	CleanStart
CONTACT INFORMATION	
Name	Deb Emerson
Title	Director of Power Services
Mailing Address	50 Santa Rosa Avenue, 5th Floor
City, State, Zip	Santa Rosa, CA 95404
Phone	(707) 978-3469
E-mail	demerson@sonomacleanpower.org
Website URL for PCL Posting	https://sonomacleanpower.org/

This Annual Report Template includes Schedules 1 and 2, applicable to retail suppliers. Power pools are required to report using Schedules 3 and 4 provided in a separate reporting template. Submit the Annual Report and Attestation in PDF format with an Excel version of the Annual Report to PSDprogram@energy.ca.gov. Remember to fill in the Retail Supplier Name and Product Name above, and submit separate reports and attestations for each additional product if multiple electric service products were offered in the previous year.

NOTE: Information submitted in this report is not automatically held confidential. If your company wishes the information submitted to be considered confidential an authorized representative must submit an application for confidential designation (CEC-13), which can be found on the California Energy Commissions's website at http://www.energy.ca.gov/commission/chief_counsel/documents/CEC13.pdf.

If you have questions, contact PSD staff at PSDprogram@energy.ca.gov or (916) 653-0237.



INTRODUCTION

Each worksheet, with the exception of the Attestation, is identified by a schedule number and a title that describes the information to be entered. Retail suppliers of electricity are required to submit only those schedules that are relevant to their products. Templates for reporting as a power pool, are provided separately as Schedules 3 and 4 on the PSD webpage: <http://www.energy.ca.gov/pcl/>

The following schedules are required for retail suppliers:

Schedule #	Schedule Name
1	Power Procurements and Retail Sales
2	Annual Power Content Label Calculation
N/A	Attestation



INSTRUCTIONS

Schedule 1: Power Procurements and Retail Sales

Retail suppliers of electricity must complete this worksheet by entering information about all power purchases and generation that served the identified electric service product covered in this filing in the prior year. Insert additional rows as needed to report all procurements or generation serving the subject product. Provide the annual retail sales for the subject product in the appropriate space. **Any retail supplier that offered multiple electric service products in the prior year must submit separate Annual Reports, including Schedule 1, Schedule 2 and an attestation for each product offered.**

Specific Purchases: A Specific Purchase refers to procured electricity that is traceable to a specific generating facility. If a purchase was for unbundled Renewable Energy Credits (RECs), include the term "REC Only" in parentheses after the facility name in the Facility Name column, and categorize the power as the resource type of the generating facility from which the unbundled REC was derived. Any purchase of electricity from California Renewables Portfolio Standard (RPS) certified facilities for which the energy was procured without the associated RECs or for which the RECs were subsequently resold, must be categorized as "unspecified power." For specific purchases, include the following information for each line item:

- Facility Name - Provide the name used to identify the facility. For unbundled RECs, include the term "REC Only" in parentheses after the facility name.
- Unit Number - Provide the unit number if a facility has multiple generators that have been assigned unique identification numbers.
- Fuel Type - Provide the resource type (solar, natural gas, etc.) that this facility uses to generate electricity.
- Location - Provide the state or province in which the facility is located.
- RPS ID - Provide the RPS ID of the facility. Any procurement categorized as renewable must be from an RPS certified facility and must have an RPS ID.
- Identification Numbers - Provide **at least one** identification number from either WREGIS, the Energy Information Agency (EIA ID), or the Federal Energy Regulatory Commission (FERC QF ID); all are requested but at least one is required. If a purchase cannot be traced to a specific facility and therefore cannot provide a specific identification number, it must be categorized as an Unspecified Source of Power (see instructions below).
- Gross Megawatt Hours Procured - Provide the quantity of electricity procured in MWh from the generating facility.
- Megawatt Hours Resold or Consumed - Provide the quantity of electricity resold at wholesale or self-consumed.
- Net Megawatt Hours Procured - Provide the quantity of electricity procured minus resold and consumed electricity.

Unspecified Sources of Power: This refers to any purchase not traceable to specific generation sources by any auditable contract trail or equivalent, or to power purchases from a transaction that expressly transferred energy only and not the RECs associated from an RPS-eligible facility. For these purchases, indicate "Unspecified Power" as the Facility Name in Schedule 1. For unspecified sources of power, include the following information for each line item:

- Facility Name - Provide the seller of electricity or enter "unspecified" in the facility name field
- Megawatt Hours Procured - Provide the quantity of electricity procured in MWh.
- Megawatt Hours Resold or Consumed - Provide the quantity of electricity resold at wholesale or self-consumed.
- Net Megawatt Hours Procured - Provide the quantity of electricity procured minus resold and consumed electricity.

Retail Supplier Name: Enter the Retail Supplier Name in the cell to the left of the auto-filled Total Net Purchases cell.

Electric Service Product Name: Enter the Electric Service Product Name in the cell to the left of the Total Retail Sales cell.

Total Retail Sales: Enter the Total Retail Sales in the cell below the auto-filled Total Net Purchases cell.



Schedule 2: Power Content Label Calculator

This schedule is provided as an automated worksheet that uses the information from Schedule 1 to calculate the power content, or resource mix, for each electric service product. The "Percentages" column contains a formula that will proportionally reduce each non-renewable category in order to reconcile any discrepancies between total net purchases and total retail sales (these discrepancies generally arise due to the reporting of unbundled REC purchases). The percentages calculated on this worksheet should be used for your Power Content Label.

Attestation

This template provides the attestation that must be submitted with the Annual Report to the Energy Commission, stating that the information contained in the applicable schedules is correct and that the power has been sold "once and only once to retail consumers." For the electronic copy of this filing, fill out the information, then print, sign, and scan the document. This attestation must be included in the package that is transmitted to the Energy Commission. Please provide the annual report and attestation in PDF format and the annual report in Excel format.



ANNUAL REPORT TO THE CALIFORNIA ENERGY COMMISSION: Power Source Disclosure Program

For the Year Ending December 31, 2018

SCHEDULE 1: POWER PROCUREMENTS AND RETAIL SALES

Applicable to: Retail Suppliers

INSTRUCTIONS: Submit a separate annual report for each electric service product offered in 2018. List all purchases (Specific and Unspecified) made ONLY in the 2018 calendar year. Add additional rows if needed. If a purchase was for unbundled RECs include the term "REC Only" in parentheses after the facility name in the Facility Name column, and categorize the power as the fuel type of the generating facility from which the unbundled REC was derived. If power was purchased through a transaction that expressly transferred energy only and not the RECs associated with that energy, identify the power as "Unspecified Power" in the Fuel Type column. If purchased power was from a renewable electrical generation facility that is not certified for participation in California's RPS Program, identify the Fuel Type as "Other".

ALL PROCUREMENTS (Specific and Unspecified)										
Facility Name	Unit No.	Fuel Type	Location (State or Province)	RPS ID	WREGIS GU ID	EIA ID	FERC QF ID	Gross MWh Procured	MWh Resold or Self-Consumed	Net MWh Procured
Cape Scott Wind - Cape Scott Wind		Wind	CA	60600 W3959				8491		8491
Cedar Creek - Cedar Creek		Wind	CA	60822 W892				72905		72905
Cedar Creek II - Cedar Creek II		Wind	CA	61384 W1900				397		397
Dokie Wind - Dokie Wind		Wind	CA	61360 W1992				12241		12241
Geysers Power Plant - Calpine Geothermal Unit 11		Geothermal Energy	CA	60025 W119				56771		56771
Geysers Power Plant - Calpine Geothermal Unit 12		Geothermal Energy	CA	60004 W120				73406		73406
Geysers Power Plant - Calpine Geothermal Unit 14		Geothermal Energy	CA	60026 W122				34560		34560
Geysers Power Plant - Calpine Geothermal Unit 17		Geothermal Energy	CA	60007 W124				49088		49088
Geysers Power Plant - Calpine Geothermal Unit 18		Geothermal Energy	CA	60008 W125				25296		25296
Geysers Power Plant - Calpine Geothermal Unit 20		Geothermal Energy	CA	60009 W126				7440		7440
Geysers Power Plant - Calpine Geothermal Unit 5/6		Geothermal Energy	CA	60002 W117				111106		111106
Geysers Power Plant - Calpine Geothermal Unit 7-8		Geothermal Energy	CA	60003 W118				65776		65776
Golden Hills C - Golden Hills C		Wind	CA	63115 W5695				181320		181320
Logan Wind Energy - Logan		Wind	CA	60817 W893				70005		70005
Meikle Wind - Meikle Wind		Wind	CA	63268 W5189				80072		80072
Peetz Table Wind Energy - Peetz Table		Wind	CA	60816 W894				39693		39693
Quality Wind - Quality Wind		Wind	CA	62247 W3160				20368		20368
RE Mustang - Mustang		Solar	CA	61261 W4812				77249		77249
RE Mustang 3 - Mustang 3		Solar	CA	62862 W4814				103903		103903
Roosevelt Biogas 1 - LFG Engines 7-9 - LFG Phase II		Biogas	CA	60974 W2398				14173		14173
White Creek Wind 1 - White Creek		Wind	CA	60721 W360				58554		58554
GCPD, Priest Rapids & Wanapum Hydroelectric Project		Large Hydroelectric	WA			3887 & 3888		1003788		1003788
Generic Purchases		Unspecified Power						225841		225841
Total Net Purchases									2,392,444	

Retail Supplier Name:

Electric Service Product Name:

Total Retail Sales



ANNUAL REPORT TO THE CALIFORNIA ENERGY COMMISSION:
Power Source Disclosure Program
For the Year Ending December 31, 2018
SCHEDULE 2: ANNUAL POWER CONTENT LABEL CALCULATION
Applicable to: Retail Suppliers

INSTRUCTIONS: Total specific purchases by fuel type and enter these values in the first column. If purchased power was from a transaction that expressly transferred energy only and not the RECs associated with that energy, identify the power as "Unspecified Power". Total Retail Sales will autopopulate from Schedule 1. Any difference between total net purchases and total retail sales will be applied pro-rata to each non-renewable fuel type. Each fuel type total will then be divided automatically by retail sales to calculate fuel mix percentages.

	Net Purchases (MWh)	Percent of Total Retail Sales (MWh)
Specific Purchases		
Renewable	1,162,814	49%
Biomass & Biowaste	14,173	1%
Geothermal	423,443	18%
Eligible Hydroelectric		0%
Solar	181,152	8%
Wind	544,046	23%
Coal		0%
Large Hydroelectric	1,003,788	42%
Natural Gas		0%
Nuclear		0%
Other		0%
Total Specific Purchases	2,166,602	91%
Unspecified Power (MWh)	225,841	9%
Total	2,392,444	100%
Total Retail Sales (MWh)	2,392,444	

Comments:



ANNUAL REPORT TO THE CALIFORNIA ENERGY COMMISSION:

Power Source Disclosure Program

For the Year Ending December 31, 2018

ATTESTATION FORM

Applicable to: All participants in the Power Source Disclosure Program

I, Geof Syphers, Chief Executive Officer, declare under penalty of perjury, that the statements contained in this report including Schedules 1 and 2 are true and correct and that I, as an authorized agent of Sonoma Clean Power Authority, have authority to submit this report on the company's behalf. I further declare that the megawatt-hours claimed as specific purchases as shown in these Schedules were, to the best of my knowledge, sold once and only once to retail customers.

Name: Geof Syphers

Representing (Retail Supplier): Sonoma Clean Power Authority

Signature: _____

Dated: May 31, 2019

Executed at: Santa Rosa, CA

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Staff Report – Item 06

To: Sonoma Clean Power Authority Board of Directors

From: Stephanie Reynolds, Director of Internal Operations
Geof Syphers, CEO

Issue: Receive Internal Operations Report and Provide Input as Appropriate

Date: October 3, 2019

CURRENT PARTICIPATION RATES

	9/1/2019		
	Participation %	Opt Out %	Participation % Change
CLOVERDALE INC	83.9%	16.1%	0.0%
COTATI INC	90.8%	9.2%	-0.1%
FORT BRAGG INC	82.6%	17.4%	0.1%
PETALUMA INC	89.0%	11.0%	0.0%
POINT ARENA INC	86.3%	13.7%	2.2%
ROHNERT PARK INC	88.5%	11.5%	0.1%
SANTA ROSA INC	88.8%	11.2%	0.0%
SEBASTOPOL INC	91.0%	9.0%	-0.1%
SONOMA INC	86.8%	13.2%	0.0%
UNINC MENDOCINO CO	78.7%	21.3%	0.0%
UNINC SONOMA CO	87.1%	12.9%	0.0%
WILLITS INC	81.0%	19.0%	-0.1%
WINDSOR INC	87.7%	12.3%	0.0%
Grand Total	86.8%	13.2%	0.0%

SCP NAMED ONE OF THE BEST PLACES TO WORK

Sonoma Clean Power was named as one of the winners of the 14th Annual Best Places to Work award by the North Bay Business Journal. The 109 organizations selected were analyzed by the editorial staff of the Business Journal on the basis of several criteria, including the employer application, survey ratings by employees, number of responses, size of the company, breakdown of responses from management and non-management, and written comments by employees. Thousands of employees participate in these surveys each year. We are very proud as this is the first time SCP has received this award.

RECRUITMENTS FOR THE SCP TEAM

Our team is growing! Our new Energy Analyst, Ryan Tracey started last month and will be providing much needed help to the Procurement Team with forecasting, risk management and data analysis. We also have a new team member starting with the Programs Team this week. The new Programs Manager will help SCP with the formation and implementation of new and existing programs. Finally, we have an offer pending for the Commercial Accounts Specialist position, and plan on filling that vacancy in the near future.

HEADQUARTERS BUILDING UPDATE

On September 5th, the 431 E Street project was approved and passed through the City's planning process. Next steps are as follows:

- 1) Approval of lot line adjustment
This is required before a building permit can be issued. E-mail traffic indicates that this is nearly complete. It is an administrative process that does not require a hearing or Council approval.
- 2) Issuance of Building Permit
The building permit has been applied for and our schedule anticipates initial comments back from the City in early October and permit issuance in early December. This timeline is based on comments regarding review times from City staff.
- 3) SCP is required by City of Santa Rosa ordinance to commit 1% of estimated construction costs to the creation of public art. SCP staff have completed the selection process for an artist to create and install a

sculpture at 431 E Street. A contract with Jonathan and Saori Russell is being negotiated and will be signed under the CEO authority.

LAKE COUNTY COMMUNICATIONS REGARDING SCP MEMBERSHIP

Progress on exploring potential service to Lake County continues. To date, SCP has requested load and demand data from PG&E, met with staff from Lake County, and supported the development of a draft calendar for the entire process. Because of significant new noticing and compliance processes around resource adequacy at the CPUC, the timeline for launching service to a new geographic territory is now about 15 to 16 months longer than it was in the past.

The current draft schedule would move swiftly through a feasibility review to be completed by February 2020, a final vote regarding whether SCP's Board will extend a formal offer of service by July 2020. If SCP's Board chooses not to extend service, staff propose to work with Lake County to identify alternative means of receiving service from another CCA or on its own. Staff planning around the calendar assumes the Board will choose to offer service.

Passage of all Lake County ordinances would also be on a normal schedule, and would need to happen by October 2020. At that point an updated Implementation Plan can be completed and filed with the CPUC. It is important that the plan be filed before the end of 2020 to allow service to begin in 2022.

What follows the filing of the updated Implementation Plan, however, is a slower process than SCP used with Mendocino County because of new rules in E-4907 relating to a one-year noticing period and a much longer than typical procurement cycle for resource adequacy. These factors put the start of service at the beginning of the summer rate season in 2022.

Because of the significance of this decision, staff will regularly return to the Committee and Board and bring regular updates on this process for input.

COMMUNITY ADVISORY COMMITTEE (CAC) RECRUITMENTS FOR 2020

At the August, 2019 Board of Directors Meeting, the Board appointed Directors Slayter, Okrepkie, Hopkins and King to serve as an ad hoc committee to review applications for the CAC committee. The committee met with staff in August to review the recruitment timeline, proposed process, and informational materials. The recruitment went live on August 30th and applications will be accepted until October 14th. After October 14th, the ad

hoc committee will review applications and hold interviews before determining a recommendation for the Board at the November 14th meeting.

PROGRAMS

Transit Electrification Study

The study is currently underway with the Cadmus Group and the four transit agencies – Santa Rosa CityBus, Petaluma Transit, Sonoma County Transit, and Mendocino County Transit. Site visits have been conducted and analysis on infrastructure and policy is currently underway.

Lead Locally (CEC Grant)

The Lead Locally Research Team is now installing the new technologies and monitoring energy savings for all Phase 1 pilot homes. These products are not yet market ready and this study will create the documentation necessary to determine if the items are viable for our climate zone. SCP has begun recruitment for 50 additional sites for the Phase 2 Technology Demonstration study on market ready technologies such as; daylighting retrofits and phase change materials for commercial properties, night ventilation, induction cooktops, and economizers for residential homes. The Night Ventilation sites have been determined and The Research Team is monitoring the baseline usage for those homes. The Phase 2 study will help determine the best strategies for deployment of the technologies at our Advanced Energy Center.

An open recruitment and application for manufacturers and distributors to display and deploy emerging technologies at the Advanced Energy Center is publicly available until the opening of the Center. This application can be found on the SCP website.

The Lead Locally team opened bids for construction services on July 16. A request to award the selected lowest bidder is included as a staff item in this agenda. If approved, construction will commence in October and may be completed by late spring in 2020.

Municipal Solar + Storage RFQ

At the encouragement of the Board of Directors, SCP is engaging with our member municipalities to conduct a Technical Analysis of Municipal Solar and Energy Storage. The analysis will look at existing solar facilities owned or operated by our member municipalities in order to maximize their value, determine feasibility of adding energy storage, and identify the requirements and cost to disconnect or “island” during emergency events. An RFQ was released on July 2, 2019 and firm was selected. Staff is now engaging in

contract negotiation and will be bringing a contract to the Committee and Board this fall. We are engaging our member cities and have received positive feedback.

PermaGreen

Staff is finalizing the contract for the PermaGreen program, which would allow customers to make a multi-year commitment (20 years for residential and 10 for commercial) to EverGreen service in the case that on-site renewable energy does not make sense for their property. If proven viable, PermaGreen could offer an alternative to the on-site solar panel requirements for the new California energy code. Staff anticipates allowing one commercial property and one residential property into the program at its outset, and then opening up the program to additional properties in the coming months.

Advanced Energy Rebuild (AER)

The CPUC recently commissioned a study on AER. Under the key takeaways, the report states, “Sonoma Clean Power’s Advanced Energy Rebuild program represents an innovative example of how community choice aggregators, utilities, and other interested stakeholders can work together to create meaningful programs that promote energy efficient and zero net energy homes.” We are very proud of all of the ingenuity and hard work that is making this program a success and one to be duplicated in other areas following natural disasters. The full case study is included as an attachment to this staff report.

Currently, 224 homes have applied for Advanced Energy Rebuild, about one third of which have chosen to rebuild all-electric homes. Staff is continuing work with PG&E to outline the framework for a 2020 program offering.

Low Carbon Reach Codes

Santa Rosa, Petaluma and Windsor are all conducting a public process to consider adopting all-electric and energy-efficient reach codes for new housing. If adopted, these reach codes would mandate that all new construction within a jurisdiction use high efficiency electric equipment, reducing the greenhouse gas emissions of new homes by more than two thirds. Santa Rosa, Petaluma, and Windsor are on a time line that could allow new codes – if adopted – to be in effect as early as January 1st, 2020. Cloverdale has also recently re-engaged on this effort, and had its first public meeting on September 11th.

BACKUP POWER SYSTEMS FOR PUBLIC SAFETY POWER SHUTOFFS

Staff have anecdotally learned of many new installations of back-up power systems to keep the lights on in homes during PG&E shutoffs. To date, it appears that most of these systems are portable diesel generators of the type sold in hardware stores, or natural gas generators for whole-house systems. Staff wish to encourage all SCP customers to consider using solar photovoltaics with batteries instead, and at least to get price information for this option.

MONTHLY COMPILED FINANCIAL STATEMENTS AND BUDGETARY COMPARISON SCHEDULE FOR JUNE, 2019

See attached preliminary financial statements and budgetary comparison schedule for the period ending June 30, 2019. The fiscal year-end reports will be finalized after the completion and acceptance of the outside audit by Pisenti and Brinker which we are planning on presenting at the November Board meeting.

MONTHLY COMPILED FINANCIAL STATEMENTS FOR JULY, 2019

July marks the first month of the 2019/20 fiscal year. The year-to-date growth in net position is slightly above projections due primarily to higher than anticipated electricity sales. Year-to-date electricity sales reached \$16,355,000.

SCP maintains a balanced portfolio by procuring electricity from multiple sources. Net position reached a positive \$93,260,000, which indicates healthy growth as SCP continues to make progress towards its reserve goals. Of this net position, approximately \$61,601,000 is set aside for reserves (Operating Reserve: \$51,206,000; Program Reserve: \$9,240,000; and Collateral Reserve: \$1,154,000). Additional contributions to these reserve accounts relating to fiscal year 2018/19 surpluses will be made after the complete of the audit for that year.

Overall, other operating expenses continued near or slightly below planned levels for the year.

BUDGETARY COMPARISON SCHEDULE FOR JULY, 2019

The accompanying budgetary comparison includes the 2019/20 budget approved by the Board of Directors in June 2019.

The budget is formatted to make comparisons for both the annual and the year-to-date perspective. The first column, 2019/20 YTD Budget, allocates the Board approved annual budget at expected levels throughout the year with consideration for the timing of additional customers, usage volumes, staffing needs etc. This column represents our best estimates and this granular approach was not part of the Board approved budget.

Revenue from electricity sales to customers is greater than the year-to-date budget by approximately 3%.

The cost of electricity is approximately 6% less than the budget-to-date. Variation in this account is typically due to fluctuating market cost of energy on open position purchases.

Major operating categories of Data Management fees and PG&E Service fees are based on the customer account totals and are closely aligned to budget.

In addition to the items mentioned above, SCP continues its trend of remaining near or under budget for most of its operating expenses.

UPCOMING MEETINGS:

CAC - OCTOBER, 29, 2019

BOD MEETING - NOVEMBER 14, 2019 (Off regular schedule)

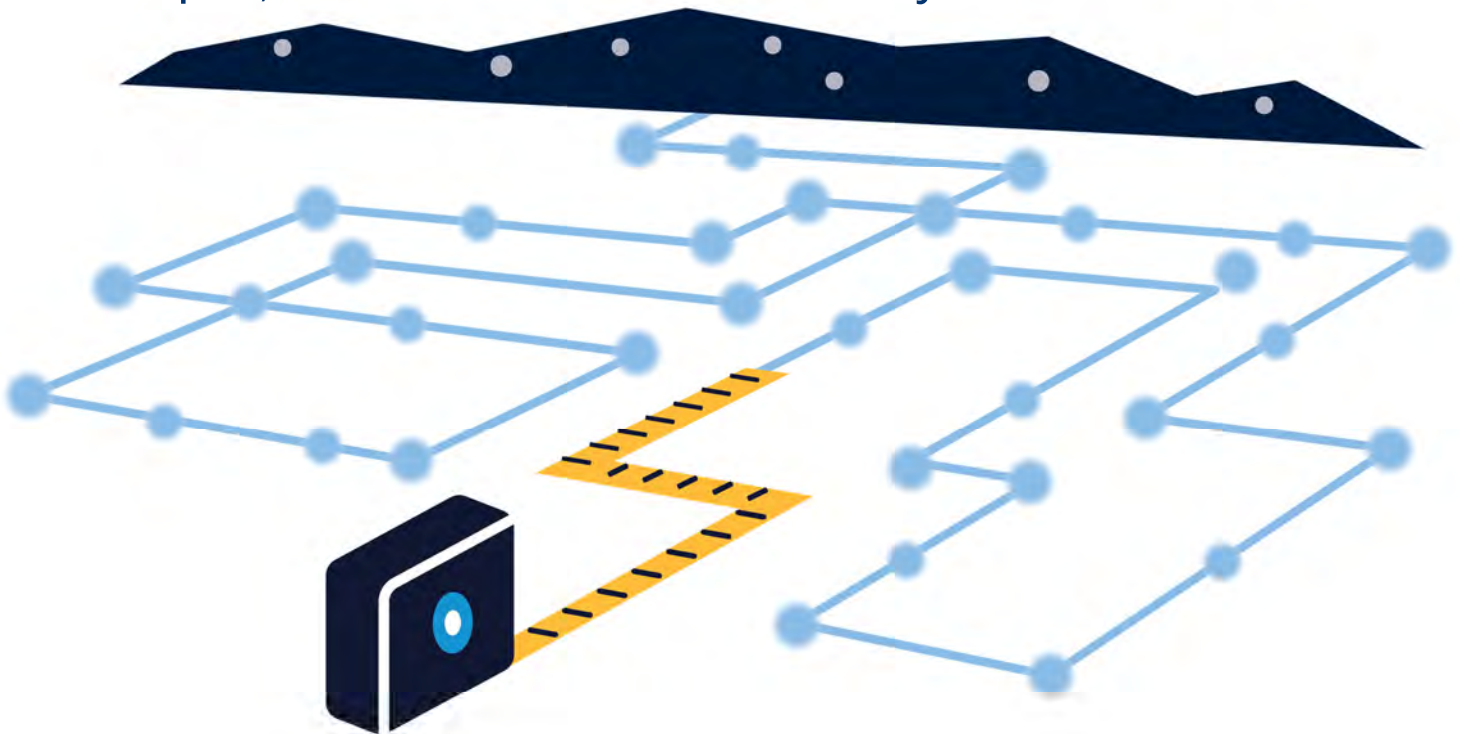
CAC - NOVEMBER, TBD

BOD MEETING - DECEMBER 5, 2019



Sonoma Clean Power and PG&E's Advanced Energy Rebuild Program

Group B, Deliverable 33 Case Study 2



August 27, 2019

This study is covered under CPUC Contract 17PS5017 between Opinion Dynamics and the California Public Utilities Commission (CPUC). Tierra Resource Consultants is a subcontractor to Opinion Dynamics for this work.

Acknowledgements

This project was a collaborative effort under contract to the CPUC. We would like to thank staff at the CPUC, Sonoma Clean Power, PG&E, TRC, and the Bay Area Air Quality Management District for their input and assistance in the preparation of this case study.

Legal Notice

This report was prepared as an account of work sponsored by the California Public Utilities Commission. It does not necessarily represent the views of the Commission or any of its employees except to the extent, if any, that it has formally been approved by the Commission at a public meeting. For information regarding any such action, communicate directly with the Commission at 505 Van Ness Avenue, San Francisco, California 94102. Neither the Commission nor the State of California, nor any officer, employee, or any of its contractors or subcontractors makes any warrant, express or implied, or assumes any legal liability whatsoever for the contents of this document.

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1. Executive Summary

This document is a case study of the efforts Sonoma Clean Power (SCP) and PG&E to support the State's goals for zero net energy and carbon reduction in the building sector. The aim of this study is to identify the best practices and lessons learned through review of the program background and specific efforts.

After wildfires destroyed thousands of homes in Sonoma County in the fall of 2017, Sonoma Clean Power and PG&E collaborated with the Bay Area Air Quality Management District (BAAQMD) to create the Advanced Energy Rebuild (AER) program to help homeowners rebuild new, more energy efficient homes with lower greenhouse gas (GHG) emissions. Launched in May of 2018, the AER program provides financial incentives, education, and project advising to encourage homeowners to adopt state-of-the-art energy efficient technologies and carbon-saving strategies in order to rebuild their fire-damaged homes at 2019 Title 24 standards, which are at a minimum 20% more efficient than the current 2016 code.

The program's innovative design layers funding from each of the three partners in order to provide incentives for both dual fuel and all electric homes. Qualifying dual fuel homes are eligible for up to \$7,500 in incentives, while higher incentives of \$12,500 are provided for all electric homes, with an additional \$5,000 available to encourage customers to add solar panels and battery storage to either type of home. Funding for accessory dwelling units (ADUs)¹ and multifamily properties is also available. Single family homes receive an average of \$9,615 per home, of which SCP averages \$4,950, while PG&E and BAAQMD average \$3,188 and \$1,476, respectively.

As of June 2019, the program has received 105 applications with a total of 207 dwelling units. This represents approximately 6% of the 3,246 fire rebuild related building permits that were issued in the Sonoma and Mendocino areas over the first 13 months of the program. Of these applications, 104 were for single family homes, while one was for a multifamily complex with 96 units. To date, 66 projects have been approved and four have completed construction. Of the 66, 22 are all electric, while the remainder are dual fuel. Of the 22 all electric homes, 21 installed solar panels, and 12 opted to include solar panels and batteries. The enrolled projects averaged an increase of 24% energy efficiency improvement above 2016 Title 24 code, with the average home estimated to be 26% more efficient than a standard home, -saving \$650 on electricity bills and offsetting 14 metric tons of CO₂. Because solar production is excluded from the savings calculations, the enrolled projects represent 9,620 kWh of energy savings, with an average of 60 kWh per dwelling unit. Total therm savings are 62,780, with an average of 387 therms per dwelling unit. Combined, the enrolled projects are contributing 340 total tons of GHG savings.

Beyond the details of the Advanced Energy Rebuild program design and implementation, this case study also yielded key best practices and lessons learned that can be applied to broader ZNE and other decarbonization efforts, including:

Best Practices

- **Utilize existing program infrastructure.** Rather than create a new program from scratch, the AER team made creative use of pre-existing efforts and allocated responsibilities according to the strengths of each participating entity. At its core, the AER program is built upon PG&E's California Advanced Homes Partnership infrastructure as implemented by TRC. SCP leverages its local presence and existing marketing and social media networks for outreach and face-to-face customer

¹ An accessory dwelling unit (ADU) is a small permanent home on the same residential lot that may be attached or detached from the main home. Other names for ADU include granny unit, in-law and casita.

service. While BAAQMD uses its numerous social media and messaging networks to help promote awareness.

- **Layer multiple funding sources.** One of the most pivotal program design elements has proven to be its layered funding stack. Each entity contributes funds for different measures based on that organization's goals and requirements. PG&E covers program implementation costs and provides resource funding for dual fuel or all electric homes, through the CAHP program's existing structure, based on the home's modelled improvement in energy efficiency beyond code requirements. BAAQMD provides deemed funds for solar and electrification measures in all electric homes. SCP pays for carbon-reducing measures in both home types, with contribution amounts varying depending on customer equipment choices and the resulting contribution from PG&E.
- **Present one forward-facing program to customers.** While the AER program is an amalgam of parts contributed by multiple entities on its back end, from the customer perspective it is presented as a single program that is designed to increase customer interest, ease participation, and maximize access to program resources. The hybrid program design creates larger incentives that make the program more enticing, while also allowing for more stringent participation requirements. Likewise, the program offers one easy-to-access program application, a streamlined review process, a unified set of customer messages, and a single customer rebate check drawn from a shared funding pool.
- **Study your customers and design your program accordingly.** At the start of the program design phase, the AER team took the time to speak with homeowners, builders, energy consultants, and other stakeholders to learn what was really needed for a fire rebuild program. Their research yielded key findings that contributed directly to the program design. Among other things, they concluded that production homebuilders and individual homeowners, particularly those participating in a fire rebuild, have different interests, needs, and program processing requirements. Production builders submit plans for large housing developments in one application with a handful of home models. This makes energy modeling and incentive processing easier. Conversely, individual homeowners present custom home models that must be reviewed on a one-off basis. Additionally, production builders are primarily concerned with low construction costs rather than long-term efficiency. While individual homeowners can be more interested in energy savings since they want comfort, resiliency, and a balance between upfront costs and life-cycle operating expenses. Moreover, while developers may be content to wait until project end for incentive payments, homeowners are often cash-strapped, so paying 50% of incentives upon application approval is extremely helpful to keep smaller contractors paid and projects moving forward.
- **Prewire new homes for future all electric and solar panel installations.** Customer preference for gas appliances represents a sizable barrier for the adoption of all electric homes. While many customers are interested in building more efficiently, fewer of them are ready to give up natural gas service and live in all electric homes. The AER program addresses this by requiring any participating dual fuel home to be prewired to accommodate future installations of all electric equipment for HVAC, water heating, cooking, and laundry. Likewise, roof designs must accommodate the structural loads associated with solar panels and they must have conduit for panel installation, even if panels are not included at the time of construction. These requirements increase the likelihood of converting dual fuel homes to all electric homes in the future by significantly reducing homeowner financial hurdles if and when such upgrades are considered.
- **Establish an induction cooking lending program.** Customer desire for natural gas cooktops ranks high among the reasons for opting for a dual fuel rather than all electric home. To overcome this barrier to customer acceptance, SCP offers an induction cooktop program that lends interested

homeowners a portable induction cooktop and associated cookware for a free 30-day trial so they can become familiar and comfortable with the speed and convenience of induction cooking. All that is required of the homeowner is a commitment to respond to a survey at the end of the trial. Survey results can provide insights into customer experiences, hesitations, preferences, and customer testimonials to promote induction cooking. A similar cooktop lending effort could be incorporated into other types of new construction programs and used as a familiarization tool to build customer interest in induction cooking.

- **Educate all stakeholders involved in the construction process.** Encouraging wider acceptance of ZNE construction requires educating all of the groups involved in the construction process, including architects, builders, homeowners, certified energy analysts, HERS raters and others. The AER program design includes educational elements directed at each of these groups, including numerous public workshops and webinars to explain the program to homeowners, training courses offered to architects and builders through a regional builders' association to familiarize them with electrification and ZNE principles; hosted local training sessions and paying testing costs to encourage local people to become certified energy analysts (CEAs), as well as uncounted one-on-one conversations with homeowners, CEAs, and HERS raters to help them appreciate the many benefits of increased efficiency and electrification and their place within the construction process.
- **Align program strategies and implementation tactics with larger goals.** While energy efficiency and electrification are the primary objectives of the AER program, SCP has also taken steps to further leverage the program to help meet its bigger picture carbon-reduction goal. To that end, SCP is using the program as an opportunity to recruit participating homeowners into its GridSavvy load shifting and demand management program that will dispatch electric vehicle charging, grid interactive heat pump water heating, and smart thermostat-controlled heat pumps—all of which are already installed in the homes and poised to offset carbon-intensive electric loads during on-peak hours.
- **Work with “block captains” in each neighborhood.** SCP credits neighborhood advocates called “block captains,” who represent groups of neighbors who are rebuilding, as being among the most effective of the program’s marketing tools. Block captains are loosely akin to the energy champions that are used in other energy efficiency programming efforts. Their extensive social networks, relatively greater knowledge of the program, and comfort with the rebuild process combine to make them well suited to speaking with PG&E, SCP and local government officials to discuss the rebuilding effort and then relaying those messages back to their friends and neighbors. SCP indicates that the role of block captains has been unique to the AER program and recommends their use in other efforts.

Lessons Learned

- **Connect with customers as early as possible in the building process.** Customer participation rates, as well as feedback from both program participants and nonparticipants, reveal the importance of early marketing to ensure that the program is top of mind for customers as they begin making their home design decisions. The AER program missed the opportunity to work with a few fast-moving homeowners because they learned of the program’s existence after they were already committed to less efficient, dual fuel home plans. Early outreach to make people aware of program offerings gives customers a greater opportunity to explore and model the best options, while also affording program implementers a greater chance to explain the program and influence decisions.
- **Be prepared to handle waves of applications.** While a fire rebuild program requires the processing of individual applications for each custom home, participating homeowners tend to apply to and proceed through the program in cohorts. While each homeowner is individually responsible for

their own decisions, they tend to apply in groups because it takes approximately the same amount of time to move through the various stages of the rebuilding process, such as removing debris from their lots, settling with their insurance companies, finding contractors, and developing building plans. As a result, it is essential to have a sufficient number of certified energy analysts and program staff on hand to help with applications, review energy models, and process checks in order to avoid bottlenecks that slow down the rebuild process.

- **Allocate sufficient time and funding to recruit, educate and incentivize certified energy analysts.** CEAs are essential for developing the standardized energy models needed for the program since CEAs submit higher quality energy models than untrained persons and thus the models require less back and forth to meet program standards. Yet despite the program's numerous efforts to recruit, educate, inform and motivate CEAs, the program fell short in the number of local CEAs available to help homeowners and in their willingness to prepare high quality models to assess differing equipment and design considerations. As a result, SCP staff were sometimes required to shoulder the burden of some of the energy modeling needed to properly prepare homeowner applications in a timely manner. Future efforts will need to allocate more resources to this facet of the program.
- **Promoting high efficiency is easier than promoting fuel switching.** The program's \$5,000 incentive for upgrading to an all electric home has enticed one third of customers to forgo natural gas service. While electric heat pumps and water heaters are readily accepted measures in dual fuel homes, fireplaces and cooktops have proven to be more challenging for customers to relinquish. While SCP's cooktop lending program has helped, other concerns, such as the home's resale value, remain as barriers. To further increase adoption of all electric homes, additional education and higher financial incentives may be necessary.

2. Program Design

In October of 2017 multiple wildfires burned across Sonoma County, destroying parts of Santa Rosa, Calistoga, Sonoma, and other communities.² By the time that the fires were extinguished thousands of structures burned and were destroyed. In Santa Rosa alone, damage was estimated at \$1.2 billion. From the ashes of these fires in May of 2018 Sonoma Clean Power's Advanced Energy Rebuild (AER) program rose to help homeowners rebuild new, more energy efficient homes with lower greenhouse gas (GHG) emissions.

The Advanced Energy Rebuild program is a first of its kind partnership between Sonoma Clean Power (SCP), Pacific Gas and Electric (PG&E), and the Bay Area Air Quality Management District (BAAQMD). With one easy-to-access application, the program provides incentives of up to \$17,500 to encourage homeowners to adopt state-of-the-art energy efficient technologies and carbon-saving strategies in order to rebuild their fire-damaged homes at 2019 Title 24 standards, which are 20% more efficient than the current 2016 code.

The program gives customers a choice of either performance-based and prescriptive menu-based paths that feed into a multi-tiered model that layers funding from each of the three partners in order to provide incentives for both dual fuel and all electric homes. Qualifying dual fuel homes are eligible for up to \$7,500 in incentives, while higher incentives of up to \$12,500 are provided for all electric homes, with an additional \$5,000 available to encourage customers to add solar panels and battery storage to either type of home. Funding for accessory dwelling units (also known as granny units) and multifamily properties is also available.

Program-supported measures include advanced building envelopes, smart thermostats, high efficiency heat pumps, grid interactive heat pump water heaters, induction cooking, EnergyStar appliances, water efficient landscaping, electric vehicle charging stations, and mandatory pre-wiring for electric appliances so that any participating dual fuel home can be more easily upgraded to an all electric home in the future. In addition to providing financial incentives for installing these measures, the program also offers participating homeowners:

- Advising on building design and measure selection, including review of construction plans, energy models, and documentation
- Referrals to lists certified energy analysts who help homeowners with the required energy modeling and the Title 24 documentation required for building permits
- Referrals to lists of HERS raters who will verify the new homes' efficient features

Even before the 2017 fires were fully extinguished, SCP and PG&E began working separately to find ways to help the fire ravaged communities. It didn't take long for them to recognize their parallel efforts and begin discussions about coordination. "Early on we reached out to PG&E saying, 'We have more than 6,000 structures we need to rebuild over the next few years. How can we work together to create a program and financial incentives to serve these customers? And how we can put this together fast enough to help before it's too late to make a difference,'" says Rachel Kuykendall, senior program manager of the Advanced Energy Rebuild Program for Sonoma Clean Power.

PG&E was interested in working with SCP, but such a possibility wasn't a foregone conclusion since the two entities hold differing goals and they're bound by different requirements. SCP is a self-funded, not-for-profit, public agency, or community choice aggregator (CCA), that supplies electric power to 500,000 residences and businesses in Sonoma and Mendocino counties. SCP's mission is to lower the costs and environmental

² Residents of Mendocino County are also served by Sonoma Clean Power, so the program was expanded to cover homes lost in Mendocino County in fires during 2018.

impacts of energy use for its customers by improving energy efficiency, increasing local renewable energy, and reducing greenhouse gas emissions. Meanwhile, PG&E is an investor-owned utility with ratepayer-funded energy efficiency programs and goals that are measured in terms of cost-effective kilowatt hour (kWh), kilowatt (kW), and therm savings as allowed by PUC regulations.

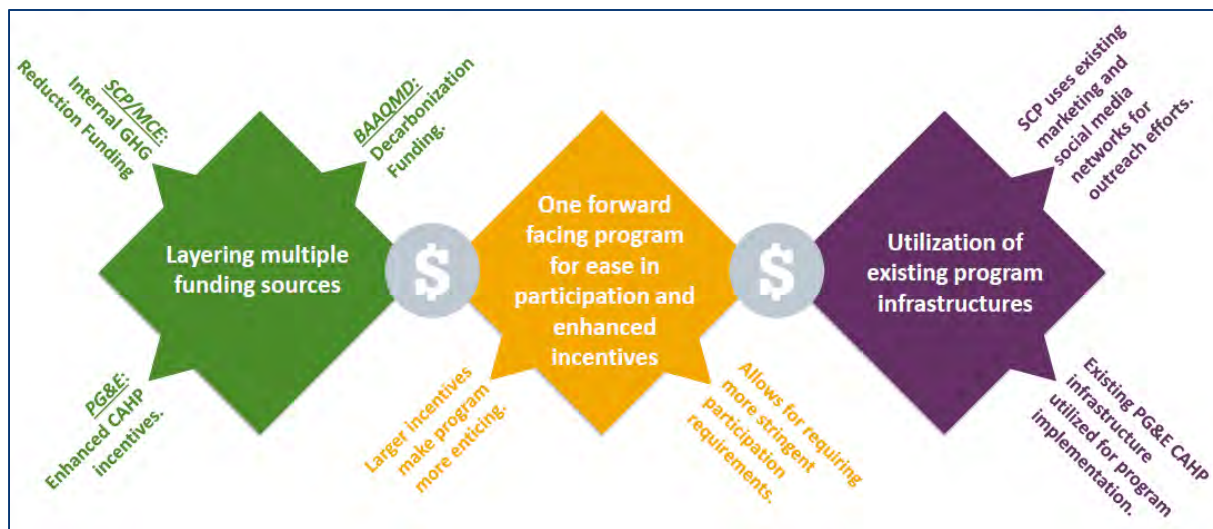
Initial conversations between the two entities were further constrained by the fact that PG&E wanted to use its existing residential new construction program, California Advanced Homes Partnership (CAHP), to enable customers to rebuild dual fuel homes, while Sonoma Clean Power wanted its rebuild program to be all-electric and not allow homes with natural gas service in the program. At first, this discrepancy seemed like a non-starter because, while SCP was free to spend its funds on fuel-switching GHG-reducing measures, CPUC guidelines at the time dictated that PG&E's ratepayer-funded program needed to incentivize the homes to be efficient regardless of their fuel choice. Fortunately, the conversation did not stop there.

"We started talking with Sonoma Clean Power with the hope of not having competing programs," says Conrad Asper, program manager for PG&E, but the idea of merely offering people the opportunity to enroll in both programs had its own drawbacks. "People would still have to go through two processes with two applications, and, to be honest, most people don't want to go to that trouble. They either would have been put off by it or they would have gone with the program that paid the higher incentive."

So the two entities began to brainstorm ideas until they realized that they could leverage PG&E's relationship with TRC, the third party implementer of its California Advanced Energy Homes Partnership. If SCP contracted with TRC to implement its Advanced Energy Rebuild program, then TRC could essentially run what appeared to the customer as a single program on the surface, while behind the scenes it was in some ways closer to two separate programs; one for PG&E that was based on the existing CAHP program that supported dual fuel homes, and a new one for SCP that supported all electric homes with electric vehicle charging, solar panels and battery storage.

This unique twist of using a third party implementor with the ability to engage in multiple contracts opened the doors for a number of other groundbreaking innovations as well (Figure 1). First, because PG&E and SCP were not contracting directly with each other, Sonoma Clean Power was able to invite in the Bay Area Air Quality Management District as an additional provider of incentive dollars. Moreover, the arrangement enabled each entity to fund different measures and to contribute to the program based on their goals and limitations. As a result, PG&E provides resource funding for kWh and therm savings, while SCP and BAAQMD fund measures targeted at GHG reductions.

Figure 1 Advanced Energy Rebuild program design



The new program design effort began with SCP, PG&E, and TRC staff talking to homeowners, contractors, energy consultants, and other stakeholders to learn what was really needed. Their research yielded a few key findings that contributed directly to the program design. With so many homes destroyed, the area had an acute housing crisis and a labor shortage that would make rebuilding more costly and time consuming. Also, unsurprisingly, homeowners were eager to rebuild quickly, yet they were facing significant insurance shortfalls. “We learned that generally homeowner priorities were to build the fastest and least expensive houses possible since many of them were underinsured,” Kuykendall says. In fact, many customers reported a gap of \$200,000 to \$300,000 between the funds they received from their insurance settlement and the actual cost to rebuild their homes. Moreover, “these folks don’t have any experience with building homes and most of them don’t even think about energy efficiency. So, we need to get people to slow down for the few extra weeks it takes to think about integrated design and energy efficiency.”

Other important factors soon became clear as well. As PG&E’s residential new construction program, CAHP primarily works with production builders who own large tracks of land, submit plans for entire developments under one application, propose a handful of home models per development, and enable incentives to be processed in large batches. None of these factors applied to the fire rebuild. Instead, each homeowner had a single lot and would be submitting a unique application, home plan, and energy model. As a result, each one-off application would require individual processing for plan review and incentive processing. Although these facts meant that the CAHP program would need to be retooled to accommodate the extra work involved, the rebuild effort also presented new opportunities to promote energy efficiency. For instance, production builders are generally not motivated by energy efficiency since they are concerned with meeting code as inexpensively as possible. Conversely, homeowners can be motivated by energy savings since they’re looking for a combination of long-term comfort, resiliency, and a balance between upfront costs and life-cycle operating expenses.

All these factors led to a program design that encourages customers to reach beyond the current 2016 Title 24 codes by making the rebuilding effort as easy as possible for homeowners. Consequently, the program also features a single application form, streamlined processes, and rapid incentive payments—all of which reflect the program’s sensitivity to helping customers get back into their homes as quickly as possible. “It took a lot of back and forth,” Kuykendall says. “But ultimately our program shows people the ideal home from a holistic,

green building design perspective and it includes things like renewable energy and water savings that are atypical for a utility program.”

As the program elements coalesced in January of 2018, PG&E submitted an advice letter³ describing the proposed joint effort to the CPUC. The letter included a request for permission to double CAHP incentives and technical support; the ability to apply CAHP funds to in-law units to help alleviate the local housing shortage; and longer rebuild timelines through 2021. The request was approved on April 27, 2018 and the program launched in May of 2018.

3. Program Implementation

Because the AER program is a joint effort between SCP, PG&E, TRC and BAAQMD, the team needed to sort out the best way to divide the responsibilities of implementation. In the end, it largely came down to each party doing what they were best suited to handle. As the primary local presence, SCP focuses its attention on customer-facing activities, including marketing, education, and outreach, as well as working with customers to ensure their building plans, energy models, and program applications are in order. TRC handles program implementation, project review, incentive processing, and program infrastructure in a manner similar to the way it handles the CAHP program. PG&E covers program administration and incentive costs, while BAAQMD’s role is limited to providing funding for solar and electrification measures in all electric homes. All parties except BAAQMD have contributed to stakeholder education for homeowners, builders, energy consultants, and HERS raters.

“We really tried to leverage Sonoma Clean Power’s local community feel and boots on the ground presence,” says PGE’s Asper. “We didn’t want to duplicate that effort with a marketing strategy on our side of it. So, we provide them with resources, and we help with outreach and customer-facing activities as needed. In a sense, that’s why it has come to be viewed as a Sonoma Clean Power program. PG&E stepped back and said you’re a trusted local entity, and we want to support this collaboration.”

“And it really worked out,” adds Nic Dunfee, TRC Senior Program Manager. “SCP has lots of one-on-one local contacts, so it was natural for them to take on marketing and awareness. While the CAHP program on the PG&E side is focused more on implementation, technical review, and processing the incentives.”

3.1 Marketing, Education, and Outreach

From the beginning the AER team knew the program needed to reach out to homeowners while they were still in the process of making design decisions and before they got to the building permit stage of their rebuild efforts. But they also wanted to be sensitive to the facts that people were grieving, that they first needed to clear their lots of fire damaged debris; and that they were in varying stages of dealing with their insurance companies. Consequently, SCP’s marketing efforts covered a wide range of channels including direct mail, social media, posting notices at city and county permitting offices, speaking with city and county staff members who could in turn educate homeowners, and attending public events where SCP staff could speak directly with homeowners (Figure 2), such as the Rebuild Green Expo, the Watershed Revival Community Gathering, and Sonoma County’s annual State of the County meeting. To reach homeowners who left the area or otherwise couldn’t attend events like these, the AER team also explained the program in a live online webinar; a recording of which remains viewable from a link on the SCP website.

³ Request for Energy Efficiency Program Enhancements to Assist October 2017 Wildfire Impacted Customers” Advice letter 3928-G/5219-E and supplemental advice letter 3928-G/5219-E-A, January 23, 2018

As part of its ongoing marketing efforts, SCP is also leveraging homeowner's personal networks by working with "block captains," who represent a group of neighbors who are all rebuilding. These block captains interface with SCP, PG&E, and/or their local government and then bring information back to their friends and neighbors. "I'd say we get the most traffic in the door from word of mouth. So, finding those block captains and local advocates for the program has been huge," says Kuykendall. "It's my understanding that's somewhat unique to our area, and not something that the other fire areas have done."

Figure 2 Rebuilding Workshop and Resource Fair in Oakmont, CA



In addition to working with homeowners, the program also seeks to educate and assist the professionals who work with the homeowners, including architects, contractors, energy analysts, and HERS raters. For this, the AER team partnered with a regional builders association called the North Coast Builders Exchange to teach a series of trainings on design thinking for ZNE, building high performance walls, designing efficient plumbing systems, building codes and standards, and other related topics (Figure 3). The classes were funded by PG&E. "We taught that series of classes twice to engage our community of builders and designers about the concept of zero net energy and zero net carbon," says Kuykendall. This was important because it familiarized the attendees with these new possibilities and prepared them for discussions with homeowners.

It was also important to the AER team to ensure that Sonoma County had a sufficient number of certified energy analysts to help participating homeowners prepare the energy modelling needed for the program. "We drew a line when we decided to require people to work with certified energy analysts to help them prepare the energy models that TRC reviews for qualification in the program," says Asper. "We knew we needed to promote better quality energy modeling with a set of minimum standards because otherwise anyone could submit an energy model, and TRC would probably need to re-do the model to get it to where we could actually use it." To build out a qualified group of local CEAs, the AER team sponsored live and online CEA and HERS rater certification courses in Santa Rosa, with SCP paying the costs of the exams for local residents in order to encourage more participation. While this training effort did increase the number of qualified CEAs to work with the program, the local CEAs have proven to be extremely busy, and they have not necessarily had the time or desire to work with AER participants to create an accurate energy model that meets the requirements for the program. Consequently, SCP often works with the CEAs to develop a preliminary model, and then works with the homeowner to determine a work scope that would get them into the program.

Finally, because cooking with natural gas is one of the biggest hurdles to promoting all electric homes, SCP also offers a related sister program designed to familiarize homeowners, designers, builders—and in fact any Sonoma or Mendocino County resident—with the concept of induction cooking. That program lends out portable induction cooktops and cooking pans that people can test for up to three weeks. “The only requirement is that people answer a survey to tell us what they think of it,” she says. “That’s been really successful as an accompanying educational piece because cooking and fireplaces are the trickiest for us in terms of pushing the electric home option to customers.” According to the survey, respondents rate their overall cooking experience at an average score of 8 out of 10, and the likelihood of switching to induction cooking at 7 out of 10.

Figure 3 AER-sponsored workshop on high performance building envelopes



If all these different marketing and education angles sound like a lot of work, it is, and deliberately so since SCP needed to deliver different messages to each audience. For homeowners the main messages are to start thinking about energy efficiency and carbon neutral design as soon as possible and to start talking with their architects, contractors, and energy analysts sooner rather than later to avoid trying to undo previous decisions after building is underway. For builders, the program has focused on educating them about the value of high efficiency design and new technologies, since they need to be familiar with equipment options and understand pricing before they’ll feel comfortable talking to customers about the benefits and advantages. Meanwhile, for the CEAs the main focus has been on empowering them to be advocates for energy efficiency rather than merely serving as a clearinghouse for Title 24 compliance. Consequently, SCP has striven to help the CEAs to appreciate the advantages of energy modeling and the value in helping homeowners to understand the options offered by the program.

3.2 Implementation

After the program’s outreach efforts capture a homeowner’s interest, the customer arranges a time to sit down with SCP staff. Often this happens around the time the customer is ready to obtain a building permit. When the customer arrives, SCP staff review their Title 24 documents and any plans if they bring them. “Then we ask if they’ve thought about these energy efficiency measures to get over the 20% hurdle,” says Kuykendall. In about 95% of cases, SCP then helps the interested homeowner to follow up with their certified energy consultant to obtain the customer’s energy model and plug in the more efficient measures. SCP then gives

the homeowner an updated project scope that will work for the program so that they can price things with their contractor. When the customer and contractor agree, the homeowner takes the updated project scope back to their CEA, who adds the new measures and sends in the updated energy model. Once all the new measures are modeled and ready, the customer can submit an online application with all the accompanying documentation needed for the program. “It’s actually very time-intensive,” admits Kuykendall. But it’s worth the effort since the handholding results in higher program participation.

Upon receiving the application, TRC reviews the energy model and all accompanying documentation. “Our reviews make sure that the models properly reflect what’s shown in the plans, and also that the requirements match up with what is required by code,” says Dunfee. If everything is in order, the project is approved and TRC issues the customer an upfront payment for half of the total incentive amount. “That’s something that’s unique to the fire rebuild program,” adds Kuykendall. “It was important to us to help people buydown some of the equipment costs because, again, a lot of these folks are underinsured, cash-strapped, and they need to make progress payments to their contractors.” The second half of the incentive amount is withheld until a certified HERS rater visits the new home and verifies the completed work. Once the HERS rater enters the project verification data into the HERS registry for the program, the completed project file is reviewed by TRC. Once the final project is confirmed, TRC cuts the second check.

Approved projects are valid for 36 months from the date of acceptance. Within this extended construction time frame, if a customer wants to make changes to the building envelope or decides to go with a different kind of equipment, they must notify the program of the change and then TRC will work them to ensure the changes remain within program parameters.

Both PG&E and the Bay Area Air Quality Management District remain largely uninvolved in these day-to-day program implementations activities, although they are kept apprised and they provide incentive funding as new projects work their way through the program pipeline.

3.3 Incentive Options

As noted above, the Advanced Energy Rebuild program offers financial incentives for both advanced energy (dual fuel) homes and all electric homes. The program is open to single family homes, duplexes, townhomes, ADUs and multifamily projects. Incentive levels vary depending upon several factors, including the type of structure, the fuel sources for the home, and whether a solar plus storage option is included.

The program offers a \$7,500 incentive for dual fuel Advanced Energy single family homes, duplexes, or townhomes. ADUs and multifamily projects can receive incentives of \$3,750 per dwelling unit. All electric homes without gas service receive higher incentives, totaling \$12,500 for single family dwellings and \$6,250 for ADUs or multifamily projects. An additional \$5,000 can be added on to any of the incentive packages for homeowners who install a solar panel system with a battery storage or who pre-purchase a 20-year commitment to 100% local renewable power through either SCP’s EverGreen service.

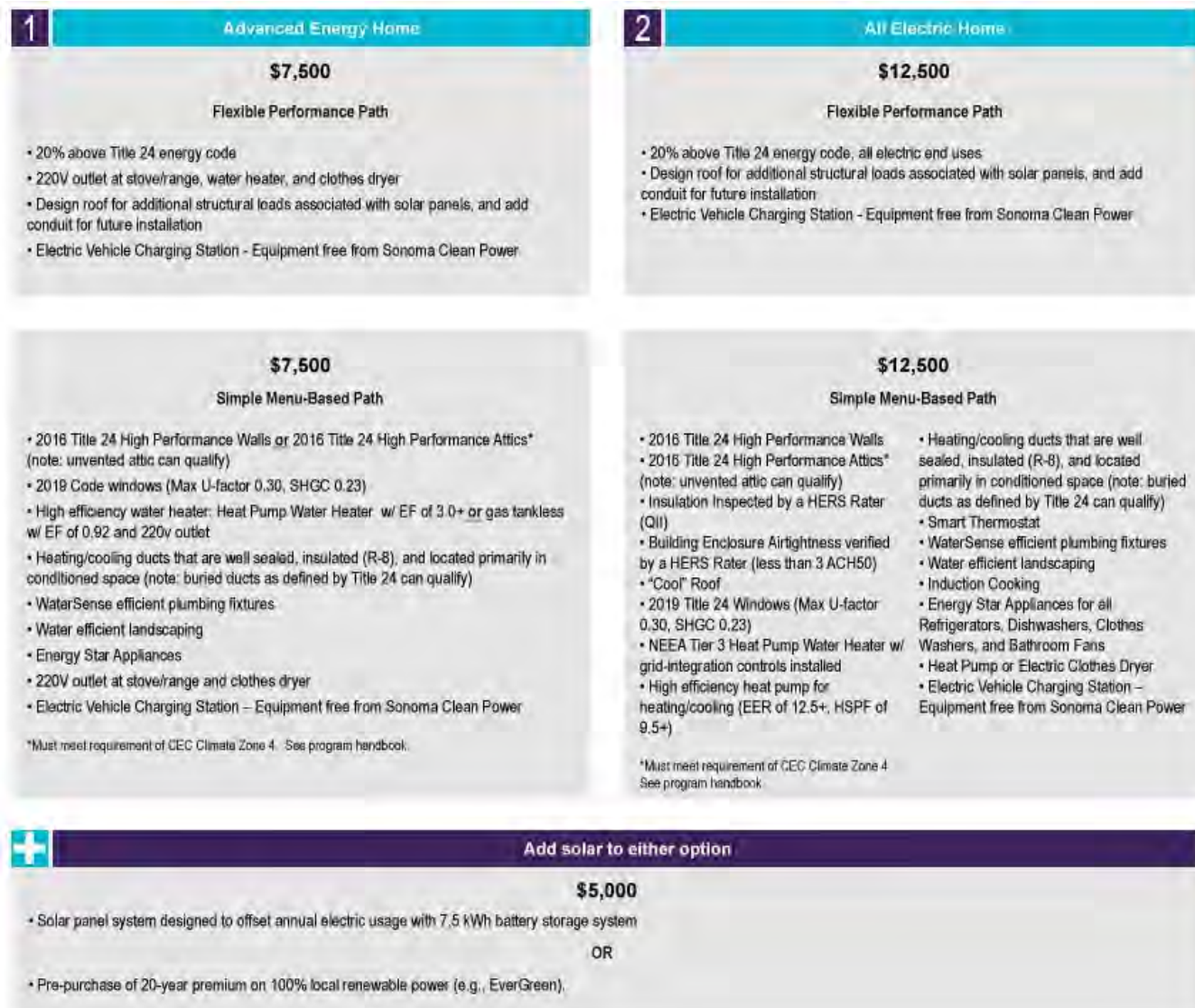
In order to receive these incentives, the AER program offers homeowners a choice of one of two pathways, (1) a flexible performance path that is based on overall efficiency or (2) a simple menu-based path based on a checklist of measures for dual fuel and all electric homes. The flexible performance path gives homeowners the ability to mix and match measures and design options by requiring their new homes to meet the following overall requirements:

- The home’s time-dependent energy efficiency must be modeled to be 20% above 2016 Title 24 energy code

- Roof design must accommodate the structural load associated with solar panels and it must feature conduit for panel installation, even if panels are not included at the time of construction
- An electric vehicle charging station must be installed. Sonoma Clean Power provides free level 2 charging stations.
- For dual fuel homes, if a gas stove/range, water heater, and/or clothes dryer are planned, 220V outlets must be also installed so that any of these gas appliances can be readily converted to electric versions at a future date.

The simple menu-based path provides a checklist of items that must be installed including 2016 Title 24 high performance walls, 2019 code windows, WaterSense efficient plumbing features, Energy Star appliances, and a number of other measures listed in Figure 4.

Figure 4 Advanced Energy Rebuild Incentive Pathways



If homeowners install all the measures on the menu-based path, the program will pay the full incentive amount (\$7,500 or \$12,500) regardless of whether the resulting energy model matches the 20% savings required by Title 24. "The menu-based path is less common but was important to us in terms of selling this to homeowners because it's a way for them to visualize what 20% better than code looks like in terms of efficiency measures. Otherwise, it's really hard for them to understand what 'better than code' means in terms of what they need to put into their homes," explains Kuykendall.

Incentive payments are only made payable to the homeowners whose names appear in the program application. Program rules prohibit applicants from accepting duplicate funding for the same measures from more than one utility-sponsored energy-efficiency program. However, if customers opt for the solar and storage package, they can also apply to PG&E's self-generation incentive program for a State of California tax credit on top of the program's \$5,000 incentive.

According to program eligibility rules, incentives are available to homes, condominiums, apartments, and accessory dwelling units in Sonoma and Mendocino counties that were destroyed by the October 2017 wildfires or the 2018 Mendocino Complex fire. To be eligible, fire damaged lots must have been red tagged by CalFIRE and the new project must receive electric and/or natural gas service from Sonoma Clean Power and/or PG&E. Because eligibility applies to both the fire damaged lot and to the homeowner at the time of the fire, it's possible for the homeowner to sell the fire damaged lot and for the new owner to rebuild with a participating project. It's also possible for original homeowner to rebuild a qualifying home on another lot somewhere else in Sonoma or Mendocino county. When asked about the decisions behind the measures required by the program, the AER team cites the pre-wiring requirement as being central to the joint funding arrangement. "That was a big point in coming up with a program design that would work for both SCP and PG&E," says Dunfee. "It's cheaper to run conduit and wire when the drywall hasn't been installed than it is to go into an existing home and fish the wire through the walls and add those outlets and extra wiring in the panels. It also gives SCP a list of homes and addresses that they can go out and target in the future if they're operating an electrification and retrofit program. Plus, it will make for a much easier selling point to those homeowners of why they should be considering an all electric retrofit."

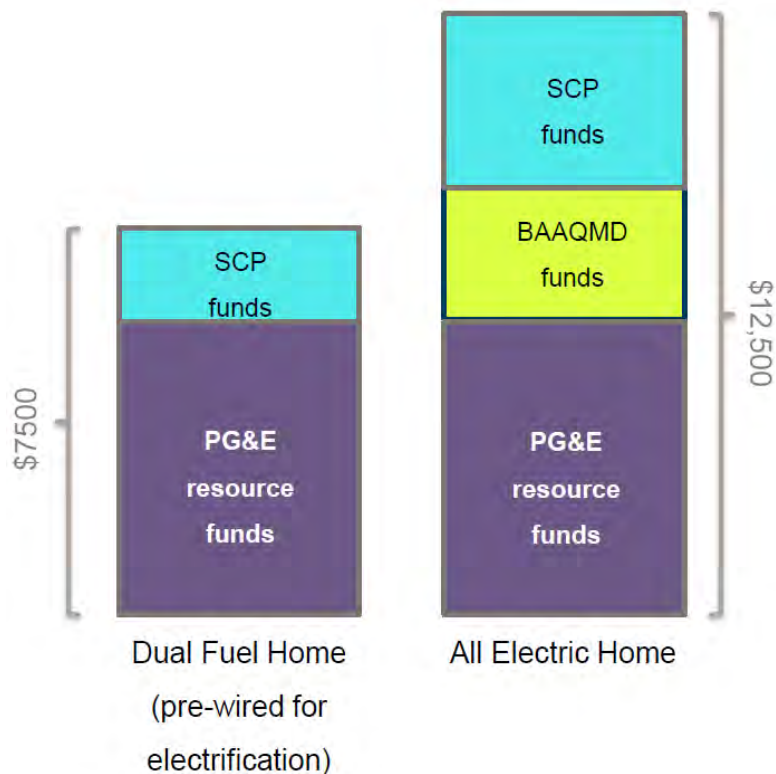
3.4 Funding

Measure selection was only one of many points that needed to be negotiated. As the program came together, SCP, PG&E and BAAQMD also needed to surmount three funding challenges. The first involved determining who would pay for which measures and how much they would contribute. The second revolved around how to manage the joint funding arrangements, made all the more complex by the fact that the amount paid by each entity per home varies depending on the efficiency, fuel source, program pathway, and solar plus storage options selected. The third required devising a way for the program to maintain sufficient reserves to pay out half of the incentives upon project approval.

The first challenge was to align the funding sources and work within the goals and limitations of each entity. As a recipient of ratepayer dollars, PG&E's energy efficiency programs were subject to California's Three Prong Test⁴ that imposed cost effectiveness requirements and limited the utility's ability to promote fuel switching activities. However, because SCP and BAAQMD don't take ratepayer dollars in the same way, they're funding options were not limited. The AER team solved this by agreeing that each entity would pay for different measures, that PG&E would only fund cost effective projects, and that PG&E would not directly support any fuel switching with ratepayer dollars. In other words, PG&E's ratepayer dollars pay for the new homes' energy efficiency measures, while the program's electrification and solar efforts are paid for by SCP and BAAQMD whose funds are earmarked for electrification and GHG reductions (Figure 5).

⁴ Original decision 92-02-075, 1992. This was revised June 28, 2019 per Rulemaking 13-11-005, Decision Modifying the Energy Efficiency Three-Prong Test Related to Fuel Substitution

Figure 5 Advanced Energy Rebuild program funding in Sonoma and Mendocino Counties



The second challenge required the team to devise a funding scheme that accommodated different customer choices regarding fuel types, program pathways, measure selection, and solar. “To the customer it looks like a unified program with fixed incentive amounts, but on the back end it is a jamming together of funding sources and messy calculations, depending on customer choices, efficiency calculations, and cost effectiveness,” says Kuykendall. The solution to this challenge was to meet the program’s fixed customer payment amounts by combining deemed incentives for certain measures with varying incentive amounts for other measures. For instance, BAAQMD funds certain measures at set dollar amounts. A heat pump water heater receives \$1,000, while a heat pump for heating or cooling receives \$1,500, and solar panels get \$3,000. PG&E’s portion of the incentives are paid in the same way as it does for the CAHP program. Those amounts are determined by the home’s Energy Design Rating (EDR) score, which fluctuates from home to home depending on the home’s modelled energy efficiency measures. As a result, the amount of funding that Sonoma Clean Power provides also varies from home to home, since it must make up the difference between the fixed customer payments promised by the program and actual incentive dollars provided by PG&E and BAAQMD.

For example, if customers opt for the menu-based path, there is a chance that the measures they select will not produce an EDR improvement of 2 as required by PG&E’s CAHP program. If this happens, SCP picks up the tab for the difference. “We designed the menu path with the sense that those homes would be roughly 20% complaint, but it really varies. The lowest we’ve seen was only about 5% above code, but we usually see more like in the 15 to 20%,” Kuykendall says. When that happens, SCP draws from its funding pool to make up the difference in order to provide customers with the full incentive amount.

TRC’s Dunfee, explains that despite this potential financial risk to SCP, it’s actually a good thing for both customers and for the program. “It gives SCP a little more skin in the game to really use their marketing and

customer outreach to push folks to add more efficiency measures, since the more efficient they can get them to be, the more incentive dollars PG&E actually picks up,” he says. According to Asper, the increased motivation to push for higher efficiency also works for PG&E, since paying incentives for more efficient homes is what the CAHP program is intended to do.

The third challenge arose from the program design decision to provide customers with a single check for half of the total rebate amount at the time their program applications are approved. The team resolved this by establishing an escrow account that TRC manages. “Sonoma Clean Power puts funds into that account, and we use it to cut a check for the 50% up-front incentive payment as soon as a project is approved for enrollment,” says Dunfee. “When the account gets depleted, we request another deposit from Sonoma Clean Power. We also track the measures and payments and calculate things for them as part of our monthly reporting to all the various stakeholders so we can invoice PG&E and BAAQMD for their share.”

All told, for the three-year life of the program BAAQMD has agreed to contribute \$2 million in total. SCP committed to \$6 million total, with a cap of \$2 million per year, and PG&E's offered \$10 million based on kilowatt hours and therms savings. When all funding sources are combined the program can provide incentives for between 800 and 1,500 homes.

3.5 Sample Project

As of June 2019, four Advanced Energy Rebuild homes had been completed. The first was finished on October 25, 2018, almost exactly one year after the October 8, 2017 Tubbs fire that destroyed the home. Those homeowners replaced their former 1986 ranch-style home with a zero net energy 2,100 square foot home. Because their new home is all-electric and ZNE, it qualified for the full \$17,500 incentive package. Among other features, the home includes the following high efficiency and renewable measures:

- Rheem EcoNet enabled heat pump water heater
- LG mini split heat pump HVAC
- Jenn-air induction range and electric oven combo
- 20-panel array of 360-watt LG solar panels with SolarEdge inverters
- LG Chem 9.8 kWh AC- energy storage system
- 2 JuiceBox Pro 40 electric vehicle chargers

The home's solar panels and battery storage are sufficient to power the entire house and charge two electric vehicles. Moreover, the solar and battery system also makes the home more grid resilient, providing self-generated power if in the future PG&E needs to curtail electric service due to high winds and fire danger. The home's energy savings are anticipated to average \$3,840 per year, for a total savings of \$95,991 over 25 years. Images of the home are shown below (Figures 6 and 7).

Figure 6 First Home Rebuilt with the Advanced Energy Rebuild Program⁵



Figure 7 High efficiency induction cooktop, grid interactive heat pump water heater, and mini-split HVAC system⁶



⁵ Photo credit: John Sarter

⁶ Photo credit: John Sarter

4. Measuring Success

When asked how the program defines success, Kuykendall emphasizes the central importance of helping the local community to recover. “I think ultimately for us success looks like getting people back in their homes,” she says. “When we started, we were starting something new and racing to get the program launched in time to help people rebuild. We didn’t really set a specific goal for participation or a metric for what portion of homes would go the all-electric pathway versus the dual fuel pathway, although we certainly wanted to maximize that since we’d love to see plenty of carbon reduction associated with these homes.” Despite this lack of initial goals and metrics, the program now has a sufficient track record to post its results, which are described in the following subsections.

4.1 Applications and Projects

According to PG&E’s first Annual Advanced Energy Rebuild Advice Letter⁷ filed with the CPUC in June of 2019, program performance between May 1, 2018 through May 31, 2019 resulted in:

- 105 applications comprising 207 dwelling units, which represents approximately 6% of the 3,246 fire rebuild related building permits that were issued in the Sonoma and Mendocino areas in the first 13 months of the program.
- Of the 105 applications, 101 applicants (96%) selected the flexible performance path, while 4 (4%) opted for the simple menu-based path.
- Of the 105 applications, one was for a multifamily complex with 96 units. While 104 were for single-family residences, 7 of which included accessory dwelling units.
- Of the 104 single-family home projects, 33 (32%) chose to build an all-electric home, while 71 (68%) chose to build a dual fuel home. The multifamily project is dual fuel.
- Of the 105 applications, 66 projects are enrolled and have received the initial 50 percent incentive.
- The 66 enrolled projects represent 161 dwelling units: 59 single-family homes, 6 ADUs, and 96 multifamily dwelling units in one multifamily complex project.
- Of the 66 enrolled projects, 28 (42%) are all electric homes
- Of the 66 enrolled projects, 4 have completed construction and received the remaining 50% of the incentive.
- Of the 66 projects, 40 include heat pumps for space heating, 31 include heat pump water heaters, and 12 include solar and batteries
- More than 490 community members have taken advantage of the various workshops offered for homeowners, contractors, CEAs, and raters.

⁷ Advice 4115-G/5578-E, June 28, 2019

4.2 Energy Savings

In terms of energy savings, PG&E's first Annual Advanced Energy Rebuild Advice Letter⁸ filed with the CPUC in June of 2019, reported the following:

- Because solar production is excluded from the savings calculations, the enrolled projects represent 9,620 kWh of energy savings, with an average of 60 kWh per dwelling unit.⁹ If the kWh associated with the solar systems are included in savings calculations, this average rises to 4,369 kWh per dwelling unit. Single-family all-electric homes with PV average over 15,000kWh savings and nearly 20,000kWh for all electric homes with PV and storage.
- Because so many homes are all electric, the enrolled projects represent a savings of 62,780 therms, with an average of 387 therms per dwelling unit.
- The enrolled projects averaged a 24% energy efficiency improvement above 2016 Title 24 code, with actual project efficiency improvements ranging from 10% to 53% above 2016 Title 24 code requirements.
- An average home is estimated to be 26% more efficient than a standard home, saving \$650 on electricity bills, offsetting 14 metric tons of CO₂.¹⁰
- Combined, the enrolled projects are contributing 340 total tons of GHG savings.¹¹

4.3 Incentives

PG&E also reported on the use of incentives in the Annual Advanced Energy Rebuild Advice Letter¹² filed with the CPUC in June of 2019, including:

- Of the \$18 million in combined funds made available for the Advanced Energy Rebuild program, as of June 2019 \$985,000 in incentives have been reserved for program applicants. This represents an average of \$6,118 per enrolled dwelling unit.
- When considered by home type, single family homes receive an average of \$9,615 each, with SCP paying \$4,950, PG&E contributing \$3,188, and BAAQMD providing \$1,476.
- The one multifamily complex in the program received \$3,750 per unit, with SCP paying \$2,830 and PG&E paying \$920 per unit. Because that project was not all electric, it did not receive funding from BAAQMD.

⁸ Advice 4115-G/5578-E, June 28, 2019

⁹ According to PG&E's June 2019 advice letter, "Many of the 33 all-electric projects enrolled demonstrated negative savings. This negative arises from the unavailability of an all-electric baseline in the CEC-approved Title 24 energy modeling software California Building Energy Code Compliance-Residential and Energy Pro), which generated a significantly low magnitude of kWh savings for the program. The current estimate for kW savings is negative 15.19 kW."

¹⁰ Note that these carbon savings are calculated based on CPUC-allowed energy efficiency savings claims, and carbon savings would be higher if solar and generation were included in the calculation.

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¹² Advice 4115-G/5578-E, June 28, 2019

5. Barriers and Opportunities

With over 6,000 structures destroyed during the fires, the AER team initially hoped to see more than 1,000 new homes participating in the program, but that forecast has proven overly optimistic. Kuykendall attributes the relatively lower program uptake to the fact that the program is first and foremost a fire recovery effort. Unlike the California Advanced Homes Partnership program that deals with production builders, the Advanced Energy Rebuild program deals primarily with individual homeowners in the midst of disaster recovery, the majority of whom are facing timelines and financial decisions that don't prioritize energy related matters.

To better understand the reasons for low uptake, the AER team fielded a survey of customers in fire-affected neighborhoods, including program participants as well as those who did not participate in the program. Survey responses reinforced the importance of reaching customers early in the rebuild process and the importance of explaining how the program fits within the larger rebuild process. With feedback now in hand, the team is improving its marketing collateral and outreach efforts. For example, the program team is developing home builder guides and planning to increase the number of webinars and online videos. They're also increasing coordination with PG&E Energy Watch and local government officials.

Despite these planned improvements, it's worth noting that prior to program launch the AER team went to considerable lengths to eliminate as many barriers as much as possible for each of the main constituencies the program touches. Efforts to streamline the program's processes began with the simple step of digitizing the paper form that PG&E used for its CAHP program so that all program materials can be managed online. That level of thinking continues a year later as SCP and TRC conduct periodic program implementation debriefs to determine how to further modify their processes, be that simplifying steps for builders or working on the nitty gritty details of the stock email messages that TRC sends to program participants.

While SCP and PG&E have made efforts to provide educational classes and resources for contractors, they've been challenged to simplify the program requirements to a basic list of requirements, such as levels of attic insulation and measures that need to be installed. "Contractors, especially production builders, don't want to do one-off interventions to meet the needs of the program," Kuykendall says "I think there's a perception in the contractor world that utility programs are notoriously not worth the effort to deal with. So, we spend a lot of time combatting that notion and making it as easy for them as possible."

The challenge with certified energy analysts has primarily been the number of CEAs available to help the cohorts of homeowners in the rebuilding process, and the amount of time needed on each project. For a start, there were not enough CEAs in Sonoma County for the number of jobs to be done. To help alleviate the backlog of work, SCP partnered with the California Association of Building Energy Consultants to host local CEA trainings to get more people certified. But even with more CEAs available, few of them have the time to run half a dozen model iterations. So, SCP has ended up doing the necessary energy modelling for many of them to ensure that homeowners have viable scopes of work.

For HERS raters, the AER program runs like a standard utility program, so any barriers have been low and easy to overcome, such as ensuring that the documentation is correct in the project registry. However, the program has also sought to help HERS raters to better do their jobs by educating homeowner about what a HERS rater does and explaining that they're required by law on all construction projects regardless whether the homeowner participates in the AER program or not.

Although each of these improvements has contributed to a better customer experience, according to Kuykendall, the largest kudos for removing barriers go to PG&E and TRC for their efforts to change, rearrange, and work around the limitations of the existing CAHP program that serves as the backbone for SCP's Advanced

Energy Rebuild program. “I think PG&E has been very open and collaborative with us in terms of streamlining that program and making it something that's really usable for customers in this situation,” she says.

6. Next Steps

As the program wrapped up a successful first year of operation and entered its second year of implementation, the turning point presented a natural opportunity to inquire about next steps for the program. Interestingly the program's success has brought the trio of funders both closer together and moved the program beyond some of their service territories.

6.1 What's Next for Sonoma Clean Power

While the wildfires that spawned the program were an undeniable tragedy, the AER effort has provided opportunities beyond simply advancing building energy efficiency and ZNE construction. It has also afforded SCP the chance to promote demand response and load shaping activities through a sister aggregated demand response program called the GridSavvy Community that is designed to dispatch electric vehicle chargers, grid interactive heat pump water heaters, and smart thermostat -controlled heat pumps. “Load shifting and load shaping are extremely important to us. As a load-serving entity, the 5:00 to 8:00 PM hours are extremely expensive to procure for, and they're extremely carbon-intensive compared to our general portfolio mix. We've done what we can to get rid of the carbon in our supply, with the exception of that evening ramp. So, we see fuel switching and demand response being fundamental in all our programs,” Kuykendall says. “Whenever we talk about energy efficiency, we're always thinking how to pair it with load management. So, we're basically setting up all the new homes in our rebuild program to be participants in the GridSavvy program.”

Aside from working on the GridSavvy integration and responding to the suggestions received from the recent customer survey, SCP continually responds to customer feedback. For instance, after a customer complained that their review was taking too long, SCP worked with TRC to better set expectations by explaining each step in the review process and sending emails to ensure customers know the status of their reviews.

Another area for potential improvements involves the value proposition of all electric homes and ZNE construction. Because a majority of homeowners are choosing dual fuel homes, SCP may reconsider its incentive levels and other ways to make the all-electric pathway more attractive. On a similar note, batteries have proven to be a stumbling block for customers due to their overall pricing. “I think there's some work to be done there to make sure there's a value proposition to the customer,” she says. Of course, incentives don't work in a vacuum, so SCP also plans to sharpen its educational messaging to better communicate the benefits of electrification.

While incremental changes like these can be addressed in the short term, for SCP the most important next step is addressing long term program design. This necessitates updating program requirements to align with changes in building codes. While any projects that are accepted into the program in 2019 will fall under the current program requirements, any new homeowners seeking to file rebuild applications after December 31, 2019, would be subject to more stringent building codes. “The current program pays incentives based on having people exceed current codes by 20%. Since those higher levels will be normal codes and standards after this year, we have to rethink our whole model for a potential 2020 program,” says Kuykendall. How the program will look in the future has yet to be finalized. PG&E filed an advice letter¹³ on July 15, 2019 and was awaiting comment from the CPUC at the time of this case study.

¹³ Advice 4119-G/5588-E, July 15, 2019

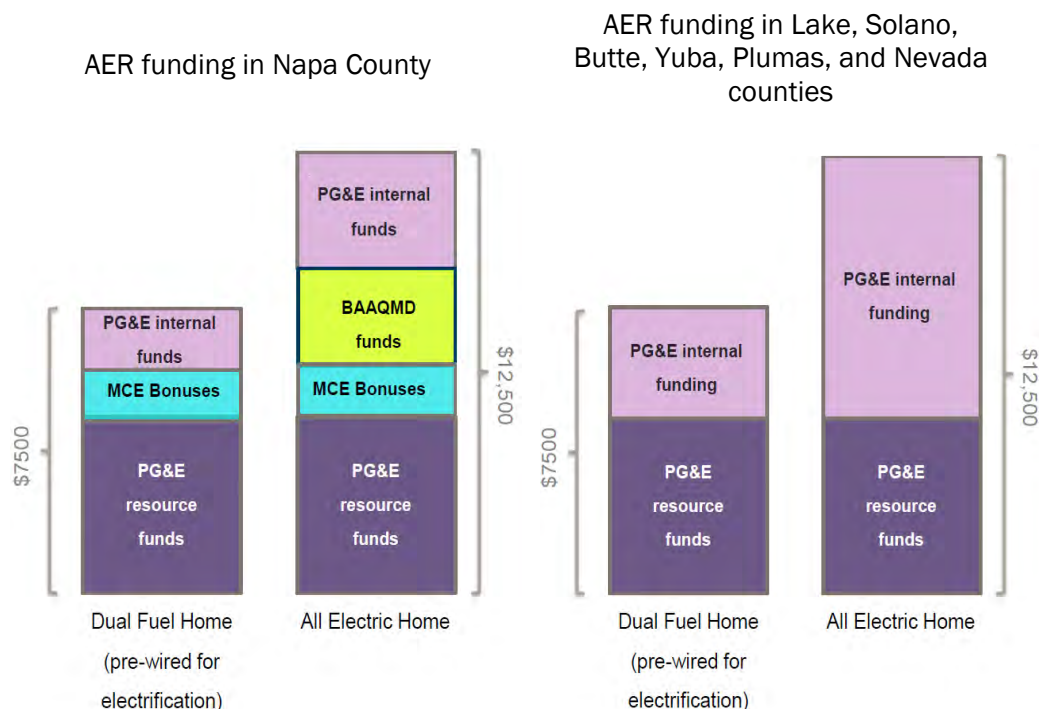
6.2 Looking Beyond Sonoma Clean Power

While Sonoma Clean Power continues to work on evolving the program and improving its local implementation effort, the overall success of the Advanced Energy Rebuild program has enabled PG&E to expand the program well beyond the bounds of SCP's service territory in Sonoma and Mendocino counties. After just a few months in operation in Sonoma County, in the summer of 2018, PG&E reteamed with BAAQMD on a similar AER program effort that also combined forces with Marin Clean Energy (MCE), the Bay Area Regional Energy Network (BayREN), and Napa County to help rebuild communities in Napa County that were damaged by fires around the same time as the fires in neighboring Sonoma County. Then on March 19, 2019, the CPUC approved PG&E Advice Letter 4068-G/5479-E, which requested approval to expand the program yet again to serve other communities in PG&E's territory that were impacted by the Camp, Carr, and other fires of 2018, in Lake, Solano, Butte, Yuba, Plumas and Nevada counties. Because SCP does not serve any of these counties TRC manages customer communications and marketing in those areas.

Although shifting the marketing and customer communication functions of the program from SCP to TRC was reasonably straightforward, redesigning the funding apparatus has been more involved. "We wanted to support the Napa area as well, and since SCP isn't in that area, we worked with BAAQMD and MCE to put together something similar," explains Asper. "The catch was that we didn't have an independently funded CCA partner like SCP, since MCE was mostly limited to using resource funds, and those would be viewed as double-dipping in combination with PG&E's funds, so we had to work around that with other funds to match the incentive levels set with SCP." (Figure 8)

Funding grew even more challenging when PG&E wanted to help in fire damaged communities in parts of the state that are not served by BAAQMD or any community choice aggregator. To backfill the financial shortfall without SCP or an alternate source of funding, PG&E sought and received approval from the CPUC to use internal non-resource dollars. "Now we have two buckets of money, but both are coming from PG&E. They're just separately accounted for. One is the bucket for the resource program we were using before, and the second is the backfill bucket of non-resource dollars to get levels to a similar amount, with \$7,500 for dual-fuel and an extra \$5,000 for all-electric homes," Asper explains.

Figure 8 Advanced Energy Rebuild Funding in Napa and Other Counties



As the Advance Energy Rebuild program grows and spreads so do accolades for the program. In fact, the program's reputation received a prominent boost in June of 2019, when it received the Grand Award from the Bay Area Metro Awards, which recognize people, projects, organizations, and local governments that are making a difference in the Bay Area. The AER program was honored for its innovative collaboration in helping the North Bay to rebuild after the fires.

Interestingly, the AER program has proven so successful that the program concept is now expanding beyond PG&E's service territory, as Southern California Edison recently filed an advice letter with the CPUC to offer a similar program to wildfire victims within its service territory. Such expansions of the Advanced Energy Rebuild program would appear to be good news for advocates of energy efficiency, electrification and GHG reductions, and even better news for residents in fire-prone areas of California, particularly given that fires may be more prevalent in the years ahead as summers seem to grow hotter, drier, and windier with each passing year.

7. Key Takeaways

Sonoma Clean Power's Advanced Energy Rebuild program represents an innovative example of how community choice aggregators, utilities, and other interested stakeholders can work together to create meaningful programs that promote energy efficient and zero net energy homes. Best practices and lessons learned from this program include the following:

Best Practices

- Utilize existing program infrastructure.** Rather than create a new program from scratch, the AER team made creative use of pre-existing efforts and allocated responsibilities according to the strengths of each participating entity. At its core, the AER program is built upon PG&E's California Advanced Homes Partnership infrastructure as implemented by TRC. SCP leverages its local presence and existing marketing and social media networks for outreach and face-to-face customer service. While BAAQMD uses its numerous social media and messaging networks to help promote awareness.
- Layer multiple funding sources.** One of the most pivotal program design elements has proven to be its layered funding stack. Each entity contributes funds for different measures based on that organization's goals and requirements. PG&E covers program implementation costs and provides resource funding for dual fuel or all electric homes, through the CAHP program's existing structure, based on the home's modelled improvement in energy efficiency beyond code requirements. BAAQMD provides deemed funds for solar and electrification measures in all electric homes. SCP pays for carbon-reducing measures in both home types, with contribution amounts varying depending on customer equipment choices and the resulting contribution from PG&E.
- Present one forward-facing program to customers.** While the AER program is an amalgam of parts contributed by multiple entities on its back end, from the customer perspective it is presented as a single program that is designed to increase customer interest, ease participation, and maximize access to program resources. The hybrid program design creates larger incentives that make the program more enticing, while also allowing for more stringent participation requirements. Likewise, the program offers one easy-to-access program application, a streamlined review process, a unified set of customer messages, and a single customer rebate check drawn from a shared funding pool.
- Study your customers and design your program accordingly.** At the start of the program design phase, the AER team took the time to speak with homeowners, builders, energy consultants, and other stakeholders to learn what was really needed for a fire rebuild program. Their research yielded key findings that contributed directly to the program design. Among other things, they concluded that production homebuilders and individual homeowners, particularly those participating in a fire rebuild, have different interests, needs, and program processing requirements. Production builders submit plans for large housing developments in one application with a handful of home models. This makes energy modeling and incentive processing easier. Conversely, individual homeowners present custom home models that must be reviewed on a one-off basis. Additionally, production builders are primarily concerned with low construction costs rather than long-term efficiency. While individual homeowners can be more interested in energy savings since they want comfort, resiliency, and a balance between upfront costs and life-cycle operating expenses. Moreover, while developers may be content to wait until project end for incentive payments, homeowners are often cash-strapped, so paying 50% of incentives upon application approval is extremely helpful to keep smaller contractors paid and projects moving forward.

- **Prewire new homes for future all electric and solar panel installations.** Customer preference for gas appliances represents a sizable barrier for the adoption of all electric homes. While many customers are interested in building more efficiently, fewer of them are ready to give up natural gas service and live in all electric homes. The AER program addresses this by requiring any participating dual fuel home to be prewired to accommodate future installations of all electric equipment for HVAC, water heating, cooking, and laundry. Likewise, roof designs must accommodate the structural loads associated with solar panels and they must have conduit for panel installation, even if panels are not included at the time of construction. These requirements increase the likelihood of converting dual fuel homes to all electric homes in the future by significantly reducing homeowner financial hurdles if and when such upgrades are considered.
- **Establish an induction cooking lending program.** Customer desire for natural gas cooktops ranks high among the reasons for opting for a dual fuel rather than all electric home. To overcome this barrier to customer acceptance, SCP offers an induction cooktop program that lends interested homeowners a portable induction cooktop and associated cookware for a free 30-day trial so they can become familiar and comfortable with the speed and convenience of induction cooking. All that is required of the homeowner is a commitment to respond to a survey at the end of the trial. Survey results can provide insights into customer experiences, hesitations, preferences, and customer testimonials to promote induction cooking. A similar cooktop lending effort could be incorporated into other types of new construction programs and used as a familiarization tool to build customer interest in induction cooking.
- **Educate all stakeholders involved in the construction process.** Encouraging wider acceptance of ZNE construction requires educating all of the groups involved in the construction process, including architects, builders, homeowners, certified energy analysts, HERS raters and others. The AER program design includes educational elements directed at each of these groups, including numerous public workshops and webinars to explain the program to homeowners, training courses offered to architects and builders through a regional builders' association to familiarize them with electrification and ZNE principles; hosted local training sessions and paying testing costs to encourage local people to become certified energy analysts (CEAs), as well as uncounted one-on-one conversations with homeowners, CEAs, and HERS raters to help them appreciate the many benefits of increased efficiency and electrification and their place within the construction process.
- **Align program strategies and implementation tactics with larger goals.** While energy efficiency and electrification are the primary objectives of the AER program, SCP has also taken steps to further leverage the program to help meet its bigger picture carbon-reduction goal. To that end, SCP is using the program as an opportunity to recruit participating homeowners into its GridSavvy load shifting and demand management program that will dispatch electric vehicle charging, grid interactive heat pump water heating, and smart thermostat-controlled heat pumps—all of which are already installed in the homes and poised to offset carbon-intensive electric loads during on-peak hours.
- **Work with “block captains” in each neighborhood.** SCP credits neighborhood advocates called “block captains,” who represent groups of neighbors who are rebuilding, as being among the most effective of the program’s marketing tools. Block captains are loosely akin to the energy champions that are used in other energy efficiency programming efforts. Their extensive social networks, relatively greater knowledge of the program, and comfort with the rebuild process combine to make them well suited to speaking with PG&E, SCP and local government officials to discuss the rebuilding effort and then relaying those messages back to their friends and neighbors. SCP indicates that the role of block captains has been unique to the AER program and recommends their use in other efforts.

Lessons Learned

- **Connect with customers as early as possible in the building process.** Customer participation rates, as well as feedback from both program participants and nonparticipants, reveal the importance of early marketing to ensure that the program is top of mind for customers as they begin making their home design decisions. The AER program missed the opportunity to work with a few fast-moving homeowners because they learned of the program's existence after they were already committed to less efficient, dual fuel home plans. Early outreach to make people aware of program offerings gives customers a greater opportunity to explore and model the best options, while also affording program implementers a greater chance to explain the program and influence decisions.
- **Be prepared to handle waves of applications.** While a fire rebuild program requires the processing of individual applications for each custom home, participating homeowners tend to apply to and proceed through the program in cohorts. While each homeowner is individually responsible for their own decisions, they tend to apply in groups because it takes approximately the same amount of time to move through the various stages of the rebuilding process, such as removing debris from their lots, settling with their insurance companies, finding contractors, and developing building plans. As a result, it is essential to have a sufficient number of certified energy analysts and program staff on hand to help with applications, review energy models, and process checks in order to avoid bottlenecks that slow down the rebuild process.
- **Allocate sufficient time and funding to recruit, educate and incentivize certified energy analysts.** CEAs are essential for developing the standardized energy models needed for the program since CEAs submit higher quality energy models than untrained persons and thus the models require less back and forth to meet program standards. Yet despite the program's numerous efforts to recruit, educate, inform and motivate CEAs, the program fell short in the number of local CEAs available to help homeowners and in their willingness to prepare high quality models to assess differing equipment and design considerations. As a result, SCP staff were sometimes required to shoulder the burden of some of the energy modeling needed to properly prepare homeowner applications in a timely manner. Future efforts will need to allocate more resources to this facet of the program.
- **Promoting high efficiency is easier than promoting fuel switching.** The program's \$5,000 incentive for upgrading to an all electric home has enticed one third of customers to forgo natural gas service. While electric heat pumps and water heaters are readily accepted measures in dual fuel homes, fireplaces and cooktops have proven to be more challenging for customers to relinquish. While SCP's cooktop lending program has helped, other concerns, such as the home's resale value, remain as barriers. To further increase adoption of all electric homes, additional education and higher financial incentives may be necessary.

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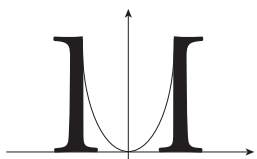
858 270 5010 [tel](#)
858 270 5211 [fax](#)

7590 Fay Avenue
Suite 406
La Jolla, CA 92037

Portland

503 287 9136 [tel](#)

3934 NE Martin Luther King, Jr. Blvd.
Suite 300
Portland, OR 97212



ACCOUNTANTS' COMPILATION REPORT

Board of Directors
Sonoma Clean Power Authority

Management is responsible for the accompanying special purpose statement of Sonoma Clean Power Authority (a California Joint Powers Authority) which comprise the budgetary comparison schedule for the period ended June 30, 2019, and for determining that the budgetary basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statement nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any assurance on this special purpose budgetary comparison statement.

The special purpose statement is prepared in accordance with the budgetary basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. This report is intended for the information of the Board of Directors of Sonoma Clean Power Authority.

Management has elected to omit substantially all of the note disclosures required by accounting principles generally accepted in the United States of America in these interim financial statements. Sonoma Clean Power Authority's annual audited financial statements include the note disclosures omitted from these interim statements. If the omitted disclosures were included in these financial statements, they might influence the user's conclusions about the Authority's financial position, results of operations, and cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy

San Rafael, CA
September 3, 2019



**SONOMA CLEAN POWER AUTHORITY
OPERATING FUND**

BUDGETARY COMPARISON SCHEDULE

July 1, 2018 through June 30, 2019

	2018/19 YTD Amended Budget	2018/19 YTD Actual	2018/19 YTD Budget Variance (Under) Over	2018/19 YTD Actual/ Amended Budget %	2018/19 Amended Budget	2018/19 Amended Budget Remaining
REVENUE AND OTHER SOURCES:						
Electricity (net of allowance) *	\$ 176,855,000	\$ 172,215,645	\$ (4,639,355)	97%	\$ 176,855,000	\$ 4,639,355
Evergreen Premium (net of allowance)	412,000	455,454	43,454	111%	412,000	(43,454)
CEC Grant	1,927,000	1,603,260	(323,740)	83%	1,927,000	323,740
BAAQMD grant	62,000	55,375	(6,625)	0%	62,000	6,625
Interest income	946,000	1,104,358	158,358	117%	946,000	(158,358)
Miscellaneous Income	-	503	503	0%	-	(503)
Total revenue and other sources	180,202,000	175,434,595	(4,767,405)	97%	180,202,000	4,767,405
EXPENDITURES AND OTHER USES:						
CURRENT EXPENDITURES						
Cost of energy and scheduling	146,345,000	145,314,794	(1,030,206)	99%	146,345,000	1,030,206
Data management	3,089,000	3,158,651	69,651	102%	3,089,000	(69,651)
Service fees- PG&E	959,000	953,613	(5,387)	99%	959,000	5,387
Personnel	3,661,000	3,536,210	(124,790)	97%	3,661,000	124,790
Outreach and communications	1,144,000	985,821	(158,179)	86%	1,144,000	158,179
Customer service	440,000	216,550	(223,450)	49%	440,000	223,450
General and administration	531,000	480,656	(50,344)	91%	531,000	50,344
Legal	710,000	624,674	(85,326)	88%	710,000	85,326
Accounting and auditing	204,000	148,385	(55,615)	73%	204,000	55,615
Technical consultants	190,000	100,204	(89,796)	53%	190,000	89,796
Legislative and regulatory advocacy	128,000	124,446	(3,554)	97%	128,000	3,554
Other consultants	160,000	115,314	(44,686)	72%	160,000	44,686
CalCCA Trade Association	400,000	300,000	(100,000)	75%	400,000	100,000
Program implementation	4,510,000	2,741,597	(1,768,403)	61%	4,510,000	1,768,403
Program - CEC grant	2,415,000	1,415,292	(999,708)	59%	2,415,000	999,708
Program development and evaluation	100,000	1,101	(98,899)	1%	100,000	98,899
Total current expenditures	164,986,000	160,217,308	(4,768,692)	97%	164,986,000	4,768,692
OTHER USES						
Collateral deposit payments	1,409,000	1,538,290	129,290	109%	1,409,000	(129,290)
Collateral deposit payments returned	-	(372,500)	(372,500)	-	-	372,500
Capital outlay	1,190,000	1,165,469	(24,531)	98%	1,190,000	24,531
Total expenditures, Other Uses and Debt Service	167,585,000	162,548,567	(5,036,433)	97%	167,585,000	5,036,433
Net increase (decrease) in available fund balance	\$ 12,617,000	\$ 12,886,028	\$ 269,028	102%	\$ 12,617,000	\$ (269,028)

* Represents sales of approximately 2,414,000 MWh for 2018/19 YTD actual.

	Current Balance	% of FY Target	FY Target Balance
RESERVES			
Operating Cash Reserve	\$ 51,123,294	62%	\$ 83,088,000
Program Cash Reserve	9,223,924	56%	16,617,600
Collateral Cash Reserve	1,143,372	8%	14,634,500
	\$ 61,490,590	54%	\$ 114,340,100

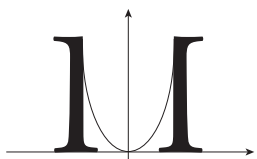
See accountants' compilation report.

SONOMA CLEAN POWER AUTHORITY
OPERATING FUND
BUDGET RECONCILIATION TO STATEMENT OF
REVENUES, EXPENSES AND CHANGES IN NET POSITION
July 1, 2018 through June 30, 2019

Net increase (decrease) in available fund balance
per budgetary comparison schedule: \$ 12,886,028

Adjustments needed to reconcile to the
changes in net position in the
Statement of Revenues, Expenses
and Changes in Net Position:

Subtract depreciation expense	(59,857)
Add back capital asset acquisitions	1,165,469
Subtract collateral deposits returned	(372,500)
Add back collateral deposits	1,538,290
Change in net position	<u>\$ 15,157,430</u>



ACCOUNTANTS' COMPILATION REPORT

Management
Sonoma Clean Power Authority

Management is responsible for the accompanying financial statements of Sonoma Clean Power Authority (a California Joint Powers Authority) which comprise the statement of net position as of June 30, 2019, and the related statement of revenues, expenses, and changes in net position, and the statement of cash flows for the period then ended in accordance with accounting principles generally accepted in the United States of America. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, conclusion, nor provide any assurance on these financial statements.

Management has elected to omit substantially all of the note disclosures required by accounting principles generally accepted in the United States of America in these interim financial statements. Sonoma Clean Power Authority's annual audited financial statements include the note disclosures omitted from these interim statements. If the omitted disclosures were included in these financial statements, they might influence the user's conclusions about the Authority's financial position, results of operations, and cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy

San Rafael, CA
September 3, 2019



SONOMA CLEAN POWER AUTHORITY

STATEMENT OF NET POSITION

As of June 30, 2019

ASSETS

Current assets	
Cash and cash equivalents	\$ 42,187,641
Investment in Sonoma County Investment Pool	15,402,798
Accounts receivable, net of allowance	17,248,908
Other receivables	1,136,168
Accrued revenue	10,409,152
Prepaid expenses	1,617,136
Deposits	332,079
Investments	10,208,015
Total current assets	<u>98,541,897</u>
Noncurrent assets	
Land	860,520
Capital assets, net of depreciation	4,118,138
Deposits	5,459,242
Total noncurrent assets	<u>10,437,900</u>
Total assets	<u>108,979,797</u>

LIABILITIES

Current liabilities	
Accounts payable	1,799,787
Accrued cost of electricity	13,687,997
Advanced from grantors	444,625
Other accrued liabilities	630,499
User taxes and energy surcharges due to other governments	498,332
Total current liabilities	<u>17,061,240</u>

NET POSITION

Investment in capital assets	4,978,658
Unrestricted	86,939,899
Total net position	<u>\$ 91,918,557</u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
July 1, 2018 through June 30, 2019

OPERATING REVENUES

Electricity sales, net	\$ 172,215,645
Evergreen electricity premium	455,454
Grant revenue	1,658,635
Total operating revenues	<u>174,329,734</u>

OPERATING EXPENSES

Cost of electricity	145,314,794
Staff compensation	3,536,210
Data manager	3,158,651
Service fees - PG&E	953,613
Consultants and other professional fees	2,892,866
Legal	624,674
Communications	1,204,014
General and administration	874,455
Program rebates and incentives	1,658,031
Depreciation	59,857
Total operating expenses	<u>160,277,165</u>
Operating income	<u>14,052,569</u>

NONOPERATING REVENUES (EXPENSES)

Interest income	1,104,358
Gain on sale of equipment	503
Total nonoperating revenues (expenses)	<u>1,104,861</u>

CHANGE IN NET POSITION

	15,157,430
Net position at beginning of period	<u>76,761,127</u>
Net position at end of period	<u><u>\$ 91,918,557</u></u>

SONOMA CLEAN POWER AUTHORITY

STATEMENT OF CASH FLOWS

July 1, 2018 through June 30, 2019

CASH FLOWS FROM OPERATING ACTIVITIES

Receipts from electricity sales	\$ 172,466,526
Receipts from grantors	821,538
Receipts from supplier for security deposits	35,600
Tax and surcharge receipts from customers	2,337,583
Deposits and collateral returned	372,500
Payments to purchase electricity	(146,139,613)
Payments for staff compensation	(3,379,303)
Payments for contract services	(6,951,432)
Payments for communications	(1,472,619)
Payments for general and administration	(805,700)
Payments for program rebates and incentives	(1,758,431)
Return of security deposits to suppliers	(21,000)
Tax and surcharge payments to other governments	(2,332,060)
Deposits and collateral paid	(1,538,290)
Payments for charitable contributions	(108,000)
Net cash provided (used) by operating activities	<u>11,527,299</u>

CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

Acquisition of capital assets	<u>(1,255,978)</u>
Net cash provided (used) by capital and financing activities	<u>(1,255,978)</u>

CASH FLOWS FROM INVESTING ACTIVITIES

Interest income received	1,079,315
Purchase of certificate of deposit	<u>(10,208,015)</u>
Net cash provided (used) by investing activities	<u>(9,128,700)</u>

Net change in cash and cash equivalents (including County Investment Pool)	1,142,621
Cash and cash equivalents at beginning of year	<u>56,447,818</u>
Cash and cash equivalents at end of year	<u>\$ 57,590,439</u>

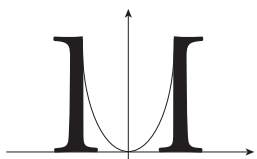
Reconciliation to the Statement of Net Position

Cash and cash equivalents	\$ 42,187,641
Investment in Sonoma County Investment Pool	<u>15,402,798</u>
Cash and cash equivalents	<u>\$ 57,590,439</u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF CASH FLOWS (continued)
July 1, 2018 through June 30, 2019

**RECONCILIATION OF OPERATING INCOME TO NET
CASH PROVIDED BY OPERATING ACTIVITIES**

Operating income	\$ 14,052,569
Adjustments to reconcile operating income to net cash provided (used) by operating activities	
Depreciation expense	48,238
Revenue reduced for uncollectible accounts	(1,096,511)
Charitable contributions considered an operating activity for cash flow purposes only	(108,000)
(Increase) decrease in net accounts receivable	1,711,751
(Increase) decrease in other receivables	(928,379)
(Increase) decrease in accrued revenue	(836,130)
(Increase) decrease in prepaid expenses	(1,086,605)
(Increase) decrease in current deposits	(1,132,290)
Increase (decrease) in accounts payable	396,581
Increase (decrease) in accrued cost of electricity	428,061
Increase (decrease) in advance from grantors	(55,375)
Increase (decrease) in accrued liabilities	96,949
Increase (decrease) in user taxes and energy surcharges due to other governments	21,840
Increase (decrease) in supplier security deposits	14,600
Net cash provided (used) by operating activities	<u><u>\$ 11,527,299</u></u>



ACCOUNTANTS' COMPILATION REPORT

Board of Directors
Sonoma Clean Power Authority

Management is responsible for the accompanying special purpose statement of Sonoma Clean Power Authority (a California Joint Powers Authority) which comprise the budgetary comparison schedule for the period ended July 31, 2019, and for determining that the budgetary basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statement nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any assurance on this special purpose budgetary comparison statement.

The special purpose statement is prepared in accordance with the budgetary basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. This report is intended for the information of the Board of Directors of Sonoma Clean Power Authority.

Management has elected to omit substantially all of the note disclosures required by accounting principles generally accepted in the United States of America in these interim financial statements. Sonoma Clean Power Authority's annual audited financial statements include the note disclosures omitted from these interim statements. If the omitted disclosures were included in these financial statements, they might influence the user's conclusions about the Authority's financial position, results of operations, and cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy

San Rafael, CA
September 18, 2019



SONOMA CLEAN POWER AUTHORITY
OPERATING FUND
BUDGETARY COMPARISON SCHEDULE
July 1, 2019 through July 31, 2019

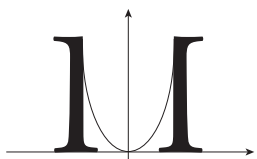
	2019/20 YTD Budget	2019/20 YTD Actual	2019/20 YTD Budget Variance (Under) Over	2019/20 YTD Actual/ Budget %	2019/20 Budget	2019/20 Budget Remaining
REVENUE AND OTHER SOURCES:						
Electricity (net of allowance) *	\$ 15,837,104	\$ 16,318,927	\$ 481,823	103%	\$ 187,866,000	\$ 171,547,073
Evergreen Premium (net of allowance)	38,019	36,381	(1,638)	96%	451,000	414,619
CEC Grant	396,667	26,927	(369,740)	7%	4,760,000	4,733,073
BAAQMD grant	8,333	-	(8,333)	0%	100,000	100,000
Interest income	84,250	110,088	25,838	131%	1,011,000	900,912
Total revenue and other sources	16,364,373	16,492,323	127,950	101%	194,188,000	177,695,677
EXPENDITURES AND OTHER USES:						
CURRENT EXPENDITURES						
Cost of energy and scheduling	15,001,649	14,127,317	(874,332)	94%	152,301,000	138,173,683
Data management	263,167	265,268	2,101	101%	3,158,000	2,892,732
Service fees- PG&E	80,083	79,916	(167)	100%	961,000	881,084
Personnel	360,833	292,989	(67,844)	81%	4,330,000	4,037,011
Outreach and communications	90,000	60,057	(29,943)	67%	960,000	899,943
Customer service	30,583	26,471	(4,112)	87%	367,000	340,529
General and administration	97,083	92,049	(5,034)	95%	505,000	412,951
Legal, regulatory and compliance	77,167	114,489	37,322	148%	926,000	811,511
Accounting	17,583	9,672	(7,911)	55%	211,000	201,328
Legislative	6,500	6,500	-	100%	78,000	71,500
Other consultants	13,333	12,240	(1,093)	92%	160,000	147,760
CalCCA Trade Association	36,667	27,500	(9,167)	75%	440,000	412,500
Program implementation	283,333	3,926	(279,407)	1%	3,400,000	3,396,074
Program - CEC grant	746,667	144,489	(602,178)	19%	8,960,000	8,815,511
Program development and evaluation	4,167	-	(4,167)	0%	50,000	50,000
Total current expenditures	17,108,815	15,262,883	(1,845,932)	89%	176,807,000	161,544,117
OTHER USES						
Capital outlay	725,000	30,012	(694,988)	4%	8,700,000	8,669,988
Total expenditures, Other Uses and Debt Service	17,833,815	15,292,895	(2,540,920)	86%	185,507,000	170,214,105
Net increase (decrease) in available fund balance	\$ (1,469,442)	\$ 1,199,428	\$ 2,668,870	-82%	\$ 8,681,000	\$ 7,481,572

* Represents sales of approximately 206,000 MWh for 2019/20 YTD actual.

	Current Balance	% of FY Target	FY Target Balance
RESERVES			
Operating Cash Reserve	\$ 51,205,860	55%	\$ 92,753,500
Program Cash Reserve	9,240,437	50%	18,550,700
Collateral Cash Reserve	1,154,381	8%	15,230,100
	\$ 61,600,678	49%	\$ 126,534,300

SONOMA CLEAN POWER AUTHORITY
OPERATING FUND
BUDGET RECONCILIATION TO STATEMENT OF
REVENUES, EXPENSES AND CHANGES IN NET POSITION
July 1, 2019 through July 31, 2019

Net increase (decrease) in available fund balance per budgetary comparison schedule:	\$ 1,199,428
Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position:	
Subtract depreciation expense	(5,374)
Add back capital asset acquisitions	<u>147,574</u>
Change in net position	<u><u>\$ 1,341,628</u></u>



ACCOUNTANTS' COMPILATION REPORT

Management
Sonoma Clean Power Authority

Management is responsible for the accompanying financial statements of Sonoma Clean Power Authority (a California Joint Powers Authority) which comprise the statement of net position as of July 31, 2019, and the related statement of revenues, expenses, and changes in net position, and the statement of cash flows for the period then ended in accordance with accounting principles generally accepted in the United States of America. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, conclusion, nor provide any assurance on these financial statements.

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We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

Maher Accountancy

San Rafael, CA
September 18, 2019



SONOMA CLEAN POWER AUTHORITY

STATEMENT OF NET POSITION

As of July 31, 2019

ASSETS

Current assets

Cash and cash equivalents	\$ 44,895,482
Investment in Sonoma County Investment Pool	15,489,074
Accounts receivable, net of allowance	17,860,966
Other receivables	435,914
Accrued revenue	9,546,802
Prepaid expenses	1,600,333
Deposits	332,079
Investments	10,231,562
Total current assets	<u>100,392,212</u>

Noncurrent assets

Land	860,520
Capital assets, net of depreciation	4,266,410
Deposits	5,459,242
Total noncurrent assets	<u>10,586,172</u>
Total assets	<u>110,978,384</u>

LIABILITIES

Current liabilities

Accounts payable	1,475,414
Accrued cost of electricity	14,816,555
Advanced from grantors	444,625
Other accrued liabilities	552,468
User taxes and energy surcharges due to other governments	429,137
Total current liabilities	<u>17,718,199</u>

NET POSITION

Investment in capital assets	5,126,930
Unrestricted	<u>88,133,255</u>
Total net position	<u>\$ 93,260,185</u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
July 1, 2019 through July 31, 2019

OPERATING REVENUES

Electricity sales, net	\$ 16,318,927
Evergreen electricity premium	36,381
Grant revenue	26,927
Total operating revenues	<u>16,382,235</u>

OPERATING EXPENSES

Cost of electricity	14,127,317
Staff compensation	313,801
Data manager	265,268
Service fees - PG&E	79,916
Consultants and other professional fees	37,633
Legal	114,489
Communications	86,528
General and administration	120,369
Depreciation	5,374
Total operating expenses	<u>15,150,695</u>
Operating income	<u>1,231,540</u>

NONOPERATING REVENUES (EXPENSES)

Interest income	<u>110,088</u>
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CHANGE IN NET POSITION

	1,341,628
Net position at beginning of period	<u>91,918,557</u>
Net position at end of period	<u>\$ 93,260,185</u>

SONOMA CLEAN POWER AUTHORITY

STATEMENT OF CASH FLOWS

July 1, 2019 through July 31, 2019

CASH FLOWS FROM OPERATING ACTIVITIES

Receipts from electricity sales	\$ 16,609,551
Receipts from grantors	402,734
Tax and surcharge receipts from customers	213,506
Payments to purchase electricity	(12,555,820)
Payments for staff compensation	(435,848)
Payments for contract services	(896,913)
Payments for communications	(147,397)
Payments for general and administration	(156,100)
Return of security deposits to suppliers	(14,600)
Tax and surcharge payments to other governments	(286,651)
Net cash provided (used) by operating activities	<u>2,732,462</u>

CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

Acquisition of capital assets	<u>(81,162)</u>
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CASH FLOWS FROM INVESTING ACTIVITIES

Interest income received	<u>142,817</u>
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Net change in cash and cash equivalents (including County Investment Pool)	2,794,117
Cash and cash equivalents at beginning of year	<u>57,590,439</u>
Cash and cash equivalents at end of year	<u>\$ 60,384,556</u>

Reconciliation to the Statement of Net Position

Cash and cash equivalents	\$ 44,895,482
Investment in Sonoma County Investment Pool	<u>15,489,074</u>
Cash and cash equivalents	<u>\$ 60,384,556</u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF CASH FLOWS (continued)
July 1, 2019 through July 31, 2019

**RECONCILIATION OF OPERATING INCOME TO NET
CASH PROVIDED BY OPERATING ACTIVITIES**

Operating income	\$ 1,231,540
Adjustments to reconcile operating income to net cash provided (used) by operating activities	
Depreciation expense	5,374
Revenue reduced for uncollectible accounts	125,254
(Increase) decrease in net accounts receivable	(737,310)
(Increase) decrease in other receivables	643,977
(Increase) decrease in accrued revenue	862,349
(Increase) decrease in prepaid expenses	16,803
Increase (decrease) in accounts payable	(396,857)
Increase (decrease) in accrued cost of electricity	376,847
Increase (decrease) in accrued liabilities	688,280
Increase (decrease) in user taxes and energy surcharges due to other governments	(69,195)
Increase (decrease) in supplier security deposits	(14,600)
Net cash provided (used) by operating activities	<u><u>\$ 2,732,462</u></u>



Staff Report – Item 07

To: Sonoma Clean Power Authority Board of Directors

From: Geof Syphers, CEO
Neal Reardon, Director of Regulatory Affairs

Issue: Receive Legislative and Regulatory Updates and Provide Direction as Appropriate

Date: October 3, 2019

Requested Board Action:

Receive Legislative and Regulatory Updates and Provide Direction as Appropriate

REGULATORY REPORT

PG&E Energy Resource Recovery Account (ERRA)

PG&E submitted an Application for approval of 2020 ERRA revenue requirements in June. This Application proposes to raise the PCIA charged to departing customers significantly (SCP's 2014 vintage residential customers would pay 60% more in PCIA than they do today). SCP and a coalition of Northern California CCAs are heavily engaged in this proceeding and have retained external consultants who can review PG&E's confidential work papers to assist us in our defense. We have already identified a significant amount of areas where the Application deviates from required practice and previous precedent.

A pre-hearing conference was held on August 15th. Testimony was submitted on September 10th, with PG&E's Rebuttal served on September 24th. Evidentiary Hearings to address disputed issues of fact and law will be held from September 30th to October 2nd. Following those hearings, and subsequent data requests, opening and reply briefs will be due October 21st.

and 31st. The Commission intends to resolve and implement rates by January 1st of 2020.

Resource Adequacy (RA)

A Motion for Approval of a Settlement was filed with the CPUC by a diverse group of stakeholders, including CalCCA, SDG&E, Shell Energy, and Calpine. This Settlement outlines the terms by which a Central Procurement Entity (“CPE”) would purchase RA on behalf of LSEs which did not do so on their own accord. It is in direct response to a proposal denied by the Commission earlier this year to implement a central buyer for all RA, regardless of LSEs’ desire to enter into their own contracts. Following that vote, the Commission directed stakeholders develop their own version of a central buyer framework for RA.

Comments on the Central Buyer Settlement are due September 30th, with replies due October 15th. Following that stakeholder feedback, the Commission may modify, adopt, or deny the settlement proposal. It should be noted that the Settlement does not propose which entity should function as the CPE (e.g. an IOU, a new or existing State agency), but details the responsibility, function, and timing of actions. As proposed, the Central Procurement Entity would assume responsibility in 2021 for the 2022 Resource Adequacy year.

In addition to the discussion of a central buyer, the Commission issued a Proposed Decision modifying the rules governing RA imported from out-of-state resources. This proposal would only deem import RA eligible if the resources under contract were delivering energy during times of peak need. Thus it would blend a capacity product with an energy one. In addition to nullifying the value of existing contracts for import RA, this proposal raises issues around Interstate Commerce laws and may provoke FERC intervention. SCP is working through CalCCA to file comments on this proposed decision which are due on September 26th.

Integrated Resource Planning (IRP)

On July 22nd, 44 stakeholders submitted over 700 pages of comments on a CPUC Ruling initiating a procurement track and seeking comment on potential reliability issues. The Ruling described a near-term need for 2,000 MW of capacity to ensure reliability, and proposed – as a partial solution – to direct SCE to procure 500 MW of capacity in the near term. The ruling posed

a series of questions to parties intended to answer this central question of whether a need exists, when it will materialize, and appropriate measures to mitigate it.

Following responses to this Ruling, the Commission recently issued a Proposed Decision which would extend the planned retirement dates of Once-through-cooling facilities for up to three years. In addition, it would order all LSEs in Southern California Edison territory to procure 2,500 MW of qualifying capacity – 60% of this by August of 2021, 80% by Aug. of 2022, and the remainder by Aug. of 2023. CalCCA is developing a response to this proposal and SCE has already issued an RFO for their portion of the required capacity.

LEGISLATIVE REPORT

The legislature ended its 2019 session relatively calmly.

Assemblyman Mayes was given the green light to allow PG&E to introduce a bill to borrow \$20 billion in tax-free bonds in AB 235 in an attempt to fund PG&E's plan of reorganization and emerge from bankruptcy. However, the Governor and Senate leadership only allowed introduction of the bill on the condition that it not be voted on in 2019 since fire victims strongly opposed the bill. The shareholders of PG&E will be working during the interim in hopes of bringing a compromise to the table as soon as the Legislature returns, however, a new twist has emerged in bankruptcy court: the tort claimants committee representing a large number of fire victims recently submitted a competing plan for PG&E's reorganization that would fully fund fire victims and forms and alliance with PG&E's bondholders. Significant negotiations are expected between now and January as a result.

Because PG&E's bill was written to have ratepayers be directly responsible for all wildfire costs and then reimbursed through an undecided mechanism which could allow for cost shifts onto ratepayers, SCP submitted a letter in opposition to AB 235. SCP will be working with all stakeholders to work on a plan that does not have the potential to shift wildfire costs onto ratepayers.

The Governor will have until October 13th to sign or veto all legislation passed by the Legislature.

SCP LEGISLATIVE POSITIONS

AB 56 (E. Garcia) – Central Procurement

Result: DIED IN COMMITTEE

SCP Position: Oppose

AB 56 would authorize the California Public Utilities Commission and the California Energy Commission to jointly establish the “California Clean Electricity Authority” if certain findings regarding need for the Authority as a means to help achieve California’s clean energy goals, plug gaps in current procurement by retail sellers, and that the Authority can reasonably manage power supply commitments previously entered into by electrical corporations.

AB 235 (Mayes) - Electrical corporations: wildfire victim recovery bonds

Location: PARKED and awaiting further amendments

SCP Position: Oppose

AB 235 would allow PG&E to borrow up to \$20 billion in tax-free loans from the State of California, using ratepayers as the borrower, and would create a method for reimbursing ratepayers that SCP has concerns could lead to increased ratepayer costs. See attached letter for details.

AB 684 (Levine) – Building Standards

Result: PASSED and awaiting Governor’s approval

SCP Position: Support

AB 684 would require the Department of Housing and Community Development and the Building Standards Commission to research, develop, and propose building standards for electric vehicle parking spaces in existing multifamily and non-residential buildings.

AB 684 was placed on the consent calendar and passed the Senate Housing Committee on July 2, 2019.

AB 1362 (O’Donnell) – CCA Code of Conduct

Result: PASSED and awaiting Governor’s approval

SCP Position: Neutral

AB 1362 was amended to require the CPUC to establish a centralized procurement clearinghouse of load-serving entities’ residential electric rate tariffs and programs. When the bill was heard in the Assembly, AB 56 was amended to remove the mandate that CCAs comply with the code of conduct, which applies to utilities that have shareholders that can assume costs for lobbying and marketing. However, the “clearinghouse” language remained in the bill. After discussing this concern with the Senate Energy, Utilities and Communications Committee consultant, the committee’s suggestion to the author to amend the bill to remove the reference to the

clearinghouse and instead require the CPUC to post this information on their website. Assemblyman O'Donnell accepted the amendment. AB 1362 was approved by the committee as amended and was passed to the Senate Appropriations Committee.

SB 155 (Bradford) – Integrated Resource Plan

Result: PASSED and awaiting Governor's approval

SCP Position: Neutral

Senator Bradford accepted the amendments proposed by the Assembly Appropriations Committee and SCP removed its opposition. The Assembly Appropriations Committee amendments made sure the IRP will stay as a planning document.

SB 167 (Dodd) – Wildfire Mitigation Plans De-energizing

Location: PASSED and awaiting Governor's approval

SCP Position: Support

SB 167 requires electrical corporations to develop protocols for de-energizing portions of their distribution system within their wildfire mitigation plans. The protocols are related to mitigating the public safety impacts of disabling reclosers and de-energizing portions of the electrical distribution system along with considering the impacts on customers who are receiving medical baseline-allowances.

SB 255 (Bradford) – Diverse Business Enterprises

Result: PASSED and awaiting Governor's approval

SCP Position: Support

SB 255 expands the CPUC utility supplier diversity program by lowering the annual gross revenue threshold for participation from \$25 million to \$15 million in California and would include CCAs, electric service providers, distributed energy resource companies, and certain wholesale electric generators. SB 255 will be heard in the Assembly Appropriations Committee when the Legislature returns from summer recess.

SB 350 (Hertzberg) – Central Buyer

Result: HELD – Author has pulled bill from the file

SCP Position: Allow to Negotiate

SB 350 authorizes the CPUC to consider changes within the resource adequacy program, including the use of a multi-year centralized resource adequacy mechanism.

SB 520 (Hertzberg) – Provider of Last Resort**Result: PASSED and awaiting Governor’s approval****SCP Position: Oppose**

SB 520 authorizes the CPUC to develop threshold attributes for load serving entities to serve as a “provider of last resort” or POLR, and generally tasks PG&E with serving as the POLR in SCP’s territory. Neither PG&E nor SCP support this outcome.



Staff Report – Item 08

To: Sonoma Clean Power Authority Board of Directors

From: Chad Asay, Programs Manager

Issue: Adopt a Resolution to Award the Construction Contract for the Advanced Energy Center to the Low Bidder, Agbayani Construction Corporation and Waive Immaterial Bidding Irregularities; Reject Bid Protest from Arntz Builders, Inc.; and Make CEQA Exemption Findings

Date: October 3, 2019

Requested Action

Request that the Board of Directors (“Board”) adopt the attached Resolution which takes the actions identified below.

Summary of the Resolution

If approved by the Board, the attached resolution (Attachment A) would:

1. Approve the plans and specifications for the Advanced Energy Center (“AEC”) on file with the SCP Clerk of the Board;
2. Award a Construction Contract for the AEC to the low bidder, Agbayani Construction Corporation (“Agbayani”) in the amount of \$2,822,000 and waive immaterial bidding irregularities;
3. Reject Bid Protest Submitted by Arntz Builders, Inc (“Arntz”).
4. Authorize the CEO to execute any awarded construction contract and any required construction change orders up a not-to-exceed amount of \$282,200 which is equal to 10% of the contract amount, and authorize the CEO to pay all proper claims; and

5. Find that the AEC construction project is exempt from the California Environmental Quality Act (“CEQA”) pursuant to sections 15301 and 15302 of the CEQA Guidelines.

Background

Project Goal – To provide an Advanced Energy Center retail location for Sonoma Clean Power (“SCP”) that maintains a healthy workplace while showcasing energy efficiency and fuel switching in the built environment.

SCP was awarded the California Energy Commission’s EPIC Grant 17-304 to, among other things, establish the AEC in order to speed deployment of market-ready advanced energy efficiency technologies. The AEC will be a physical storefront where SCPA customers may view and purchase energy-saving items from third-party vendors. Vendors will demonstrate energy-saving items at individual vendor displays in the AEC. SCP contracted with TLCD Architecture to design the AEC project, and has engaged the services of Sixth Dimension as the AEC project’s construction manager. The AEC will be located at 741 4th Street, in Santa Rosa, California.

Discussion

The AEC project involves a complete remodel of the leased, vacant space into a new marketplace and demonstration area. The estimated cost of the construction of the AEC project is \$3.01 M, funded by a combination of grant and SCP funds.

The construction work involves interior renovation work of an existing building, with only minor exterior repairs and improvements. The construction contractor will be tasked with demolition on the first and second floor, and the construction of tenant improvements to approximately 9,500 SF. Construction will include a demonstration kitchen, upgrades to the HVAC system, construction of a training room, the addition of a small ADA ramp to the rear entrance (the only exterior element of work), electrical improvements, and fire sprinklers throughout the building interior.

Staff issued a notice inviting bids for construction services on June 4, 2019. Initially bids were due on June 25, 2019. The bid opening date was then extended to July 16, 2019. A summary of bids is attached to this staff report (Attachment B). Agbayani Construction Corporation was determined to be the lowest responsible bidder with a bid of \$2,822,000.

On July 18, 2019, staff received a bid protest from the second low bidder, Arntz, alleging issues related to Agbayani’s subcontractor list. SCP requested

and Agbayani provided a response to issues alleged by Arntz and also to minor bidding irregularities SCP staff had identified in Agbayani's bid. Staff reviewed the Protest with the SCP General Counsel and determined it lacked merit, as stated in the attached letter SCP drafted in response to the Arntz bid protest (Attachment C). In addition, staff reviewed the following minor bidding irregularities with SCP General Counsel and determined that each of the following could be waived as a matter of law as immaterial, since none of these minor irregularities affected the amount of Agbayani's bid, nor afforded it a competitive advantage not available to other bidders:

- 1) Agbayani's bid omitted proof of its capacity to provide the required builder's risk and pollution liability insurance. The confirming letter from Agbayani's insurance broker was subsequently submitted.
- 2) Two of the three similar projects listed by Agbayani were completed in 2017 instead of 2018 or 2019. Staff is satisfied that Agbayani has sufficient relevant experience.
- 3) Agbayani omitted a description of its safety program. The entire safety program, including its safety rating, was subsequently submitted, and staff is satisfied with the safety program and safety rating.

Staff recommends that the Board waive the above immaterial irregularities as allowed by law.

Construction is anticipated to begin in October 2019.

Fiscal Impacts

In FY 19/20 SCP budgeted \$4.2 M to CEC grant administration, labor and tenant improvements. Additionally, there are \$509K in grant funds dedicated to the AEC tenant improvements.

TLCD Architecture's Estimated Cost	\$3,001,000.00
Lowest Bid	\$2,822,000.00
Highest Bid	\$3,494,000.00
Grant Funds dedicated to AEC Improvements	\$509,000.00
SCP's FY 19/20 Approved Budget towards Lead Locally	\$4,200,000.00

Environmental Review

As described in more detail in the attached Resolution, the AEC project is a renovation of an existing leased space and is therefore categorically exempt from CEQA under Class I (Existing Facilities) and Class II (Replacement or

Reconstruction), per sections 15301 and 15302 of the CEQA Guidelines, respectively.

Community Advisory Committee Review

The Community Advisory Committee unanimously approved staff's requested action at their September 17, 2019 meeting.

Attachments

- **Attachment A** - Resolution
- **Attachment B** - Summary of Bids
- **Attachment C** - SCP Response to Bid Protest

Related Items "On File" with the Clerk of the Board

- SCP Advanced Energy Center Project Manual, Bid Set, and Supplementary Photographic Exhibit
- SCP Advanced Energy Center Bid Addenda 1-4

Attachment A

[NOT YET ADOPTED]

RESOLUTION NO. 2019 – XX

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE SONOMA CLEAN POWER
AUTHORITY AWARDING, APPROVING AND DELEGATING AUTHORITY TO THE
CEO TO EXECUTE A CONSTRUCTION CONTRACT WITH AGBAYANI
CONSTRUCTION CORPORATION FOR THE CONSTRUCTION OF THE ADVANCED
ENERGY CENTER IMPROVEMENTS, FINDING OF CEQA EXEMPTIONS, REJECTING
A BID PROTEST SUBMITTED BY ARNTZ BUILDERS, INC., AND ASSOCIATED
ACTIONS**

WHEREAS, the Sonoma Clean Power Authority (“SCP”) was awarded the California Energy Commission’s EPIC Grant 17-304 to, among other things, site and construct an Advanced Energy Center (“AEC”) retail location to speed deployment of market-ready advanced energy efficiency technologies.

WHEREAS, the AEC will be a physical retail location at which SCPA customers may view and purchase energy-saving items directly from private, third-party vendors;

WHEREAS, the AEC will be constructed in an existing, leased building that is approximately 9,500 square feet in the downtown Santa Rosa, California;

WHEREAS, the construction work for the AEC project involves renovation of a currently vacant space, including: (1) demolition work on the first and second floors, (2) construction of new interior tenant improvements such as a demonstration kitchen and training rooms, upgraded HVAC systems, and associated mechanical, electrical and fire sprinkler work; and (3) minimal exterior improvements required in connection with interior renovation, including connections for mechanical, electrical and fire sprinkler work and an ADA ramp;

WHEREAS, the AEC project was bid on June 4, 2019, and 4 bids were received and opened on July 16, 2019;

WHEREAS, Agbayani Construction Corporation was determined to be the lowest responsible bidder based on its bid for \$2,822,000; and

WHEREAS, staff determined that Agbayani Construction Corporation satisfies the bidding requirements for the AEC project;

WHEREAS, on July 18, 2019, SCP staff received a bid protest letter from Arntz Builders, Inc., the second low bidder, alleging that the Agbayani Construction Company bid was non-responsive due to issues related to the subcontractor list;

WHEREAS, Agbayani provided satisfactory responses to staff regarding three minor bidding irregularities pertaining to (1) builder’s risk and pollution liability insurance, (2) dates of completion of similar projects, and (3) safety program details.

WHEREAS, SCP staff have consulted with the General Counsel and have concluded that: (1) the bid protest lacks merit; (2) the three minor bidding irregularities identified by staff may be waived as a matter of law as immaterial, since none of these minor irregularities affected the amount of Agbayani's bid, nor afforded it a competitive advantage not available to other bidders; and (3) the bid may be awarded to Agbayani Construction Company as the lowest responsible bidder;

NOW, THEREFORE BE IT RESOLVED, the Board of Directors of the Sonoma Clean Power Authority hereby:

Section 1. Finds that the foregoing recitals are true and correct and a substantive part of this Resolution.

Section 2. Finds that the AEC project is categorically exempt from the California Environmental Quality Act ("CEQA") pursuant to a Class I (Existing Facilities) and Class II (Replacement or Reconstruction) because the AEC project is a renovation of the interior space of an existing building in Santa Rosa's downtown with only minor exterior repairs and improvements required in connection with the indoor tenant improvements.

Section 3. Finds that the AEC project presents no unusual circumstances or other exceptions that would preclude applicability of either the Class I (Existing Facilities) or Class II (Replacement or Reconstruction) CEQA Exemptions.

Section 4. Approves the plans and specifications for the AEC on file with the SCP Clerk of the Board.

Section 5. Finds and determines that the allegations regarding the bid of Agbayani Construction Company for the AEC project according to the bid protest submitted by Arntz Builders, Inc. dated July 18, 2019, are without merit. The Board of Directors therefore rejects the bid protest submitted by Arntz Builders, Inc.

Section 6. Finds and determines that the three minor bidding irregularities identified by staff may be waived as immaterial since none of these minor irregularities affected the amount of Agbayani's bid, nor afforded it a competitive advantage not available to other bidders. Based on staff's recommendation, the Board of Directors therefore waives the three minor bidding irregularities.

Section 7. Awards the Construction Contract for the AEC project's construction to Agbayani Construction Corporation in the amount of \$2,822,000, conditioned on Agbayani Construction Corporation's timely executing the construction contract and submitting of all required documents, including, but not limited to executed bonds, certificates of insurance and endorsement in accordance with project bid and contract documents.

Section 8. Authorizes the CEO to execute the Construction Contract with Agbayani Construction Corporation for \$2,822,000, and authorizes the CEO to execute any required construction change orders up to a not-to-exceed amount of

two hundred and eighty two thousand and two hundred (\$282,200), which is ten percent (10%) of the Contract Amount, and authorizeS the CEO to pay all proper claims for performance of the Construction Contract.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

DULY ADOPTED this 3rdth day of October, 2019

JURISDICTION	NAME	AYE	NO	ABSTAIN/ ABSENT
Cloverdale	Director Bagby			
Cotati	Director Landman			
County of Mendocino	Director Gjerde			
County of Sonoma	Director Hopkins			
Petaluma	Director King			
Point Arena	Director Torrez			
Rohnert Park	Director Belforte			
Santa Rosa	Director Tibbetts			
Sebastopol	Director Slayter			
Sonoma	Director Harrington			
Windsor	Director Okrepkie			

In alphabetical order by jurisdiction

Chair, Sonoma Clean Power Authority

Attest:

Clerk of the Board

APPROVED AS TO FORM:

General Counsel,
Sonoma Clean Power Authority

Attachment B

Summary of Bid Process and Bids

Staff issued a notice inviting bids for construction services advertising the AEC construction project on June 4, 2019. Initially bids were due on June 25, 2019. The bid opening date was then extended to July 16, 2019. The bidding period was 42 calendar days. SCP received 4 bids from qualified contractors on July 16, 2019.

Bid Name/Number	Agbayani Construction Corporation
Proposed Length of Project	198 calendar days
Total Calendar Days to Respond to Bid	42
Pre-Bid Meeting Date	June 11, June 12, and July 8, 2019
Number of Potential Bidders Attending Pre-Bid Meeting	7
Number of Bids Received	4
Bid Price Range	\$2,822,000 to \$3,494,000

SCP received bids from Agbayani Construction Corporation, Arntz Builders Inc., CWS Construction Group Inc., and Midstate Construction Corporation. The low bid submitted by Agbayani Construction Corporation is \$2,822,000 and is 7% below SCP staff's estimate for the project.



50 Santa Rosa Ave., 5th Floor
Santa Rosa, CA 95404

Delivered via email & certified mail

August 21, 2019

JP Van Zee, Senior Project Manager
Arntz Builders, Inc.
431 Payran Street
Petaluma, CA 94952

Re: Sonoma Clean Power Advanced Energy Center Project

Response to Bid Protest

Dear Mr. Van Zee:

This letter responds to your bid protest, dated July 18, 2019, protesting the bid submitted by Agbayani Construction Corporation ("ACC"), the apparent low bidder for the above-referenced project ("Project"), on behalf of Arntz Builders, Inc. ("Arntz"), the second low bidder. Following review and analysis of the protest and consultation with legal counsel, I have determined that your protest lacks merit for the reasons stated below. Therefore, I will recommend that the Governing Board for the Sonoma Clean Power Authority ("SCPA") award the contract for the Project to ACC as the lowest responsible bidder.

I. Legal Standards

As set forth in Article 3.1.B of Section 00200 (*Instructions to Bidders*) of the bid documents for this Project, and in accordance with the terms of the SCPA's authority as a joint powers agency, the apparent low bid is determined in accordance with Public Contract Code section 20128, which provides that the contract will be awarded to the lowest responsible bidder.

Pursuant to Article 3.2.D of Section 00200 (*Instructions to Bidders*), the SCPA “may conduct reasonable investigation...as Owner deems necessary to assist in the evaluation of any Bid and to establish Bidder’s responsibility....” Public agencies are afforded discretion to make determinations of responsibility:

“An agency has discretion to determine whether a low bidder is ‘responsible,’ that is, whether the bidder has the fitness, quality, and capacity to perform the proposed work satisfactorily.” (*D.H. Williams Const. Inc. v. Clovis Unified Sch. Dist.* (2007) 146 Cal.App.4th 757, 763 (“*Williams*”).)

With respect to issues of responsiveness, in Article 1.9 of Section 00100 (*Advertisement for Bids*), the SCPA expressly reserves its rights to waive minor or inconsequential bidding defects or irregularities:

“Owner specifically reserves the right, in its sole discretion, to reject any or all Bids, to re-bid, or to waive inconsequential defects in bidding not involving time, price, or quality of the work. Owner may reject any and all Bids and waive any minor irregularities in the Bids.”

Article 3.3.C of Section 00200 (*Instructions to Bidders*) also states that the SCPA may “waive any informalities or minor irregularities.” In general, issues of responsiveness are determined by looking exclusively at the face of the bid. (*Great West Contractors, Inc. v. Irvine Unif. Sch. Dist.* (2010) 187 Cal.App.4th 1425, 1453.) Therefore, allegations that go beyond the face of the bid—e.g., allegations based on speculation as to future behavior—are generally not relevant for determining responsiveness.

II. Issues and Facts

In its protest, Arntz asserts that ACC’s bid “must be deemed nonresponsive” because ACC has allegedly violated Public Contract Code section 4104(b) by listing two subcontractors for work

that Arntz identifies as “Abatement” and by listing two subcontractors for work that Arntz identifies as “Low Voltage & Camera.”

In this regard, ACC’s submittal of Section 00430 (*Subcontractors List*), includes the following listed subcontractors and description of work:

Subcontractor Name:	ACC’s Description of Work:
MG Remediation, Inc.	“Abatement”
Central Valley Environmental	“Demo & Abatement”
Netronix Integration, Inc.	“—Low Voltage —Security Camera”
Consolidated Network Corp.	“—Low Voltage —Camera”

The descriptions provided by ACC for the two sets of subcontractors are similar, but not identical. More significantly, ACC has represented that in both cases, the two subcontractors listed for similarly described work, will not be performing the same work. In each instance, according to ACC, one of the two listed subcontractors will only be performing work excluded from the scope provided by the primary subcontractor. ACC has not indicated that it will self-perform work for which it does not possess the requisite license.

Arntz also alleges that ACC “did not provide sufficient descriptions of the work to be performed.” However, neither the Public Contract Code nor case law construing the requirements of section 4104 establish any standards for determining the relative sufficiency of descriptions of the work on a subcontractor list form. Even if the descriptions arguably could have been more detailed or precise, that does not render the bid nonresponsive.

III. Analysis

While Arntz states that ACC's bid is "nonresponsive," the bid protest actually raises issues of responsibility pursuant to the *Williams* case, cited above. According to Arntz, the allegedly insufficient descriptions in the subcontractor list form gave ACC "the ability to decide, after the opening of bids, what work would be delegated to which subcontractor." In other words, Arntz speculates that ACC may violate the requirements of the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100 et seq.) (the "Act").

In *Williams*, a school district rejected a low bid as nonresponsive because it listed an unlicensed subcontractor. The court concluded that this was not an issue of *responsiveness*, but a question of *responsibility* based on speculation as to the bidder's intentions:

"If an agency had reason to believe a bidder knowingly listed a subcontractor, whether licensed or not, with the intention of substituting a different subcontractor once the prime contract was awarded, the agency clearly would be entitled to reject the prime bidder as not responsible...." (*Williams, supra*, at 766.)

The court found that the school district wrongfully rejected the low bid as nonresponsive instead of affording the low bidder a due process hearing on the issue of responsibility, and further observed that an awarding agency has recourse to statutory remedies in the event of a future violation of the Act:

"Further, if the agency discovered such action after the contract was awarded, the agency may take remedial action: 'A prime contractor violating any of the provisions of [the act] violates his or her contract and the awarding authority may exercise the option, in its own discretion, of (1) canceling his or her contract or (2) assessing the prime contractor a penalty....' (Pub. Contract Code, § 4110.)" (*Williams, supra*, at 766.)

In the absence of actual evidence that ACC is not a “responsible bidder,” as that term is defined in the Public Contract Code and case law, the SCPA has no basis for disqualifying ACC as a non-responsible bidder and could not do so without a due process hearing.

IV. Conclusion

Based on the foregoing, the SCPA rejects the contention that ACC’s bid is nonresponsive based on its subcontractor list form. Assuming the Board is otherwise satisfied that ACC is a responsible bidder, the Board may award the contract for the Project to ACC as the lowest responsible bidder. Alternatively, the SCPA retains the right to reject all bids.

The SCPA appreciates Arntz’s participation in the bid for the Project and wishes it success in future bids.

Sincerely,



Cordel Stillman, Director of Programs

C: Agbayani Construction Corporation
Geof Syphers, Chief Executive Officer, Sonoma Clean Power
General Counsel, Sonoma Clean Power
Karl, Schultz, 6th Dimension



Staff Report – Item 09

To: Sonoma Clean Power Authority Board of Directors

From: Erica Torgerson, Director of Customer Service
Danielle Baker, Senior Customer Care Specialist
Nelson Lomeli, Programs Manager

Issue: Discuss and Provide Direction as Appropriate on the Proposed Successor Program to SCP's NetGreen Program

Date: October 3, 2019

Requested Board Action:

Provide direction as appropriate on the following questions:

- 1) Should SCP consider phasing out its current net energy metering program, NetGreen, in favor of a successor program?
- 2) If the answer to question #1 is yes, then what should the NetGreen successor program look like?

The Basics

Net Energy Metering (NEM):

When a customer installs a solar system (or other generating technology), PG&E will install a special meter that measures how much electricity is being put into the grid by the system (energy generated exceeding the customer's energy needs) and how much electricity is being used by the home or business from the grid (energy consumed) and calculates the amount of net energy consumed or generated. This tracking is done in a standard unit of energy measurement called a kilowatt-hour (kWh).

SCP's Current NetGreen Program (Net Monthly Billing with Annual Cash Out):

SCP's net energy metering program is called NetGreen. NetGreen was adopted by SCP's Board of Directors in 2013. The NetGreen program credits customers for excess energy generated from an onsite generating system such as rooftop solar. The program credits customers at the SCP CleanStart

retail rate, at the time of generation, plus a bonus penny per kWh for excess electricity generated and delivered back onto the grid. The customer is billed on their net consumption each month and any net generation credits are accrued in an escrow account to be used for future SCP charges. The following table illustrates SCP's current retail CleanStart rates during the summer peak period for common rates used by solar customers.

Residential Rates	CleanStart Retail Rate	Penny per kWh	SCP Cash Out Rate
E-1	\$ 0.08544	\$ 0.01	\$ 0.09544
E-6	\$ 0.21965	\$ 0.01	\$ 0.22965
E-TOU-B	\$ 0.18768	\$ 0.01	\$ 0.19768
EV-A	\$ 0.24043	\$ 0.01	\$ 0.25043

Commercial Rates	CleanStart Retail Rate	Penny per kWh	SCP Cash Out Rate
A-1 TOU	\$ 0.11450	\$ 0.01	\$ 0.12450
A-6	\$ 0.34826	\$ 0.01	\$ 0.35826
A-10 TOU	\$ 0.14280	\$ 0.01	\$ 0.15280
E-19-S Option R	\$ 0.27313	\$ 0.01	\$ 0.28313
E-20-S Option R	\$ 0.24777	\$ 0.01	\$ 0.25777

Each spring, if a customer's NetGreen escrow balance exceeds \$100, SCP will automatically send a check equivalent to their escrow balance up to \$5,000 to the customer. If a customer's NetGreen escrow balance is below \$100, the credits roll-over to the following month. Incremental values of credit balances in excess of \$5,000 are forfeited by the customer and re-set to zero. By law, Net Energy Metering Aggregation customers (customers who combine usage and generation from two or more sites) are not eligible to receive credit cash-outs and credits are re-set to zero annually.

PG&E's Current NEM Program (Annual True-Up Only):

In contrast to SCP's net monthly billing, the PG&E NEM program uses an annual true-up process. PG&E only invoices NEM customers a meter reading fee each month of approximately \$10 and the net PG&E delivery charges or credits are only shown as an informational line item on their bill.

At the end of the customer's true-up period (which varies for each customer based on their interconnection date or the date they enrolled in SCP service), if the customer has a dollar credit balance, PG&E will calculate how many kWh of true over-generation (i.e. a total negative net usage in kWh for the 12-month period) that customer has contributed to the grid. PG&E then uses a Net Surplus Compensation (NSC) \$/kWh rate and applies that to the total annual kWh of over-generation for the cash out amount. The NSC rate is set monthly based on CPUC Decision 11-06-016. PG&E's Net Surplus Compensation (NSC) rate is based on current approximate wholesale prices for the previous 12 months. Following is a table of PG&E's NSC rates. See Exhibit A for full table.

Month of True Up	PG&E NSC Rate
May-18	\$ 0.02878
June-18	\$ 0.02836
September-18	\$ 0.02931
October-18	\$ 0.02837
November-18	\$ 0.02886
December-18	\$ 0.02951
January-19	\$ 0.03174
February-19	\$ 0.03232
March-19	\$ 0.03523
April-19	\$ 0.03590
June-19	\$ 0.03561
May-19	\$ 0.03565

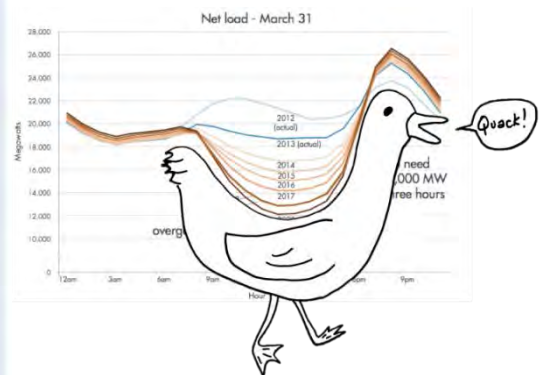
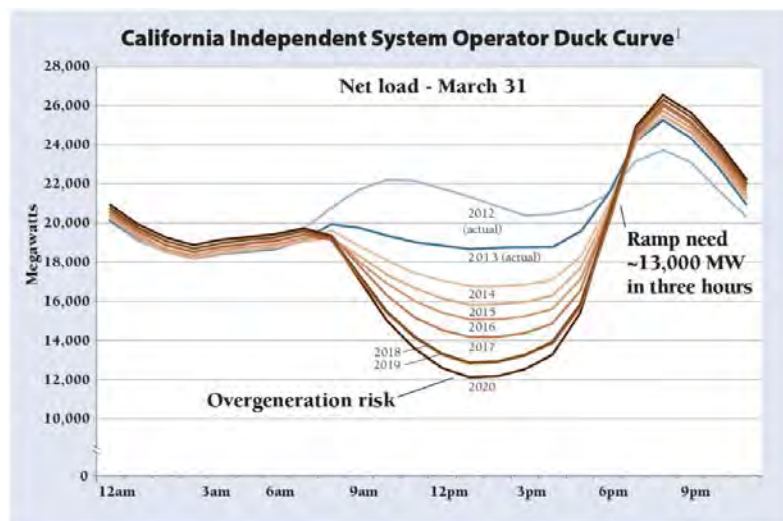
If at the end of the customer's true-up period, the customer's running total is a charge, PG&E will bill the customer for those charges on their annual true-up statement.

Question #1: Should SCP consider phasing out its current net energy metering program, NetGreen, in favor of a successor program?

In the California energy market, the peak demand for grid power now occurs near or after sunset for 9 or 10 months of the year, when solar power is dramatically reduced or no longer available. In SCP's territory, where a substantial amount of solar electric capacity has been installed by customers, the amount of power that must be generated from sources other than solar rapidly increases in late afternoon and peaks in the mid-evening hours, producing what is referred to as "the Duck Curve."

The California Independent System Operator (CAISO) has been monitoring and analyzing the Duck Curve for many years and their biggest finding is the growing gap between morning and evening prices relative to midday prices. According to their last study, the U.S. Energy Information Administration found that the wholesale energy market prices over the past six months during the 5 p.m. to 8 p.m. period (the "neck" of the duck) have increased to \$60 per megawatt-hour, compared to about \$35 per megawatt-hour in the same time frame in 2016. They have also measured a drastic decrease in the midday prices, now averaging \$15 per megawatt-hour. These high peaks and deep valleys are forecast to get more extreme over the next five years as more solar power is installed and Title 24 begins requiring solar on every new home beginning in 2020.

A crucial part of this curve comes from the net load (the difference between expected load and anticipated electricity production from the range of energy sources). In certain times of the year (namely spring and summer), the curves create a "belly" appearance in the midday that then drastically increases in the late afternoon, early evening creating the steep neck of the "Duck".



Should SCP Revisit NetGreen Now?

During the midday, a large amount of solar energy is generated by customer-owned systems that lowers the demand for grid electricity. The abundant supply of energy during the mid-day coupled with a lack of supply during high demand afternoon/evening hours explains the large disparity between midday and evening energy prices.

In addition, California's current ability to ramp up power output by the necessary 12,000 MW increase (and growing) in the late afternoon is currently limited by the number of natural gas turbines which are already running, since it can take 6 to 12 hours to start a combined cycle gas turbine. Significantly increasing California's supply of solar energy without a large amount of storage could therefore cause an increase in greenhouse emissions, or at best provide very little net benefit.

Due to these challenges and concerns, staff sees a growing mismatch between the financial incentives of the NetGreen program and the effectiveness of that program in reducing overall greenhouse gas emissions.

Additionally, since the NetGreen program was developed in 2013, rooftop solar panels have dropped in price by 32 percent¹ and California's building code was updated to mandate solar power on all new residential construction starting January 2020. Additional background information is available in the appendix of this Staff Report.

With these industry-wide changes, SCP wants to ensure it has a net energy metering program that will be fiscally sustainable as more customers move to rooftop solar. As the following table shows, SCP's annual cash out has

¹ U.S. Solar Photovoltaic System Cost Benchmark: Q1 2018 - National Renewable Energy Laboratory

increased by 25% since 2016, is expected to reach nearly \$1,000,000 in 2020 and to continue growing every year.

Year	Cash Out Amount	Credits Forfeited (Over \$5,000 Cap)	Number of Accounts Cashed Out	Notes
2015	\$ 206,647.24	\$ (92,928.08)	249	Partial year
2016	\$ 689,697.24	\$ (148,814.97)	1,362	Dry, sunny winter
2017	\$ 605,467.59	\$ (260,241.61)	1,368	Very wet and cloudy winter
2018	\$ 639,723.02	\$ (188,377.28)	1,528	First cash out that includes Mendocino County
2019	\$ 862,240.79	\$ (296,617.26)	2,027	Mild summer, less A/C use necessary
Totals	\$ 3,003,775.88	\$ (986,979.20)	6,534	

SCP currently serves 225,795 accounts, of which 14,787 are NEM customers (as of July 1, 2019). SCP serves 82% of eligible NEM customers in its service territory. In terms of kilowatt-hours (kWh) 85% of SCP's NEM customers, are net consumers of electricity (meaning they use more than they produce annually) and 15% are net generators of electricity (meaning they produce more than they use annually).

With SCP's current NetGreen program, customers don't have to be net generators to receive a cash out because credits earned are often at more expensive, peak energy prices, but energy consumed is often at cheaper, off-peak hours, thus giving the customer a positive credit balance in spring. However, the customer still put less kilowatt-hours onto the grid than kilowatt-hours they took off the grid.

To ensure that SCP's NetGreen expenditures are still having a strong benefit on greenhouse gas emissions, are fiscally sustainable over the next several years, and are not causing grid reliability problems, staff recommends revisiting the NetGreen program.

Question #2: If the answer to question #1 is yes, then what should the NetGreen successor program look like?

If the Community Advisory Committee and Board of Directors agree with staff's belief that the answer to Question #1 is yes, then how should the successor program be designed? Staff has considered multiple factors and scenarios which are described in more detail in the appendix of this Staff Report before landing on the following recommended program design. Staff also researched and compared other utility NEM programs to evaluate options, see Exhibit B for a list of program designs by utility.

Staff Recommendation:

Staff recommends SCP maintain the current NetGreen program net monthly billing process but evolve the program's annual cash-out to a Net Surplus Compensation (NSC) cash out process that pays customers a rate closer to

wholesale prices when a customer over-generates kilowatt-hours on an annual basis. We recommend using PG&E's NEM NSC annual cash-out process, but improve on the financial benefit by increasing the NSC amount compared to PG&E.

Following the spring 2020 annual cash out, staff proposes to shift NEM customers to an NSC program for the annual cash out, similar to PG&E's with a few added benefits.

- Monthly billing would continue with generation credits being applied at the CleanStart retail rate plus the bonus penny per kWh netted against the electricity consumed each month.
 - Staff proposes to continue the bonus penny to make up the difference between SCP's lower generation rates compared with PG&E's generation rates (see example below).
 - SCP's E-1 Rate: $\$0.08544/\text{kWh} + \text{PCIA} + \text{FF} = \0.11306
 - PG&E's E-1 Rate: $\$0.11757/\text{kWh}$
 - Difference: $\$0.00451$
- Customers who are net energy generators in kilowatt-hours during the annual cash out period (spring to spring) would be paid for excess energy at SCP's Premium Net Surplus Compensation Rate (PNSC).
 - SCP's PNSC rate would be set at 2.0x of PG&E's 12-month NSC average for the calendar year preceding the cash out.
 - 2018 Average PG&E NSC Rate: $\$0.02842$
 - 2019 Annual Cash-Out SCP PNSC Rate: $\$0.05684$
- Just as in the current NetGreen program, customers with a NetGreen PNSC balance of \$100 or more in the spring will automatically receive a check up to the cash out cap of \$5,000. Incremental credit balances in excess of \$5,000 will be forfeited and re-set to zero.
- Customers with a NetGreen PNSC balance below \$100 will have their PNSC balance rolled over to the following month.
 - There's a potential that some customers with a NetGreen credit balance above \$100 may have less than \$100 in PNSC and would therefore not receive a check but instead have the PNSC rolled over to the next month.

- NetGreen Aggregation customers are not eligible to receive net surplus compensation per state law and will have credits re-set to zero annually.

Conclusion/Fiscal Impact:

During the 2019 annual cash out, SCP cashed out 2,027 customer accounts whose credit balance exceeded \$100 for a total of \$862,241 and rolled over \$82,837 in credits for 2,696 customers whose balance was below \$100. Due to SCP's credit cap of \$5,000 per account, \$296,617 worth of credits were forfeited by customers.

If during 2019, SCP was operating under staff's proposed program, SCP would have cashed out 702 customer accounts whose credit balance exceed \$100 for a total of \$211,522 and rolled over \$25,753 in credits for 1,540 customers whose balance was below \$100. Due to SCP's credit cap of \$5,000 per account, \$29,368 worth of credits would be forfeited by customers.

Here are those numbers summarized in a table:

	Cash Out of Credits	Cash Out Customers	Roll-Over Credits	Roll-Over Customers	Forfeited Credits	Forfeited Customers
Current Program	\$ 862,241	2,027	\$ 82,837	2696	\$ 296,617	32
Proposed Program	\$ 211,522	702	\$ 25,753	1540	\$ 29,368	4
Difference (Savings)	\$ (650,719)	(1,325)	\$ (57,084)	(1,156)	\$ (267,249)	(28)

The savings to SCP would flow back into SCP's budget and staff recommend allocating that amount towards greenhouse gas savings programs that target reductions during the late afternoon and early evening peak, such as building electrification programs, demand response programs, and energy storage (batteries) programs.

Proposed Timeline: Below is staff's proposed implementation timeline:

2019	Staff to prepare proposed updated NetGreen successor program for CAC and BOD review and provide input
September 2019	Draft plan presented to CAC for input
October 2019	Draft plan with input from CAC presented to BOD
November 2019	Proposed final plan presented to CAC for recommendation
December 2019	Adoption by BOD
April 2020	Update NetGreen Welcome Letter to reflect NSC program

April/May 2020	<p>Last cash out under the current NetGreen program (retail rate + \$0.01)</p> <p>New SCP NetGreen successor tariff to open</p> <p>Include language around the revised program in the annual cash out letter.</p>
June 2020	<p>Direct mail to all NEM customers informing them of the revised NetGreen program.</p>
April/May 2021	<p>1st cash-out under SCP's Premium Net Surplus Compensation program.</p> <p>Pay out at SCP's PNSC Rate (<i>e.g.</i> \$0.05684/kWh) for customers with over \$100 in credits up to \$5,000.</p>

Community Advisory Committee Review:

The Community Advisory Committee engaged in a robust discussion, received public comment, and provided detailed feedback to staff at their September 17 meeting. The Committee agreed that SCP should move forward with designing a successor program and requested that staff provide additional details around marketing and outreach of such program to customers, developers, and the broader solar industry. The Committee also requested that staff research whether CPUC requirements that exist for grandfathering existing net energy metering customers of investor-owned utilities could apply to CCAs.

Exhibit A
Net Surplus Compensation Rates for Energy

True-up Month	NSC Rate* (\$/kWh)
Jan. 2017	0.02703
Feb. 2017	0.02754
Mar. 2017	0.02793
Apr. 2017	0.02777
May 2017	0.02719
June 2017	0.02710
July 2017	0.02715
Aug. 2017	0.02746
Sep. 2017	0.02739
Oct. 2017	0.02819
Nov. 2017	0.02793
Dec. 2017	0.02844
Jan. 2018	0.02822
Feb. 2018	0.02793
Mar. 2018	0.02749
Apr. 2018	0.02836
May 2018	0.02878
June 2018	0.02836
July 2018	0.02801
Aug. 2018	0.02781
Sep. 2018	0.02931
Oct. 2018	0.02837
Nov. 2018	0.02886
Dec. 2018	0.02951
Jan. 2019	0.03174
Feb. 2019	0.03232
Mar. 2019	0.03523
Apr. 2019	0.03590
May 2019	0.03565
June 2019	0.03561
July 2019	0.03513
<p><i>* Per D.11-06-016, the electricity portion of the NSC rate is the simple rolling average of PG&E's default load aggregation point price from 7 a.m. to 5 p.m., corresponding to the customer's 12-month true-up period.</i></p>	
<p><small>"PG&E" refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2019 Pacific Gas and Electric Company. All rights reserved.</small></p>	

Exhibit B

Below is a brief synopsis of what other NEM programs follow in order of most generous to least.

CCA	Program Model	Monthly Billing Rate for Net Generators	Annual Cash Out
Redwood Coast Energy Authority	Retail + \$0.01; net generators earn an extra \$0.01 on 100% renewable product (equivalent to the premium)	Retail + \$0.01	Annually in May for balances over \$100 as requested. Balances below \$100 roll over.
Sonoma Clean Power (Current)	Retail + \$0.01	Retail + \$0.01	Annually in spring for balances over \$100 up to \$5,000. Balances below \$100 roll over.
MCE Clean Energy	Retail + \$0.01	Retail + \$0.01	Annually in April for balances over \$100 up to \$5000. Balances below \$100 roll over.
Peninsula Clean Energy	Retail + \$0.01	Retail + \$0.01	Annually in April for balances over \$100. Balances below \$100 roll over.
Silicon Valley Clean Energy	Retail rate; additional \$0.008/kWh credit for 100% renewable option	Retail	Annually in April for balances over \$100 up to \$5000. Balances below \$100 roll over.
King City Community Power	Retail Rate; credits tracked in dollars	Retail	Annually in July for balances over \$100 up to \$5000. Payments in excess of \$5000 are subject to KCCP approval.
CleanPowerSF	NSC at \$0.0893/kWh (3x PG&E NSC rate)	Retail	Annually in April; applied as a bill credit or by check upon request

CCA	Program Model	Monthly Billing Rate for Net Generators	Annual Cash Out
Sonoma Clean Power (Proposed)	NSC at double PG&E's rate; monthly billing at retail plus the bonus penny	Retail + \$0.01	Annually in spring for balances over \$100. Balances below \$100 roll over.
Apple Valley Choice Energy	NSC at \$0.06/kWh	Retail	Annually in April
Lancaster Choice Energy	NSC at \$0.06/kWh	Retail	Annually in October; no minimum or maximum balance
Pico Rivera Innovative Municipal Energy	NSC at \$0.06/kWh	Retail	Annually in September for balances over \$100. Balances below \$100 roll over.
Rancho Mirage Energy Authority	NSC at \$0.06/kWh	Retail	Annually in May
San Jacinto Power	NSC at \$0.06/kWh	Retail	Annually in October
Solana Energy Alliance	NSC at \$0.06/kWh	Retail	
Clean Power Alliance	NSC at 10% higher than SCE (\$0.04492/kWh as of May 2019)	Retail	Annually in April for balances above \$100, balances below roll over
SDG&E	NSC at wholesale (\$0.04289 April 2019)	Retail	Annually at true-up
Southern California Edison	NSC at wholesale (\$0.03846 April 2019)	Retail	Annually at true-up
Valley Clean Energy	NSC at wholesale plus + \$0.01	Retail	Annually at account true-up for balances over \$100. Balances below \$100 roll over.
San Jose Clean Energy	NSC at 25% higher than PG&E (\$0.03552/kWh)	Retail	NSC applied as a bill credit annually, but may request a check

CCA	Program Model	Monthly Billing Rate for Net Generators	Annual Cash Out
PG&E	NSC at wholesale (\$0.03590 April 2019)	Retail	Annually at true-up
Pioneer Community Energy	NSC at \$0.03/kWh	Retail	Annually in March/April for balances over \$25. Balances below \$25 roll over.
East Bay Community Energy	Mixed NSC	Existing & new NEM customers - Retail Low income & municipal customers - Retail + \$0.01	Annually in April for balances above \$100, balances below roll over; Existing NEM customers, PG&E NSC; New solar customers greater of retail capped at \$2500 or PG&E NSC; CARE/FERA retail plus \$0.01

Appendix

This appendix provides additional background, research, and thoughts that staff had while preparing the subject Staff Report. Some of this information may also be presented in the Staff Report.

Benefits of Current NetGreen Program:

SCP's current NetGreen program has the following customer benefits:

- **NetGreen Credits.** SCP credits the full retail CleanStart rate plus a bonus for energy generated. Those credits are banked monthly to be used to offset any SCP generation charges you may have throughout the year.
- **Generator Bonus.** SCP gives a bonus of \$0.01/kWh for all net energy generated. Makes up the difference between PG&E's lower generation rates compared to SCP generation rates.
- **Annual Cash Out.** Each spring, if a customer's NetGreen credit balance is \$100 or greater, SCP will automatically send the customer a check for the full retail credit balance up to \$5,000. If a customer has less than \$100 in credits, those credits simply roll over to the following month.
- **Monthly Billing.** SCP heard from customers, that they did not like receiving a large bill once a year, so SCP uses monthly billing for any generation usage not covered by the customer's NetGreen balance.

Costs of the Existing NetGreen Program:

The direct financial costs of SCP's existing NetGreen program have the following components:

- **Wholesale Energy Benefit.** Customers with solar power offset SCP's wholesale value of energy for the amount they send back to the grid. The average wholesale value of solar production has fallen dramatically in recent years to about \$0.015 per kWh of value, down from about \$0.065 just five years ago.
- **Non-Energy Costs.** NEM customers rely on SCP for all resource adequacy, shaping services (the cost of matching real-time supply with real-time demand), long-term renewable energy contract hedging for compliance, CAISO market fees, billing and customer communication services, customer programs, legal and contract services, staffing, rent, insurance, and miscellaneous business expenses. None of these costs

are paid for by solar customers because SCP currently has no fixed charges or other mechanism for recovering such costs. These costs total an estimated \$0.039 per kWh in 2019.

- **One Cent Premium.** Customers who generate more electricity than they use are currently credited at the retail rate at the time of generation plus a bonus penny (\$0.01/kWh) anytime they over-generate. For May 1, 2018 through April 30, 2019 this amounted to \$162,691.99 across 1,972 accounts.
- **Cash Out.** The below table summarizes the cash out payments made each year to solar customers since inception of the program.

Year	Cash Out Amount	Credits Forfeited (Over \$5,000 Cap)	Number of Accounts Cashed Out	Notes
2015	\$ 206,647.24	\$ (92,928.08)	249	Partial year
2016	\$ 689,697.24	\$ (148,814.97)	1,362	Dry, sunny winter
2017	\$ 605,467.59	\$ (260,241.61)	1,368	Very wet and cloudy winter
2018	\$ 639,723.02	\$ (188,377.28)	1,528	First cash out that includes Mendocino County
2019	\$ 862,240.79	\$ (296,617.26)	2,027	Mild summer, less A/C use necessary
Totals	\$ 3,003,775.88	\$ (986,979.20)	6,534	

The bottom line is that NetGreen carries an increasing cost that continues to rise, as the wholesale value of midday energy has fallen, and costs for resource adequacy have more than doubled.

Changing Landscape:

A number of factors will influence NetGreen's costs and environmental benefits in the near future, including:

- **California Building Code Updates and Implications.** California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 Standards will continue to improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 Standards will go into effect on January 1, 2020 (for building permit applications submitted on or after that date). The 2019 standard requires solar photovoltaic (PV) systems for all new homes.
- **Increasing Delivery Rates.** PG&E rates are expected to increase dramatically to absorb some of the estimated \$30 billion in past fire liabilities, fire-hardening of the grid, wildfire monitoring, and increasing costs of capital. Examples of ongoing CPUC proceedings and legislation include:

- General Rate Case A. 18-12-009;
- Wildfire Non-Bypassable Charge R.19-07-017; and
- California Assembly Bill 1054
- **Distributed Energy Resources.** The cost of solar panels and equipment remains very low. In addition, the cost of battery storage is still high but falling quickly for both utility scale and behind-the-meter.
- **Neck of the Duck.** Planned retirement of older natural gas plants will limit ability to rely on that resource type for meeting the evening ramp (neck of the duck) and could result in increased peak pricing, greenhouse gas emissions, and investment in battery storage.
- **Residential Time-of-Use.** Residential customers' electricity rates are moving to default time-of-use, with peak prices from 4 to 9 pm in 2021.
- **Peak Period Shift.** Commercial and agricultural customers' electricity rates will shift to peak prices between 4 to 9 pm and 5 to 8 pm respectively starting later this year.

SCP's Goals in Program Design:

Sonoma Clean Power is “*turning the tide on the climate crisis, through bold ideas and practical programs.*” In designing this successor program, staff worked to ensure the program would be innovative, practical, and inclusive. Staff also looked to the Authority's Joint Powers Agreement to ensure we were meeting the Authority's purpose of:

- Reducing greenhouse gas emissions in Sonoma County and neighboring regions;
- Providing electric power and other forms of energy to customers at a competitive cost;
- Carrying out programs to reduce total energy consumption;
- Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources; and
- Promoting long-term electric rate stability, energy security, reliability, and resilience.

The successor program needs to ensure:

- Incentive funds are effectively reducing greenhouse gas emissions in our communities;
- SCP's financial resources are being used in an efficient manner that keeps rates competitive for all customers;
- Incentives help drive behavior and purchase decisions that lower customer energy costs and support climate benefits;
- Customers are incentivized to install local distributed energy resources and help drive the "solar plus" market, specifically the energy storage market;
- This program, like all SCP programs, is highly accessible to a diverse population of customers.

Factors SCP Controls when Designing the Successor Program:

- **Bonus Penny:** Regardless of whether a customer receives electric generation from SCP or PG&E, the customer is credited monthly at the retail rate when they over-generate allowing them to offset their monthly bill. Since SCP rates are lower than PG&E, the monthly over-generation credit rate is also lower. The bonus penny helps make up the difference in generation rates.
- **Cash Out Cap:** The maximum cash out amount per account before credits are forfeited. The current cap is \$5,000 per account.
- **Cash Out Rate:** The cash out rate makes the most significant impact on the amount SCP pays in incentives to solar customers. Under SCP's current program, SCP pays customers the retail CleanStart rate, plus the bonus penny at the annual spring cash out. In contrast, PG&E's net energy metering program pays customers out at the Net Surplus Compensation (NSC) rate set monthly based on CPUC Decision 11-06-016 at their annual true-up and more closely aligns with wholesale energy costs.
- **Roll Over Credits:** Under SCP's current program, customers with credit balances less than \$100 at the time of the annual cash out do not receive a cash out check, but credits are rolled over to the following month. Using the roll over method allows customer who haven't reached that \$100 threshold to never lose out on credits.

Factors that are Limited when Designing the Successor Program:

- **Monthly Billing vs Annual True-Up:** When SCP initially designed its program, it purposely designed it to include net monthly billing compared to an annual true-up process like PG&E's. This was based on customer feedback, operational constraints of Calpine's billing system (Calpine is SCP's billing agent), and financial stability as a new agency. Since that time, Calpine does have some CCAs which bill some of their customers on an annual basis. However, Calpine has advised SCP that it continues to be operationally difficult to have customers on an annual true-up cycle and that even when offered, customers are unlikely to change once they've converted to monthly billing. Staff does not recommend offering annual true-ups as an option at this time.
- **Mandating Time-of-Use Rates:** SCP cannot mandate a customer be on a time-of-use rate to participate in our NetGreen program without either creating a second NEM program for those customers that refuse to transition to a time-of-use rate or returning those customers back to PG&E to take service on their NEM tariff. Also, Staff recognizes that with the default Time-of-Use Transition coming in March 2021 for SCP customers, most customers will be on a time-of-use rate at that point and all new NEM customers are required to take service on a time-of-use rate.
- **Differentiating NEM 1.0 vs NEM 2.0 Customers:** Staff analyzed whether it could design different NetGreen programs based on what version of NEM a customer was on, 1.0 vs 2.0. However, SCP does not currently receive which version a customer in a trackable format, thus this could lead to operational difficulties and additional customer confusion.
- **Mandating Multiple Version of NetGreen:** Overall, staff believes having more than one NetGreen program would be difficult to manage operationally and explain to customers and solar vendors. NEM billing is complicated enough without adding multiple programs.

Current NetGreen Participation & Design:

SCP currently serves 225,795 accounts, of which 14,787 are NEM customers (as of July 1, 2019). SCP serves 82% of eligible NEM customers in its service territory. In terms of kilowatt-hours (kWh) 85% of SCP's NEM customers, are net consumers of electricity (meaning they use more than they produce annually) and 15% are net generators of electricity (meaning they produce

more than they use annually). The largest concentration of NEM customers take service on SCP's E-1 rate. This is a residential tiered rate that has a flat generation and delivery rate. Below is a breakdown of NEM E-1 customers' annual usage.

E-1 Customers		
Usage Range	# of Customers	% of Customers
over 50,001 kWh	13	0.2%
20,001 through 50,000 kWh	75	1.3%
10,001 through 20,000 kWh	415	7.4%
5,001 through 10,000 kWh	1077	19.2%
2,501 through 5,000 kWh	1268	22.6%
101 through 2,500 kWh	1740	31.1%
0 through 100 kWh	101	1.8%
-1 through -100 kWh	99	1.8%
-101 through -2,500 kWh	666	11.9%
-2,501 through -5,000 kWh	109	1.9%
-5,001 through -10,000 kWh	33	0.6%
over -10,001 kWh	6	0.1%
Total	5602	

Below is a breakdown of all SCP NEM customers' annual usage.

All Customers		
Usage Range	# of Customers	% of Customers
over 1,000,000 kWh	22	0.1%
50,001 through 1,000,000 kWh	287	1.9%
20,001 through 50,000 kWh	405	2.7%
10,001 through 20,000 kWh	1298	8.8%
5,001 through 10,000 kWh	2994	20.2%
2,501 through 5,000 kWh	3214	21.7%
101 through 2,500 kWh	4114	27.8%
0 through 100 kWh	211	1.4%
-1 through -100 kWh	192	1.3%
-101 through -2,500 kWh	1572	10.6%
-2,501 through -5,000 kWh	301	2.0%
-5,001 through -10,000 kWh	123	0.8%
-10,001 through -20,000 kWh	36	0.2%
-20,001 through -50,000 kWh	11	0.1%
over -50,000 kWh	7	0.0%
Total	14787	

SCP's annual cash out paid \$862,240.79 to customers that had a credit balance of more than \$100 for the period of May 2018-April 2019. Due to the \$5,000 cap, \$296,617.26 worth of credits were forfeited. SCP carried over \$82,837.16 in credit balances below \$100.

Analysis of Various Factors and Designs:

First, staff looked into converting from paying the retail rate to a Net Surplus Compensation (NCS) rate that more closely aligns with average wholesale

prices for excess energy generated by customers. In California, Assembly Bill 920 requires PG&E and other state utilities to offer payment for surplus kilowatt-hours sent back to the electric grid by renewable energy systems. PG&E's NSC rate is based on current market prices for the previous 12 months. See Exhibit A.

Second, staff looked at other CCAs and IOUs to survey how they are approaching these same issues. See Exhibit B.

Finally, to evaluate program design options SCP analyzed different scenarios that looked at a variety of factors including different NSC rates and credit caps.

Staff settled on three scenarios to present that all:

- Keep the bonus penny for over-generation to make up for SCP's lower generation rates compared to PG&E;
- Maintain the credit cap at \$5,000 per account;
- Keep the annual cash out period in the spring;
- Cash out customers if their credit balance exceeds \$100; and
- Roll over credits if balance is below \$100 at the spring cash out.

Scenarios:

For comparison, here is a snapshot of the 2019 actual cash out.

2019 Actual NetGreen	Cash Out of Credits	Cash Out Customers	Roll-Over Credits	Roll-Over Customers	Forfeited Credits	Forfeited Customers
Retail Rate	\$ 862,241	2,027	\$ 82,837	2,696	\$ 296,617	32

For this analysis, staff used PG&E's average 2018 NSC rate. Staff proposes always using the previous calendar year's 12 month average. For 2018, the average was \$0.02842. See Exhibit A.

Scenario 1:

Net Surplus Compensation rate set at PG&E's previous calendar year twelve-month average.

Scenario 1 NSC Rate	Cash Out of Credits	Cash Out Customers	Roll-Over Credits	Roll-Over Customers	Forfeited Credits	Forfeited Customers
\$ 0.02842	\$ 84,497	303	\$ 57,341	1,939	\$ 7,983	2

Scenario 2:

Net Surplus Compensation rate set at 1.5x PG&E's previous calendar year twelve-month average.

Scenario 2 NSC Rate	Cash Out of Credits	Cash Out Customers	Roll-Over Credits	Roll-Over Customers	Forfeited Credits	Forfeited Customers
\$ 0.04263	\$ 147,177	514	\$ 60,292	1,728	\$ 17,263	3

Scenario 3:

Net Surplus Compensation rate set at 2.0x PG&E's previous calendar year twelve-month average.

Scenario 3 NSC Rate	Cash Out of Credits	Cash Out Customers	Roll-Over Credits	Roll-Over Customers	Forfeited Credits	Forfeited Customers
\$ 0.05684	\$ 211,522	702	\$ 58,753	1,540	\$ 29,368	4

Other Factors Analyzed:

Staff analyzed a reduced cash out cap for the three scenarios.

	NSC Rate	Cash Out Cap at \$5,000				Cash Out Cap at \$2,500				Difference (Savings to SCP)
		Cash Out of Credits	Cash Out Customers	Forfeited Credits	Forfeited Customers	Cash Out of Credits	Cash Out Customers	Forfeited Credits	Forfeited Customers	
Scenario 1	\$ 0.02842	\$ 84,497	303	\$ 7,983	2	\$ 77,796	303	\$ 4,684	4	\$ (6,701)
Scenario 2	\$ 0.04263	\$ 147,177	514	\$ 17,263	3	\$ 135,729	514	\$ 13,710	6	\$ (11,448)
Scenario 3	\$ 0.05684	\$ 211,522	702	\$ 29,368	4	\$ 196,826	702	\$ 24,064	8	\$ (14,696)

Staff analyzed a reduced cash out cap for the three scenarios which had minimal financial impact to SCP and impacted very few customers. Reducing the cap from the current \$5,000 to \$2,500 had a financial savings to SCP of \$14,696 in the most extreme case. Staff does not believe to be large enough to warrant the change.

Staff determined the NSC rate has a more significant financial impact than the cash out cap. See summary of scenarios below:

	NSC Rate	Cash Out of Credits	Roll-Over Credits	Forfeited Credits
Scenario 1	\$ 0.02842	\$ 84,497	\$ 57,341	\$ 7,983
Scenario 2	\$ 0.04263	\$ 147,177	\$ 60,292	\$ 17,263
Scenario 3	\$ 0.05684	\$ 211,522	\$ 58,753	\$ 29,368

In looking at the cash out of paying customers at PG&E's NSC rate compared to 200% of PG&E's NSC rate, it would put \$127,025 more dollars in the pockets of SCP solar customers and sustain a substantial advantage for those customers to remain with SCP.

Conclusion:

Staff recommends SCP evolve the NetGreen program to a Net Surplus Compensation (NSC) cash out process that pays customers a rate closer to wholesale prices when a customer over-generates on an annual basis, but still

provides a financial benefit compared to PG&E's net energy metering program.

Based on its analysis, staff further recommends Scenario 3, which sets the NSC rate at a premium compared to PG&E's NSC rate. Each January, SCP would look at PG&E's previous calendar year's 12 month average NSC rate. SCP would then set its Premium Net Surplus Compensation rate or PNSC rate at 200% of that average for the upcoming calendar year. The cap would remain at \$5,000.

Proposed NetGreen Successor Program:

- Following the spring 2020 annual cash out, SCP shifts NEM customers to a Net Surplus Compensation (NSC) program for the annual cash out, similar to PG&E's with a few added benefits.
- Monthly billing continues with generation credits being applied at the CleanStart retail rate plus the bonus penny per kWh against the electricity consumed each month.
- Customers who are **net energy generators in kilowatt hours** during the annual cash out period (spring to spring) will be paid for excess energy at SCP's Premium Net Surplus Compensation Rate (PNSC).
 - SCP's PNSC rate will be set at **2.0x PG&E's 12-month NSC average** for the calendar year preceding the cash out.
 - PG&E's 2018 12-month NSC Rate Average: \$0.02842
 - 2019 Annual Cash-Out PNSC Rate: \$0.05684 (*illustrative only*)
- Customers with a NetGreen PNSC balance of \$100 or more in the spring will automatically receive a check up to \$5,000. Credit balances in excess of \$5,000 will be forfeited and re-set to zero.
- Customers with a PNSC balance below \$100 will have their PNSC balance rolled over to the following month.
 - There's a potential that some customers with a NetGreen credit balance above \$100 may have less than \$100 in PSNC and would therefore not receive a check but instead have the PSNC rolled over to the next month.
- NetGreen Aggregation customers are not eligible to receive net surplus compensation per state law and will have credits re-set to zero annually.

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Staff Report – Item 10

To: Sonoma Clean Power Authority Board of Directors

From: Nelson Lomeli, Programs Manager

Issue: Approve and Delegate Authority to the Chief Executive Officer to Negotiate and Execute a Contract with the Center for Sustainable Energy to implement a Sonoma and Mendocino County CALeVIP Project in 2020

Date: October 3, 2019

Recommendation:

Approve and Delegate Authority to the Chief Executive Officer to negotiate and execute a contract substantially in the form attached (Attachment A) with the Center for Sustainable Energy (CSE) to implement a Sonoma and Mendocino County California Electric Vehicle Infrastructure Project (CALeVIP) Project in 2020 with an aggregate not-to-exceed amount of \$1,650,000 over three years.

Background:

The California Electric Vehicle Infrastructure Project (CALeVIP), funded by the California Energy Commission (CEC) and administered statewide by CSE, works to address regional needs for electric vehicle (EV) charging infrastructure throughout California. CALeVIP leverages local partnerships to implement an incentive program to facilitate the installation of public Level 2 and Direct Current Fast Charging (DCFC). The goal is to address the gap in charging infrastructure and thus encourage wider adoption of EVs.

The CEC, in partnership with the National Renewable Energy Lab (NREL), created the CEC EV Infrastructure Projection Tool (EVI-Pro), which estimates the infrastructure needs to achieve California's zero-emission vehicle goals by 2025. Using the tool, the CEC estimates a gap of over 1,000 Level 2 connectors in Sonoma and 182 connectors in Mendocino. For DCFC, the CEC estimates a gap of 154 chargers in Sonoma and 6 in Mendocino.

In late 2018, Staff assembled a partnership of the Bay Area Air Quality Management District (BAAQMD), Mendocino County Air Quality Management District (MCAQMD), Northern Sonoma County Air Pollution Control District

(NSCAPCD), and the Sonoma County Regional Climate Protection Authority (RCPA) to submit a Letter of Intent to the Energy Commission to collaborate with CSE on implementation of a regional CALeVIP project in 2020. The letter stated that if selected, SCP would match CEC funding with \$500,000 per year for three years, subject to Board approval, and the NSCAPCD would match CEC funding with \$50,000 per year for three years, subject to their Board approval. BAAQMD will allow eligible CALeVIP projects to take advantage of their Charge! incentive program and MCAQMD and RCPA will provide technical support and resources.

In May 2019, Energy Commission staff sent a recommendation to Commissioner Patty Monahan selecting Sonoma and Mendocino County as a regional 2020 CALeVIP project, naming it the “Sonoma Coast” Incentive Project. On August 14, 2019, Energy Commission staff held a CALeVIP workshop in SCP offices announcing the funding levels for the “Sonoma Coast” Incentive Project of \$5.1 million from CEC and up to \$1.65 million from the partnership. CEC scheduled the launch of the “Sonoma Coast” Project for October 2020.

Discussion:

The attached contract is between SCPA and CSE to administer and implement a Sonoma and Mendocino CALeVIP project beginning in October 2020. In cooperation with the partnership, CSE will:

- design a targeted regional incentive program that will provide rebates for the installation of public Level 2 and DCFC charging stations;
- determine an appropriate incentive structure and amount in coordination with CEC staff;
- provide application support, including a staffed help desk;
- design, develop, configure, and launch a robust, user friendly website with a funding visualization, instructions, forms, resources, requirements, and application;
- develop an Integrated Communications Plan that will identify goals, target audience, methods, and schedule of marketing efforts;
- develop marketing, outreach, and educational materials in conjunction with SCPA marketing team;
- develop a curated EV Charging Installation 101 resource that will describe the charger capabilities, load considerations, typical requirements, utility connections requirements, and best practices;
- process and evaluate applications for incentive payments;
- collect data on applications, implementation, and charger utilization;
- create and manage separate accounts for SCPA funds and CEC funds; and

- provide a final report on the project when funding is exhausted.

CALeVIP Program Information:

The following information is based on previous CALeVIP projects and is subject to change with the launch of the Sonoma and Mendocino Project. Illustrative purposes only – to be finalized as part of the Service CSE is providing.

Incentive Levels:

- Level 2: \$5,000 per connector (up to 10 connectors) + additional adders:
 - Multi-Unit Dwelling (MUD): +\$1,000 per connector
 - Located in a Disadvantage Community (DAC): +\$500 per connector
 - Located in a Low-Income Community (defined using AB 1550 maps): +\$500 per connector
 - Located in a Rural Community (defined as any unincorporated community in the county): +\$1,000 per connector.
- DCFC: Up to four (4) chargers
 - ≥50 kW chargers: up to \$50,000 or 75% of total project cost
 - 50 kW chargers installed in a low-income community: up to \$60,000 or 80% of total project cost
 - 100+ kW chargers: up to \$70,000 or 75% of total project cost
 - 100+ kW chargers installed in a low-income community: up to \$80,000 or 80% of total project cost

Eligibility:

- Open to site owners, public agencies, tribal communities, and private companies with a valid CA Business License
 - Applicants must have executed site host agreement before applying.
- Eligible site locations including workplaces, multi-unit complexes, universities, grocery stores, retail gas stations, hospitals, hotels, airports, libraries, transit hubs, curbside, and public parking garages.
- Open to projects sited in the Cities of Healdsburg and Ukiah as they would receive CEC funding. They would not be eligible for SCPA funding.
- Chargers must be available to the public (meaning anyone at the workplace or MUD can use it and not assigned to a specific person or unit).
- DCFC must be available 24/7/365 and be well-lit and secure.

Requirements:

- Level 2: must accept multiple forms of payments, be networked for 2 years, capable of providing 6.2 kW of power, able to revert to open communication protocol standards, and be Energy Star Certified.
- DCFC: must accept multiple forms of payments, provide CHAdeMO and SAE CCS plugs, be networked for 5 years, able to revert to open communication protocol standards, and be Energy Star Certified.

Eligible Cost:

- Equipment itself, panel upgrades, transformers, energy storage, planning and design, installation labor cost (Prevailing Wage), utility service orders, and signage, networking agreements, extended warranties, stub-outs, and demand management equipment.
- Incentives will not pay for permits, solar panels, and other cost paid by other rebates or programs.

Fiscal Impact:

The aggregate not-to-exceed amount under the agreement is \$1,650,000, which includes:

- \$115,500 in aggregate Services Fee paid by SCPA to CSE when key milestones are met; and
- \$1,534,500 over the three years incentive funding commitment from SCPA to fund public Level 2 and DCFC infrastructure, accounting for the Services Fee. (*See Table 1*)
- \$150,000 over three years pass-through funding commitment made by NSCAPCD to the project. This amount will be reimbursed by NSCAPCD to SCPA and would be disbursed to NSCAPCD-sited projects only.

Of SCPA's \$1,534,500 incentive funding commitment, \$1,384,500 over three years of SCPA funds will be used for incentives and will only be disbursed to SCP customers. (*See Table 2*)

<i>Table 1.</i>	Amount
Aggregate Not-to-Exceed Amount	\$1,650,000
Services Fee to CSE	\$(115,500)
Incentive Funding Commitment from SCP including NSCAPC funds	\$1,534,500

<i>Table 2.</i>	Amount
Incentive Funding Commitment from SCP	\$1,534,500
NSCAPCD Pass-through Incentive Funding Commitment	(\$150,000)
Amount from SCP to be used for incentives of SCP customer-sited projects	\$1,384,500

Budget:

Staff budgeted \$500,000 in the current FY19-20 programs budget when it was anticipated the program would launch in Q1 of 2020. Staff expects to pay \$17,500 of the Services fee from the current FY19-20 programs budget for the delivery of finalized program design and website.

Staff will be budgeting \$550,000 in future fiscal years programs budget to cover SCPA's funding commitment, the pass-through funding commitment from NSCAPCD, which will be reimbursed by NSCAPCD, and the Contractor Services Fee.

Overall, the total amount for the program will be \$6,750,000 composed of the following funding contributions:

- \$5,100,000 from the CEC;
- \$1,500,000 from SCPA; and
- \$150,000 from NSCAPCD.

Of the total amount, \$6,634,500 dollars will be available for incentives as \$115,500 of SCPA's funding contribution will be used to pay the Services Fee to CSE.

Allocations:

The CEC has allocated \$5.88 million in incentives to Sonoma County and \$750,000 in incentives to Mendocino, based on the projected need for EV charging infrastructure from the CEC EVI-Pro tool.

Table 3 shows amounts allocated to each county by charger technology (DCFC vs. Level 2) and Table 4 shows amounts allocated to each county by source of funding.

<i>Table 3.</i>	Allocation by Charger Tech		
	Level 2	DCFC	Total
Sonoma	\$2,584,500	\$3,300,000	\$5,884,500
Mendocino	\$450,000	\$300,000	\$750,000
Total	\$3,034,500	\$3,600,000	\$6,634,500

Table 4.

Allocation by Funding Commitments

	CEC	Partnership	Total
Sonoma	\$4,800,000	\$1,084,500	\$5,884,500
Mendocino	\$300,000	\$450,000	\$750,000
Total	\$5,100,000	\$1,534,500	\$6,634,500

Note: The difference between the Sonoma Coast Total Amount of \$6.75M and the \$6.634M shown in Tables 3 & 4 is the \$115,500 Services Fee paid to CSE.

Community Advisory Committee (CAC) Comments

The CAC unanimously recommended approval of the contract to the Board. The CAC raised concerns around the requirement by the CEC that the chargers be networked due to the lack of connectivity and broadband in rural and coastal communities. Staff will engage with the CEC to address those concerns during program design as networking is a pillar requirement of the program and other CEC grants. CAC members also raised questions about the eligibility of roadside chargers (eligible with an executed Site Host Agreement) and public use of Level 2 charging stations at workplaces and hotel-like locations (up to the discretion of the site host).

Attachments

- Attachment A - Professional Services Agreement with Center for Sustainable Energy for Sonoma-Mendocino CALeVIP Project

[Attachments for this item can be accessed through this link or by request from the Clerk of the Board](#)

- Attachment B - CALeVIP Letter of Intent from SCP, BAAQMD, MCAQMD, NSCAPCD, RCPA

[Attachments for this item can be accessed through this link or by request from the Clerk of the Board](#)

- Attachment C - California Energy Commission Staff Workshop Presentation

[Attachments for this item can be accessed through this link or by request from the Clerk of the Board](#)



Staff Report – Item 11

To: Sonoma Clean Power Authority Board of Directors

From: Jessica Mullan, General Counsel

Issue: Closed Session – Conference with Legal Counsel – Existing Litigation
(Paragraph (1) of subdivision (d) of Section 54956.9)
Name of Case: In re PG&E Corporation, Debtor; Chapter 11; US
Bankruptcy Court, Northern District of California San Francisco
Division, Case No. 19- 30088(DM) and Case No. 19- 300889(DM)

Date: October 3, 2019

There are no written materials for this item.