



**AGENDA
COMMUNITY ADVISORY COMMITTEE MEETING
WEDNESDAY, JULY 29, 2020
1:00 P.M.**

******GOVERNOR'S EXECUTIVE ORDER N-25-20******

******GOVERNOR'S EXECUTIVE ORDER N-29-20******

RE CORONAVIRUS COVID-19

CONSISTENT WITH THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-25-20 AND N-29-20 WHICH SUSPEND CERTAIN REQUIREMENTS OF THE BROWN ACT, AND THE ORDER OF THE HEALTH OFFICER OF THE COUNTY OF SONOMA TO SHELTER IN PLACE TO MINIMIZE THE SPREAD OF COVID-19, MEMBERS OF THE COMMUNITY ADVISORY COMMITTEE WILL PARTICIPATE IN THE JULY 29, 2020 MEETING BY TELECONFERENCE. DUE TO THE EXECUTIVE ORDERS, IN-PERSON PARTICIPATION BY THE PUBLIC WILL NOT BE PERMITTED AND NO PHYSICAL LOCATION FROM WHICH THE PUBLIC MAY ATTEND THE MEETING WILL BE AVAILABLE. REMOTE PUBLIC PARTICIPATION DETAILS ARE LISTED BELOW.

Members of the public who wish to participate in the Community Advisory Committee Meeting may do so via the following webinar link or teleconference call-in number and meeting code:

- Webinar link: <https://zoom.us/j/92345962509>
 - Telephone number: 1 (669) 900-9128
 - Meeting ID: 923 4596 2509

PLEASE NOTE: The Sonoma Clean Power Business Office is closed and this meeting will be conducted entirely by teleconference.

How to Submit Public Comment During the Teleconference Meeting:

The Chair will request public comment during the Public Comment period for all items on the agenda. Comments may be submitted in writing (preferred) to meetings@sonomacleanpower.org or during the meeting via the webinar "raise your hand" feature. For detailed public comment instructions, [please visit this page](#).

For written comments, state the agenda item number that you are commenting on and limit to 300 words. Written comments received prior to the meeting and/or the agenda item you wish to comment on will be read into the record up to 300 words.

I. CALL TO ORDER

II. PUBLIC COMMENT ON MATTERS NOT LISTED ON THE AGENDA

(Comments are restricted to matters within the Committee's jurisdiction. Please be brief and limit spoken comments to three minutes, or 300 words if written.)

III. COMMUNITY ADVISORY COMMITTEE CONSENT CALENDAR

1. Approve June 24, 2020 Draft Community Advisory Committee Meeting Minutes (Action) - pg. 5

IV. COMMUNITY ADVISORY COMMITTEE REGULAR CALENDAR

2. Receive Internal Operations and Monthly Financial Report and Provide Feedback as Appropriate (Discussion) - pg. 11
3. Receive Legislative and Regulatory Updates and Provide Feedback as Appropriate (Discussion) - pg. 65
4. Discussion on City and County Compliance with AB 1236 – Local Ordinances Requiring Permit Streamlining and Checklist for Electric Vehicle Charging Stations (Discussion/Potential Action) - pg. 73
5. Review and Recommend Board Adoption of SCP's 2020 Integrated Resource Plan for CPUC Conforming Portfolios (Action) - pg. 75

V. COMMITTEE MEMBER ANNOUNCEMENTS

VI. ADJOURN

DISABLED ACCOMMODATION: If you have a disability which requires an accommodation or an alternative format, please contact the Clerk of the Board at (707) 890-8491, or by email at meetings@sonomacleanpower.org 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
COMMUNITY ADVISORY COMMITTEE MEETING
WEDNESDAY, JUNE 24, 2020
1:00 P.M.**

******GOVERNOR'S EXECUTIVE ORDER N-25-20******

******GOVERNOR'S EXECUTIVE ORDER N-29-20******

****RE CORONAVIRUS COVID-19****

DUE TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-25-20 AND N-29-20 WHICH SUSPEND CERTAIN REQUIREMENTS OF THE BROWN ACT, AND THE ORDER OF THE HEALTH OFFICER OF THE COUNTY OF SONOMA TO SHELTER IN PLACE TO MINIMIZE THE SPREAD OF COVID-19, MEMBERS OF THE COMMUNITY ADVISORY COMMITTEE PARTICIPATED IN THE JUNE 24, 2020 MEETING BY TELECONFERENCE

I. CALL TO ORDER

Vice Chair Baldwin called the meeting to order at approximately 1:06 p.m.

Committee Members present: Vice Chair Baldwin and Members Brady, Chaban, Mattinson, Morris, Nicholls, Sizemore, Quinlan, and Wells

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

II. PUBLIC COMMENT ON MATTERS NOT LISTED ON THE AGENDA

None

III. COMMUNITY ADVISORY COMMITTEE CONSENT CALENDAR

1. Approve May 19, 2020 Draft Community Advisory Committee Meeting Minutes
2. Recommend that the Board of Directors Approve a Contract with the Career Technical Education Foundation for the SWITCH Vehicle Education Program
3. Recommend that the Board of Directors Adopt a New Small Business Rate for Storage (B1-ST)

Public comment: None

Motion to adopt the June 24, 2020 Community Advisory Committee Consent Calendar by Member Wells

Second: Member Nicholls

Motion passed: 9-0-0

IV. COMMUNITY ADVISORY COMMITTEE REGULAR CALENDAR

4. Recommend that the Board of Directors Approve and Authorize the CEO, or his Designee, to Execute a Third Amendment to the Contract with EHDD for Design and Construction Administration Support for the SCP Headquarters Project

Member Quinlan requested that this item be pulled from the Consent Calendar and placed on the Regular Calendar for further discussion; he then noted that the Third Amendment had minor typos and questioned whether the Amendment contained all the necessary recitals. CEO Syphers advised Member Quinlan that he will take his comments as direction to staff and will bring the item to SCP's Special Counsel for additional review. Member Quinlan then asked why personnel changes with EHDD required an increase in the overall contract value; Director of Programs Cordel Stillman stated that the staff member assigned to this project by EHDD left their employment, and due to COVID-19, EHDD has been unable to successfully recruit for the position, which has necessitated that higher-level staff provide administrative support.

Motion to Recommend that the Board Approve and Authorize the CEO, or his Designee, to Execute a Third Amendment to the Contract with EHDD for Design and Construction Administration Support for the SCP Headquarters Project Subject to Any Needed Revisions as Determined by Special Counsel by Member Quinlan

Second: Member Mattinson

Motion passed: 9-0-0

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

Director of Internal Operations Stephanie Reynolds introduced this item by noting SCP's business office remains closed to staff and the public with no specific reopening date. She then announced the hiring of two new staff

members, including Jennifer Rafferty, who joined the Operations team as an Administrative Aide, and a store manager for the Advanced Energy Center who will be introduced to the Committee following his start date in July. Director Reynolds described Marketing efforts around energy conservation tips and CARE/FERA enrollments. Programs Manager Carolyn Glanton then updated the Committee on a series of well-attended monthly webinars, and some of the topic areas, which include solar plus storage, an introduction to electric vehicles, and home remodeling for climate resiliency & fuel switching. Senior Programs Manager Rachel Kuykendall advised the Committee of a new partnership with ecobee (a smart thermostat manufacturer) and upcoming GridSavvy demand response events.

Public comment: None

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

Director of Regulatory Affairs introduced the item by noting that the CPUC approved PG&E's plan to emerge from bankruptcy, which means that PG&E will be able to meet the Governor Newsom's June 30th deadline and will have access to funds for additional wildfire damages as established in AB 1054. Director Reardon noted that the CPUC approval plan largely maintains the status-quo but does question the viability of PG&E's monopoly status moving forward. He then detailed recent changes at PG&E, which includes the following: the company's plan to sell its flagship headquarters and relocate; the appointment of 11 new members to their Board of Directors; and a downgrade of their credit rating below investment grade to junk status.

Director Reardon then advised the Committee that on June 11th the CPUC approved a central buyer for local Resource Adequacy, and that PG&E will serve as a central buyer for SCP and any other CCAs within their service territory beginning in 2023. He noted that this decision absolutely detracts from SCP's ability to self-procure on behalf of its customers and will add to the costs that PG&E charges SCP customers for services rendered.

He then detailed a CPUC decision which recognizes the importance of local governments in planning and developing microgrids to protect customers from the harm caused by PSPS events, and that the main requirements of the decision include: Investor Owned Utilities (IOU) have to host semi-annual workshops in conjunction with local city and/or county offices of emergency services; IOUs have to develop a Resiliency Project Engagement Guide, which is a how-to guide on the development of microgrids with preapproved diagrams for developers & other stakeholders; and a requirement that the IOUs create a data portal with information such as current grid upgrade

projects, locations of upgrades, and their forecasted impact on reducing PSPS events.

CEO Syphers began his legislative update by noting the upcoming deadline for passing the State's annual budget, and that any approved budget will likely return for further amendment due to adverse economic impacts from COVID-19. He then spoke on SCP's support of an Assembly Constitutional Amendment, ACA 5, which if passed, would place a repeal of Proposition 209 on the November ballot; should the measure pass the fall ballot, public agencies would be allowed to resume affirmative action policies. He then spoke on SB 350 ("The Golden State Energy Bill") which is a proposal for the conditions under which PG&E would lose its Certificate of Public Convenience and Necessity and electric power services would be transferred to a publicly-owned state entity.

Public comment: None

7. Receive Update on Impacts of COVID-19 to SCP

COO Koszalka noted that staff will reduce the frequency of these reports giving a lack of significant updates to bring to the Committee. He advised the Committee that SCP contracted with local economists for a study to assist with SCP's forecasting needs, and that the study projects a 5% decline in revenue for the fiscal year starting July 1st.

Public comment: None

8. Recommend that the Board of Directors Delegate Authority to the CEO or his Designee to Negotiate, Execute, and Amend a Professional Services Agreement with TerraVerde Energy, LLC with a Not-to-Exceed amount of \$500,000 to Analyze Battery Storage Systems at Public Education Facilities

Programs Manager Carolyn Glanton gave an overview of the proposed agreement with TerraVerde Energy to conduct a technical and feasibility analysis of adding battery storage to existing school-owned solar systems to public education facilities within SCP's service territory. Member Sizemore asked if there is significant demand for battery storage from public education facilities; CEO Syphers noted that due-diligence studies increase the likelihood of public facilities receiving state funding & incentives for battery storage, and battery storage systems are in demand since they not only reduce operational costs, but allow public facilities to serve as emergency centers during PSPS events and other disaster situations.

Member Morris asked about the school selection process and how it would be determined which schools get to participate; Programs Manager Glanton stated that TerraVerde will use a set of criteria to evaluate and establish a short-list of viable sites.

Motion to Recommend that the Board of Directors Delegate Authority to the CEO or his Designee to Negotiate, Execute, and Amend a Professional Services Agreement with TerraVerde Energy, LLC with a Not-to-Exceed amount of \$500,000 to Analyze Battery Storage Systems at Public Education Facilities by Committee Member Quinlan

Second: Member Mattinson

Motion passed: 9-0-0

9. Committee Member Discussion on whether to Recommend a Policy Position on Hydraulic Fracturing (aka “fracking”) for Natural Gas

Vice Chair Baldwin introduced the item by noting that a certain percentage of SCP’s energy portfolio is derived from natural-gas-powered generators, and to be mindful of this fact when developing a potential policy position for Board consideration. Member Brady noted that this topic had come up on more than one occasion, which is why she requested it be placed on the agenda, while acknowledging the challenges that come with advocating against natural gas in its entirety. Member Mattinson noted that a policy position on this topic would align with SCP’s mission as outlined in its Joint Powers Authority Agreement, along with his support for reducing fossil fuel usage, particularly those sources derived from fracking. Member Nicholls asked if CalCCA has taken a position against fracking, and CEO Syphers stated that while CalCCA has not taken a position on this topic, SCP’s Policy Position is to reduce greenhouse gas emissions by all available means. Member Chaban noted his support for taking a policy position against natural gas usage; Member Sizemore expressed similar comments. Member Quinlan questioned whether it is even possible to differentiate between natural gas derived from fracking versus more traditional methods of extraction for power sourcing & advocacy purposes; CEO Syphers stated that is it highly unlikely given the structure of the commodity marketplace for natural gas products. Member Morris noted her stance against fracking but questioned whether advocacy on this topic is appropriate.

Member Mattinson recommended that staff draft a statement noting that SCP uses natural gas, given its low-cost and use for backup generation facilities, but the organization is committed to moving away from all fossil fuel energy

sources as soon as possible; Member Brady seconded this recommendation. Member Sizemore requested that any statement note the impacts of fracking to disadvantaged communities. CEO Syphers requested that the Committee appoint an ad hoc to support staff; Vice Chair Baldwin appointed Members Brady and Mattinson to the ad hoc.

Public comment: None

V. COMMITTEE MEMBER ANNOUNCEMENTS

None

VI. ADJOURN

Motion to Adjourn the June 24, 2020 Community Advisory Committee Meeting by Member Sizemore

Second: Member Nicholls

Motion Approved by Unanimous Consent.

The meeting was adjourned at approximately 2:34 p.m.



Staff Report - Item 02

To: Sonoma Clean Power Community Advisory Committee

From: Stephanie Reynolds, Director of Internal Operations
Mike Koszalka, Chief Operating Officer

Issue: Receive Internal Operations Report and Provide Feedback as Appropriate

Date: July 29, 2020

BUSINESS OFFICE CLOSURE CONTINUES

Staff continue to work remotely and follow guidelines to shelter in place as they are set by the local Public Health Officer, Dr. Sundari Mase. Incoming emails and calls to the call center from the public are being handled in the same manner as if the office were fully open.

COVID-19 IMPACTS TO SCP

Staff continues to closely monitor the impact of COVID-19 on energy usage and revenues for SCP. Starting in the latter half of June, usage consistently tracks above pre-COVID conditions due to increased business activity, warmer weather conditions, and the large segment of the population working from home. Through the first two weeks of July, overall usage is 4% above pre-COVID conditions; a 9% increase in residential load is partly offset by a 1% decrease in commercial. Revenues from energy sales are projected to be 3% above budget for the month of July. This contrasts with -2.5% versus budget for the month of June before the recent ramp-up in commercial usage. Note that July is also the first month where COVID conditions were incorporated into budget forecasts. The data currently available through July 13

does not reflect the potential impact of new restrictions on business from the state and county.

CURRENT PARTICIPATION RATES (as of 7/2/20)

COUNTY	Eligible	SCP	% Part.	% Opt Out
<input checked="" type="checkbox"/> MENDOCINO	38,412	30,707	79.9%	20.1%
FORT BRAGG INC	4,020	3,344	83.2%	16.8%
POINT ARENA INC	341	289	84.8%	15.2%
UNINC MENDOCINO CO	31,307	24,869	79.4%	20.6%
WILLITS INC	2,744	2,205	80.4%	19.6%
<input checked="" type="checkbox"/> SONOMA	223,184	196,686	88.1%	11.9%
CLOVERDALE INC	3,882	3,236	83.4%	16.6%
COTATI INC	3,826	3,466	90.6%	9.4%
PETALUMA INC	26,858	23,931	89.1%	10.9%
ROHNERT PARK INC	18,375	16,216	88.3%	11.7%
SANTA ROSA INC	75,936	67,405	88.8%	11.2%
SEBASTOPOL INC	4,432	4,030	90.9%	9.1%
SONOMA INC	6,363	5,536	87.0%	13.0%
UNINC SONOMA CO	73,602	64,152	87.2%	12.8%
WINDSOR INC	9,910	8,714	87.9%	12.1%
Total	261,596	227,393	86.9%	13.1%

Current EverGreen Enrollment by TOT

TOT_DESC	SCP Meters	EverGreen Meters	EverGreen Rate
CLOVERDALE INC	3,236	21	0.65%
COTATI INC	3,466	121	3.49%
FORT BRAGG INC	3,344	26	0.78%
PETALUMA INC	23,931	190	0.79%
POINT ARENA INC	289	2	0.69%
ROHNERT PARK INC	16,216	49	0.30%
SANTA ROSA INC	67,405	494	0.73%
SEBASTOPOL INC	4,030	166	4.12%
SONOMA INC	5,536	82	1.48%
UNINC MENDOCINO CO	24,869	245	0.99%
UNINC SONOMA CO	64,152	704	1.10%
WILLITS INC	2,205	15	0.68%
WINDSOR INC	8,714	40	0.46%
Total	227,393	2145	0.94%

NEW TEAM MEMBER

Just this month, our newest team member, David Harvey, joined SCP. David is the new Advanced Energy Center Store Manager and will oversee the Center and the interns staffing the site. He comes to SCP with an extensive energy and customer service background that we look forward to putting to good use.

COMMUNITY OUTREACH UPDATE

In recognition of Sonoma Clean Power's donation to benefit Mendocino County residents in the days immediately following March's shelter in place order, The Community Foundation of Mendocino County (CFMC) is sharing community stories, highlighting some of the positive impacts made possible by donations from the business community. SCP's donation (\$15,000) was specifically directed to benefit senior citizens, many of whom live in rural areas and rely upon food delivery services such as Meals on Wheels.

In addition to a June 24th article in the *Ukiah Daily Journal* "Coronavirus: Community Foundation of Mendocino County Working to Meet Local Needs", an e-newsletter from CFMC provided more context regarding how the donations are being put to good use:

"This grant is a godsend," said Richard Baker, Executive Director of Willits Seniors, Inc. "It will provide the financial means for us to serve over 9,600 meals to our senior community and those with underlying health conditions for a period of six months. Our partnership with the Community Foundation has allowed us to meet the increasing demand to provide a safe food delivery method for this vulnerable population during the COVID-19 pandemic."

Willits Harrah Senior Center is providing seniors the opportunity to dine in for lunch, to pick up a to-go meal, or have a meal delivered. "I don't know what I would do without this service," said Roberta, a senior receiving meals while sheltering in place. "I always look forward to talking with the Meals on Wheels drivers. They are always so kind to me, and you get a lot of food, enough for both my lunch and dinner."

SCP LEAVES THE ALLIANCE

CEO Syphers decided to cancel SCP's membership in the Sonoma County Alliance after the former president issued a racially divisive statement and the organization failed to respond to SCP's critical feedback with specific and meaningful actions to reverse the harm. This sadly leaves a gap in staff's ability to efficiently connect with large numbers of local businesses to discuss their plans for projects in energy efficiency, solar power, battery storage and electric vehicle infrastructure and fleets, and for SCP to efficiently communicate about its customer programs.

PROGRAMS UPDATES:

Included as an attachment to the agenda is the latest update to the Programs Division's Strategic Action Plan. This plan is updated every January and June to reflect the status of existing programs and categorizes efforts as "Immediate, Short term and Long term". The Plan highlights significant progress made in the previous six months and lists new programs that we have under consideration.

Advanced Energy Rebuild (AER)

The application deadline for Advanced Energy Rebuild was on June 30th. In total, the program had 326 applications covering 451 dwellings. These include 325 single-family homes, 96 multi-family units, and 30 Accessory Dwelling Units (ADU). Of these, 87 dwellings are all-electric and 115 are building with a battery backup system. Over \$2.7M in incentives has been reserved for rebuild projects, with 60 still in plan review. Enrolled homeowners will have 36 months to complete their projects.

Advanced Energy Build (AEB)

The Advanced Energy Build (AEB) new construction program was launched on July 1, 2020. The program has a goal of 500 homes, and includes incentives for electric-ready and all-electric homes, along with additional funds for battery storage integration. A webinar to introduce the local building community to the program was held on July 22nd.

Self-Generation Incentive Program (SGIP)

The SGIP Assistance program launched in April 2020. This program provides residential customers with SGIP incentives upfront and assistance with applications to install battery energy storage systems under 30 kilowatts (kW). More information can be found at www.sonomacleanpower.org/programs/sgipassistance

The program temporarily paused accepting Equity Resiliency applications while awaiting clarifications on program requirements. Additional funding from Senate Bill 700 became available on July 20 and PG&E has started reviewing projects on the Equity Resiliency waitlist.

As of July 20, customers have been able to choose to work with any of the 32 participating contractors. SCP has received 44 projects submitted by 17 contractors/installers totaling almost \$935,000. Most projects submitted so far are equity resiliency projects, meaning the rebate covers 100% of the project.

Sonoma Coast Incentive Project - CALeVIP

The Sonoma Coast Incentive Project, which provides incentives for the installation of electric vehicle charging infrastructure, officially started accepting applications on July 8, 2020, as scheduled.

The application portal opened at 8:51 AM and by 9:10 AM, all the funds for both Direct Fast Chargers (DCFC) and Level 2 chargers across both counties had been provisionally reserved (i.e. applications received). This is the fastest any CALeVIP project has had all of its funds reserved! The Center for Sustainable Energy (CSE), the Statewide project implementer, stated that within the first hour of the application opening, 163 applications were received.

As of July 21, 2020, more than \$18.4M in applications have been received and are currently on the waitlist. This includes:

- **Mendocino:** \$1.95M in excess DCFC applications and \$441K in excess Level 2 applications.
- **Sonoma:** \$12.5M in excess DCFC applications and \$3.4M in excess Level 2 applications

As a reminder, the total Sonoma Coast Incentive Project budget is \$6.75M broken down into the following categories:

- **Mendocino:** \$300K for DCFC and \$450K for Level 2 for a total budget of \$750K
 - 25% of DCFC and Level 2 funds will be committed to Disadvantaged and Low-Income Communities
 - *Note: applications with an installation address in the cities/towns of Laytonville, Leggett, Ukiah and Willits are not eligible for DCFC funds as the CEC has previously invested in DCFC infrastructure in these locations.*

- **Sonoma:** \$3.3M for DCFC and \$2.7M for Level 2 for a total budget of \$6M
 - 25% of DCFC and Level 2 funds will be committed to unincorporated areas.

The rebates (incentives) are up to \$80,000 for Direct Current Fast Chargers (DCFC) and up to \$7,500 for Level 2 chargers for the design, engineering, purchase, and installation of the charging infrastructure.

CSE is currently processing all the applications received and will start sending “Funds Reserved” emails to applicants on a first-come, first-served basis. Staff is still encouraging interested parties to apply for funds as some applications will be denied, be cancelled by the applicants, and/or the project ultimately may not work out. Any funding reserved by the applicant will go to the next project on the waitlist. Additionally, funds are reserved at the maximum rebate amount and a project may ultimately not receive that maximum amount due to a lower total project cost or a change in the number of chargers or ports actually installed.

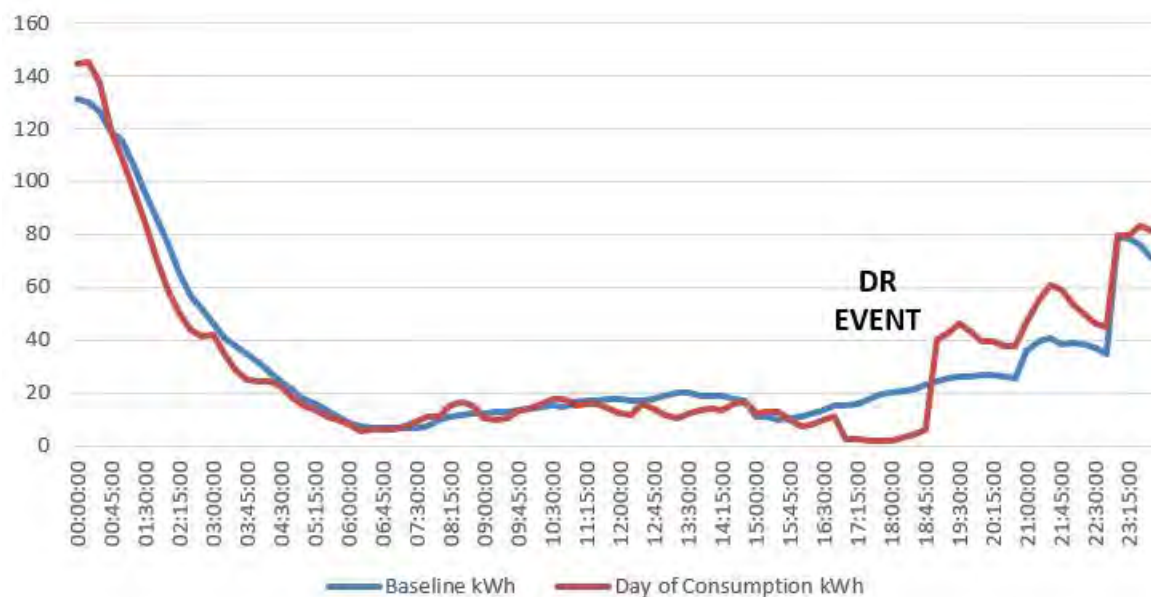
Staff is anticipating the first report from CSE at the end of the month showing all the applications received and will have a better understanding of the locations.

For more information, including the requirements and supporting documents, visit the Sonoma Coast Incentive Project CALeVIP landing page sonomacleanpower.org/calevip.

GridSavvy Community

The GridSavvy Community has partnered with BayREN’s existing Home+ program to offer SCP customers \$1,700 (for standard customers) to \$2,000 (for CARE/FERA customers) in incentives for grid-interactive heat pump water heaters. The combined programs will use one application, and customers will have access to the trained and vetted contractors that are a part of the Home+ program. Customers with existing compatible EV chargers, smart thermostats, and heat pump water heaters can now also seamlessly join GridSavvy through the program website. Finally, demand response events based on SCP’s projected peak loads continue, with the last event

being on July 9th. Results from the EV chargers during that event are shown in the graph below.



Lead Locally (CEC Grant)

The Lead locally research team continues its Phase 1 applied study of both phase change materials and air to water heat pumps. Phase 2 site recruitment are nearing completion and installations are scheduled over the next two months.

The Education and Outreach team has put together a robust schedule of courses and events for the 20/21 FY. The intent is to conduct most events online to best reach community members during times of distancing. Please check our online calendar for upcoming events.

Construction at the Advanced Energy Center has reached the phase where flooring is being prepped for finishing, and walls will be painted. Multiple manufacturers and distributors are under contract to participate at the Advanced Energy Center and their display bays are being constructed and co-branding marketing strategies are being defined. The SCP team is developing safety protocols to prepare for a public presence at the AEC opening.

Energy Resiliency Audit Program (ERAP)

Description:

Small commercial customers receive a no-cost backup energy audit to help determine how much battery storage is needed to power critical electric loads during a shutoff; whether battery storage is financially feasible; and how storage could be integrated into existing operations to benefit their business year-round.

The program is focused on providing technical electric resiliency expertise to commercial enterprises impacted by PG&E PSPS (Public Safety Power Shutoffs), and particularly to those considered essential in their communities.

Enrollment to date

- Customer sites enrolled: 24 (Three of those became non-responsive after we sent the initial questionnaire.)
- Net customer sites enrolled: 21
- Stage One reports delivered: 6 (All are evaluating whether to move to Stage Two.)
- The Center for Sustainable Energy (CSE) is evaluating the remaining 15.

The CSE is the program partner providing the electrical engineering expertise.

Program Product Reports

Stage One reports provide customers with an estimation of implementation costs based on their individual operation and historical electrical usage. If energy storage is deemed a viable option, a Stage Two analysis is undertaken.

Stage Two reports provide a final implementation study, including an in-depth review of existing electrical infrastructure and recommended infrastructure upgrades.

Enrollment Recap

To prepare for direct customer contact, we first identified the essential small business SCP customers by their NAICS business classification code. Then we cross referenced to the list of those fed on the PG&E circuits most prone to PSPS. From that combined list, we made direct contact with 70 top priority customers, alerting them that they qualified for the ERAP program.

Among our prime targets were NEM customers. Since they already had solar PV in place, they presumably had a higher probability of acting on the ERAP recommendations and implement battery storage prior the "2020 PSPS Season".

We successfully contacted SCP customers in all of the SCP Member towns and territories.

Customers have also heard about the program through SCP's press releases and marketing efforts. Several customers not considered essential responded, and because they were in PSPS impact zones, we enrolled them in the program. Enrollment efforts are ongoing.

Enrolled customers to date fall into the following NAICS classifications:

- Civic and Social Organizations
- Fire Protection
- Full-Service Restaurants
- Homes for the Elderly
- Hotels (except Casino)-Motels
- Junior Colleges [farm program]
- Motion Picture Theaters
- Nursing-Residential Care Facilities
- Sporting Goods Stores
- Supermarkets-Other Grocery
- Temporary Shelters
- Veterinary Services
- Water Supply-Irrigation System
- Wineries

Customers enrolled did so primarily for PSPS resiliency, but also for overall electric cost savings.

Customers who elected not to enroll typically mentioned two factors:

1. They had already significantly invested in gas generators. These were primarily grocers who had been researching power options since last fall.
2. They were heavily involved in Covid-19 response and protections, as in the case of nursing homes, and did not want to divert resources to resiliency now.

MONTHLY COMPILED FINANCIALS STATEMENT AND BUDGETARY COMPARISON SCHEDULE

BUDGETARY COMPARISON SCHEDULE

The accompanying budgetary comparison includes the 2019/20 budget amendment approved by the Board of Directors in February 2020.

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 slightly less than the year-to-date budget by approximately 4%. The cost of electricity is approximately equal to 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.

MONTHLY COMPILED FINANCIAL STATEMENTS

The year-to-date growth in net position is slightly under projections due primarily to lower than expected revenues. Revenue from electricity sales is less than projections by approximately 4%, and cost of energy is over expectations by just under 1%. Year-to-date electricity sales reached \$170,992,000.

SCP maintains a balanced portfolio by procuring electricity from multiple sources. Net position reached a positive \$114,613,000, which indicates healthy growth.

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

UPCOMING MEETINGS:

BOD - Thursday, August 6, 2020 at 8:45 A.M.

CAC - No August Meeting Scheduled

BOD - No September Meeting Scheduled

ATTACHMENTS:

SCP May 2020 Budgetary Statement

SCP May 2020 Financial Statements

Sonoma Clean Power Programs Division Strategic Action Plan



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 May 31, 2020, 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
June 25, 2020

SONOMA CLEAN POWER AUTHORITY
OPERATING FUND
BUDGETARY COMPARISON SCHEDULE
July 1, 2019 through May 31, 2020

	2019/20 YTD Amended Budget	2019/20 YTD Actual	2019/20 YTD Amended Budget Variance (Under) Over	2019/20 YTD Actual/ Amended Budget %	2019/20 Amended Budget	2019/20 Amended Budget Remaining
REVENUE AND OTHER SOURCES:						
Electricity (net of allowance) *	\$ 177,925,514	\$ 170,993,186	\$ (6,932,328)	96%	\$ 196,600,000	\$ 25,606,814
Evergreen Premium (net of allowance)	442,551	553,446	110,895	125%	489,000	(64,446)
CEC Grant	4,363,333	2,372,104	(1,991,229)	54%	4,760,000	2,387,896
BAAQMD grant	91,667	144,000	52,333	0%	100,000	(44,000)
Interest income	1,214,583	1,318,792	104,209	109%	1,325,000	6,208
Total revenue and other sources	184,037,648	175,381,528	(8,656,120)	95%	203,274,000	27,892,472
EXPENDITURES AND OTHER USES:						
CURRENT EXPENDITURES						
Cost of energy and scheduling	136,498,988	137,743,050	1,244,062	101%	150,630,000	12,886,950
Data management	2,894,833	2,910,627	15,794	101%	3,158,000	247,373
Service fees- PG&E	880,917	881,671	754	100%	961,000	79,329
Personnel	3,969,167	3,715,632	(253,535)	94%	4,330,000	614,368
Outreach and communications	880,000	792,154	(87,846)	90%	960,000	167,846
Customer service	350,702	300,874	(49,828)	86%	367,000	66,126
General and administration	467,917	474,659	6,742	101%	505,000	30,341
Legal, regulatory and compliance	1,010,167	848,403	(161,764)	84%	1,102,000	253,597
Accounting	193,417	153,542	(39,875)	79%	211,000	57,458
Legislative	71,500	71,500	-	100%	78,000	6,500
Other consultants	146,667	151,044	4,377	103%	160,000	8,956
CalCCA Trade Association	403,333	302,500	(100,833)	75%	440,000	137,500
Program implementation	2,475,000	1,884,052	(590,948)	76%	2,700,000	815,948
Program - CEC grant	7,700,000	4,137,648	(3,562,352)	54%	8,400,000	4,262,352
Program development and evaluation	45,833	2,348	(43,485)	5%	50,000	47,652
Total current expenditures	157,988,441	154,369,704	(3,618,737)	98%	174,052,000	19,682,296
OTHER USES						
Capital outlay	3,483,333	515,143	(2,968,190)	15%	3,800,000	3,284,857
Total Expenditures, Other Uses and Debt Service	161,471,774	154,884,847	(6,586,927)	96%	177,852,000	22,967,153
Net increase (decrease) in available fund balance	\$ 22,565,874	\$ 20,496,681	\$ (2,069,193)	91%	\$ 25,422,000	\$ 4,925,319
<i>* Represents sales of approximately 2,094,000 MWh for 2019/20 YTD actual.</i>						
RESERVES						
Operating Cash Reserve	\$ 58,847,000		\$ 88,926,000			
Program Cash Reserve	10,769,000		17,785,200			
Collateral Cash Reserve	2,173,000		15,063,000			
	\$ 71,789,000		\$ 121,774,200			

SONOMA CLEAN POWER AUTHORITY
OPERATING FUND
BUDGET RECONCILIATION TO STATEMENT OF
REVENUES, EXPENSES AND CHANGES IN NET POSITION
July 1, 2019 through May 31, 2020

Net increase (decrease) in available fund balance per budgetary comparison schedule:	\$ 20,496,681
Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position:	
Subtract depreciation expense	(59,788)
Add back capital asset acquisitions	<u>2,257,730</u>
Change in net position	<u>\$ 22,694,623</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 May 31, 2020, 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
June 25, 2020

SONOMA CLEAN POWER AUTHORITY

STATEMENT OF NET POSITION

As of May 31, 2020

ASSETS

Current assets

Cash and cash equivalents	\$ 66,338,508
Accounts receivable, net of allowance	17,592,366
Other receivables	2,640,336
Accrued revenue	10,399,908
Prepaid expenses	1,113,540
Deposits	757,079
Investments	20,212,350
Total current assets	<u>119,054,087</u>

Noncurrent assets

Land and construction-in-progress	7,036,818
Capital assets, net of depreciation	146,549
Deposits	5,459,242
Total noncurrent assets	<u>12,642,609</u>
Total assets	<u>131,696,696</u>

LIABILITIES

Current liabilities

Accounts payable	1,867,693
Accrued cost of electricity	13,726,490
Advanced from grantors	300,625
Other accrued liabilities	730,153
User taxes and energy surcharges due to other governments	458,555
Total current liabilities	<u>17,083,516</u>

NET POSITION

Investment in capital assets	7,183,367
Unrestricted	107,429,813
Total net position	<u>\$ 114,613,180</u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
July 1, 2019 through May 31, 2020

OPERATING REVENUES

Electricity sales, net	\$ 170,992,476
Evergreen electricity premium	553,446
Grant revenue	2,516,104
Total operating revenues	<u>174,062,026</u>

OPERATING EXPENSES

Cost of electricity	137,743,050
Contract services	9,413,350
Staff compensation	3,876,820
General and administration	1,006,451
Program rebates and incentives	587,446
Depreciation	59,788
Total operating expenses	<u>152,686,905</u>
Operating income	<u>21,375,121</u>

NONOPERATING REVENUES (EXPENSES)

Interest income	1,318,792
Other nonoperating revenue	710
Total nonoperating revenues (expenses)	<u>1,319,502</u>

CHANGE IN NET POSITION

	22,694,623
Net position at beginning of period	<u>91,918,557</u>
Net position at end of period	<u><u>\$ 114,613,180</u></u>

SONOMA CLEAN POWER AUTHORITY

STATEMENT OF CASH FLOWS

July 1, 2019 through May 31, 2020

CASH FLOWS FROM OPERATING ACTIVITIES

Receipts from customers	\$ 173,525,754
Receipts from grantors	1,020,911
Other operating receipts	20,000
Payments to electricity suppliers	(137,301,485)
Payments for other goods and services	(10,613,307)
Payments for staff compensation	(3,900,390)
Tax and surcharge payments to other governments	(2,353,823)
Payments for program rebates and incentives	(868,593)
Net cash provided (used) by operating activities	<u>19,529,067</u>

CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

Payments to acquire capital assets	<u>(1,997,934)</u>
------------------------------------	--------------------

CASH FLOWS FROM INVESTING ACTIVITIES

Interest income received	942,699
Proceeds from certificates of deposit matured	10,274,237
Purchase of certificates of deposit	(20,000,000)
Net cash provided (used) by investing activities	<u>(8,783,064)</u>

Net change in cash and cash equivalents (including County Investment Pool)	8,748,069
Cash and cash equivalents at beginning of year	<u>57,590,439</u>
Cash and cash equivalents at end of year	<u><u>\$ 66,338,508</u></u>

SONOMA CLEAN POWER AUTHORITY
STATEMENT OF CASH FLOWS (continued)
July 1, 2019 through May 31, 2020

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

Operating income	\$ 21,375,121
Adjustments to reconcile operating income to net cash provided (used) by operating activities	
Depreciation expense	59,788
Revenue adjusted for allowance for uncollectible accounts	1,313,386
(Increase) decrease in:	
Accounts receivable	(1,656,847)
Other receivables	(1,406,647)
Accrued revenue	9,243
Prepaid expenses	503,596
Deposits	(425,000)
Increase (decrease) in:	
Accounts payable	(131,876)
Accrued cost of electricity	269,802
Advance from grantors	(144,000)
Accrued liabilities	(183,122)
User taxes due to other governments	(39,777)
Supplier security deposits	(14,600)
Net cash provided (used) by operating activities	<u>\$ 19,529,067</u>



Programs Division
Strategic Action Plan

Updated June 30, 2020

SCP Programs Division Strategic Action Plan

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Acronyms

AER – Advanced Energy Rebuild Program

BAAQMD – Bay Area Air Quality Management District

BayREN – Bay Area Regional Energy Network

CAISO – California Independent System Operator

CALeVIP – California Electric Vehicle Infrastructure Project

CEC – California Energy Commission

CPUC – California Public Utilities Commission

CSE – Center for Sustainable Energy

CTEF – Career Technical Education Foundation

DCFC – Direct Current Fast Charger

DIY – Do-It-Yourself

DNV-GL – An energy efficiency consultant

DOE – United States Department of Energy

DRRS – Demand Response Reporting System

EM&V – Evaluation, Measurement and Verification

EPRI – Electric Power Research Institute

ERAP – Energy Resiliency Audit Program

EV – Electric Vehicle

EVSE – Electric Vehicle Supply Equipment (i.e. charging stations)

FY – Fiscal Year (July-June)

GHG – Greenhouse Gasses

HPWH – Heat Pump Water Heater

HVAC – Heating, Ventilation and Air Conditioning

JPA – Joint Powers Authority

LCFS – Low Carbon Fuel Standard

MW – Megawatt

NEM – Net Energy Metering

NRDC – Natural Resources Defense Council

NSCAPCD –Northern Sonoma County Air Pollution Control District

PG&E – Pacific Gas and Electric

PSPS – Public Safety Power Shutoff

RCPA – Regional Climate Protection Authority

RFI – Request for Information

SCP – Sonoma Clean Power

SCTA – Sonoma County Transportation Authority

SGIP – Self Generation Incentive Program

SOMAH – Solar on Multifamily Affordable Housing

TBD – To be determined

TCC – The Climate Center

TNC – Transportation Network Company (*e.g. Uber, Lyft*)

Executive Summary

Sonoma Clean Power (SCP) is enabled by a Joint Powers Agreement (JPA) which states the following as purposes for entering into the JPA :

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

The purpose of this document is to supply a road map for the SCP Programs Section by clearly identifying strategies and the actions needed to accomplish those strategies.

This plan will facilitate the Programs Section in efficiently accomplishing its mission of achieving the goals of the JPA and providing local economic stimulus. In addition to an overall program road map, this document also attempts to prioritize actions based on available resources, regulatory constraints, and other areas of uncertainty.

Each of the strategies identified in this plan will refer to one or more of the purposes identified in the JPA. The evaluation of particular programs will include metrics specific to that program and will occur after the program has had a reasonable time to establish itself.

This document will be updated twice each year in January and June.

Significant Progress

The following items describe the significant progress made by individual programs implemented by SCP:

- 1) The **GridSavvy** program has resulted in the shipment of 3,139 (as of 6/09/20) electric vehicle charging stations and 25 smart thermostats to SCP customers. SCP is now able to dispatch these resources to lower peak demand. The addition of heat pump water heaters and batteries to the program is anticipated this year.
- 2) **Do-It-Yourself Energy and Water Saving Toolkits**, which include basic energy and water efficiency tools and products, have been placed in almost all Sonoma County and Mendocino County libraries. The 45 toolkits in circulation can be checked out just like a book and have proven to be very popular, with over 870 checkouts (*as of 6/1/20*) since inception in November 2016. The program has been suspended due to COVID-19 until libraries are authorized to re-open.
- 3) The **Education Program for Schools** in partnership with Sonoma Water was initiated in the Fall of 2017. A contract to continue the program through FY 20-21 was approved by SCP's Board.
- 4) **Induction Cooktop Experience**, a program that loans portable electric induction cooktops to customers, has seen 183 loans take place. A survey showed that customers overwhelmingly liked the new cooking experience with 44% of participating customers surveyed stating they made the switch to induction cooking. Daily Acts has started lending cooktops from their headquarters in Petaluma. Staff are investigating options for other loaning locations in north Sonoma County and in Mendocino County. This program has been suspended due to COVID-19 and will re-open when feasible.
- 5) A program to incentivize the **purchase of EV's by local non-profits** has resulted in 10 EVs being purchased. Conducting outreach for four additional nonprofits for FY 20-21 (as of 6/18/20).
- 6) The **Advanced Energy Rebuild program** was created in cooperation with PG&E and the BAAQMD to incentivize those rebuilding their homes after the 2017 fires to do so in an energy efficient manner. To date we have had 327 applications (as of 6/15/20) to the program. Although Advanced Energy Rebuild will no longer accept applications after 6/30/20, staff will

continue supporting projects submitted prior to this deadline. Homes being permitted under the 2019 Title 24 code cycle are eligible for PG&E's continuing rebuilding program.

- 7) SCP was awarded a **\$9.8M grant from the CEC** to promote energy efficiency in the residential built environment. SCP is required to provide \$3.3M in matching funds for a program total of \$13.1M. We are halfway through the research phase of the grant and all equipment in the first phase of applied technology studies in 15 residential homes are being monitored for their energy savings. We are finalizing sites for the second phase of market ready technologies and are nearing the completion of the pre monitoring stage for those sites. Additionally, we have leased a store in downtown Santa Rosa to house the marketplace (The Advanced Energy Center) envisioned by the grant. Construction of improvements is almost complete and we anticipate a soft opening in mid to late September.
- 8) SCP service territory was selected for a **\$5.1M CALeVIP Project** from the CEC to increase the number of car charging stations in SCP territory. SCP is providing \$1.5M over three years to increase the number of incentivized chargers. In addition, SCP partnered with NSCAPCD to provide an additional \$150,000 for projects installed in the District's jurisdiction. The program opened for applications for funding on July 8th and was fully subscribed within a half an hour. It is anticipated that the program will result in 50 DCFC and 500 Level 2 chargers being installed in SCP's territory. A special emphasis has been placed on directing chargers to rural, coastal, and low-income areas.
- 9) SCP completed a transit bus electrification study for the four public transit operations in SCP territory to assist in their effort to electrify their bus fleets in order to meet their Innovative Clean Transportation mandates.
- 10) SCP is funding a school bus electrification study for two school bus operators in SCP service territory to help them prepare for the transition to electric buses. The study is set to be completed by the end of 2020.
- 11) SCP launched a program to provide up-front payments of SGIP funds for the installation of battery storage systems in residential settings. As of 6/15/20, 37 projects and \$771,300 in funding has been reserved. \$218,526 has been provided to offset the initial costs of battery installation. SCP will be reimbursed once the SGIP applications are processed through PG&E.
- 12) On July 1, 2020, SCP will launch the **Advanced Energy Build** program, which will provide incentives to developers of residential homes to either

pre-wire homes for all-electric appliances or build all-electric homes. The program also includes an incentive for adding battery storage to these projects.

- 13) In June, the Board of Directors authorized staff to implement an **On-Bill Financing** program. This program allows homeowners who are SCP customers to borrow up to \$10K at 0% interest to install certain energy efficient electric appliances in their homes.
- 14) SCP began claiming **LCFS credits** from the California Air Resources Board. This is a complicated process that involved tracking of the Electric Vehicle Supply Equipment (EVSE) that we have provided to SCP customers over the past 4 years.
- 15) Coinciding with the opening of the AEC, SCP will begin offering the SCP Electrify Tool to help educate customers on the GHG reduction benefits and potential dollar savings associated with switching to an electric home. The tool will be made available for free to residential customers.
- 16) Starting in May 2020, SCP started offering the Energy Resiliency Audit Program (ERAP) to small and medium sized commercial customers that are considered essential business or were impacted by PG&E's PSPS events in 2019.

New Programs Under Consideration

SCP is including the following new activities in the plan:

- 1) **Explore Partnerships with other local non-profits** – Sonoma Clean Power could benefit through partnerships with other non-profits that are promoting energy efficiency, workforce development and electric vehicles.
- 2) **Investigate Behavioral Demand Response in residential and commercial offerings** – A program that would incentivize residents and businesses to reduce energy use at a signal from SCP through its GridSavvy umbrella of offerings.
- 3) **Develop a Multi-Family EVSE Program** – Multi-Family developments are notorious for difficulty in installing EVSE.
- 4) **Develop an Equity Outreach Program** – Work with other non-profits on the development of programs specifically designed to benefit bypassed segments of our local population.
- 5) **Develop a targeted Equity Education Program** – Develop courses targeted specifically to reach equity audiences. Potentially include incentives for completion of trainings.
- 6) Investigate the potential for an electrification program for the benefit of renters – Renters may want to electrify but are at the mercy of landlords.
- 7) Investigate how best to pair battery storage with existing or planned solar systems at public education facilities.

Discontinued Programs

Discontinued programs are programs that were initiated as a pilot and were either not successful, or successful enough to jumpstart market transformation.

- 1) **Advanced Energy Rebuild:** While we will continue to administer this program until all approved projects are complete, the program stopped accepting new applications on June 30, 2020.

Program Strategies and Levels of Action

This plan identifies eight program strategies:

- Promote the Use of Electric Vehicles in Transportation
- Promote Fuel Switching in New and Existing Building Stock
- Identify and Apply for External Funding to Support Programs
- Promote the Aggregation of Loads and Resources
- Support the Integration of Distributed Energy Resources in SCP's Territory
- Support the Transition to Carbon Free Building Codes and Practices
- Test and Evaluate the Use of New Technologies
- Promote Public Education Involving Energy Efficiency and Fuel Switching

Sonoma Clean Power Programs Group Strategic Action Plan

This plan identifies three levels of action:

Immediate Action	Near-Term Action	Long-term Action
Ongoing or to be initiated within the next year.	To be initiated within one to three years.	No defined start date for action, likely longer than three years.
<ol style="list-style-type: none">1. Required by regulatory or other deadlines;2. Other strategies or actions are dependent on outcome;3. Achievable in the near-term; and4. Funding and resources are available.	<ol style="list-style-type: none">1. Actively exploring;2. Anticipated, yet not immediate, deadline;3. Funding is proposed; and4. Necessary for planning and development of long-term actions.	<ol style="list-style-type: none">1. In the conceptual phase;2. Not enough information to proceed currently;3. Lower priority; and4. Funding not available

Program Strategy One

(PST)

Promote the Use of Electric Vehicles in Transportation

This strategy fulfills the following goals of SCP's JPA:

- a) Reducing greenhouse gas emissions in Sonoma County and neighboring regions and;*
- d) Stimulating and sustaining the local economy.*

Immediate Action One:

Promote Transit and School Bus Electrification.

- Project:** Determine infrastructure needs for full electrification of bus fleets.
- Status:** SCP contracted with Cadmus to analyze the infrastructure needs of transit agencies to upgrade their fleets to all electric propulsion. Final reports were delivered to each of the transit agencies. SCP entered into a new contract with Cadmus to conduct a similar study for two school bus operators in Sonoma and Mendocino counties.
- Involved Parties:** RCPA, Sonoma County Transit, Santa Rosa City Bus, City of Petaluma, Mendocino Transit Authority, Cadmus, West County Transportation, Mendocino Unified School District.
- Metric:** Completion of the school bus electrification study reports.
- Goal:** Complete school bus electrification studies by Dec 31, 2020.

Immediate Action Two:

Provide Free Charging Stations.

- Project:** Provide free Level 2 charging stations to eligible SCP customers.
- Status:** A contract with Enel X to continue the free charging station program through June 2021 has been executed. SCP is claiming LCFS credits for this program, which will help expand program funding in future years.
- Involved Parties:** Enel X, Olivine.
- Metric:** Number of EVSE shipped and activated.
- Goal:** Ship 200 units per fiscal year.

Immediate Action Three:

Provide electric mobility solutions for local non-profits.

- Project:** Identify local non-profits that provide transportation services and incentivize their use of electric vehicles.
- Status:** SCP has implemented a program that provides \$12,500 towards the purchase or lease of an EV by non-profits. To date, 12 non-profits have taken advantage of this incentive. The program has been budgeted to continue in FY 20-21.
- Involved Parties:** RCPA, local non-profits.
- Metric:** Number of vehicles incentivized.
- Goal:** 5 vehicles per fiscal year.

Immediate Action Four:

Implement CALeVIP program.

- Project:** The CEC launched CALeVIP to work with local partners to develop and implement EV charging incentive projects that meet regional needs. Funds are provided from the Alternative and Renewable Fuel and Vehicle Technology Program.
- Status:** SCP was awarded \$5.1M for implementation of an EV charging project in Sonoma and Mendocino counties. SCP is matching the CEC project with \$1.65M. Program design is complete with a program launch date of July 8, 2020.
- Involved Parties:** RCPA, BAAQMD, NSCAPCD, MCAPCD, CSE, CEC.
- Metric:** Number of EVSE installed.
- Goal:** Incentivize a total of 500 Level 2 chargers and 50 DCFC.
Incentivize 4 DCFC in Mendocino.
Incentivize 3 DCFC in the Coastal and rural areas of our service territory.

Immediate Action Five:

Develop an eBike Incentive Program.

- Project:** Incentivize the purchase of electric bicycles either through up-stream, in-store, or rebate processes. Coordinate implementation with local bike stores and advocates.

Status: RCPA staff have been researching eBike incentive programs and interviewing local bike store owners to gauge interest. SCP anticipates launching a limited-duration incentive program in October 2020.

Involved Parties: RCPA

Metric: Number of eBikes incentivized.

Goal: 100 bikes incentivized in the first iteration of the program.

Near-Term Action One:

Support e-Mobility options.

Project: Work with local partners on e-mobility strategies, like e-scooters, to promote shift in transportation modes.

Status: Explore partnerships with other organizations for electric mobility and last-mile solutions in SCP territory.

Involved Parties: To be determined but may include the SCTA and RCPA.

Metric: TBD

Goal: TBD

Near-Term Action Two:

Promote the use of Electric Vehicles in Car Sharing.

Project: Explore the feasibility of electric car sharing.

Status: Explore partnerships with car share providers to provide incentives to EVs in SCP territory offered on provider's service.

Involved Parties: May include Maven, Zipcar, other providers.

Metric: TBD

Goal: TBD

Near-Term Action Three:

Foster electric vehicle adoption in low-income communities.

Project: Collaborate with low-income communities, community groups, and other stakeholders to identify barriers to adoption of electric vehicles and strategies to overcome those barriers.

Status: In concept phase.

Parties Involved: To be determined but may include community service groups.

Metric: TBD

Goal: TBD

Near- Term Action Four:

Foster electric vehicle charging station expansion in low-income communities.

Project: Collaborate with low-income communities, community groups, and other stakeholders to identify barriers to charging station expansion. Work with EVSE providers to expand charging to low-income communities.

Status: In concept phase.

Involved Parties: TBD

Metric: TBD

Goal: TBD

Near- Term Action Five:

Create a Multi-Family EVSE Program.

Project: Develop a program that assists the owners of multi-family developments in planning for and installing EVSE for their tenants.

Status: In concept phase.

Involved Parties: TBD

Metric: TBD

Goal: TBD

Long-Term Action One:

Promote the use of All-Electric Autonomous Vehicles in SCP Territory.

Project: Develop relationships with autonomous vehicle developers and work closely with them to develop services within the SCP service area.

Status: In concept phase.

Sonoma Clean Power Programs Group Strategic Action Plan

Parties Involved: To be determined but may include the RCPA, SCTA, and regional partners.

Metric: TBD

Goal: TBD

///End of Strategy One\\

Program Strategy Two

(PS2)

Promote Fuel Switching in New and Existing Building Stock

This strategy fulfills the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions;*
- c. Carrying out programs to reduce total energy consumption and;*
- d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.*

Immediate Action One:

Project Management for the Lead Locally CEC Grant.

Project: Implement the CEC Lead Locally Grant.

Status: The CEC Lead Locally Grant commenced July 9, 2018. New technologies related to the Applied Research Study have been installed in 15 demonstration homes as part of the Phase 1 research. Phase 2 research locations are being identified and most sites are completing their pre-monitoring for baseline data. Advanced Energy Center construction began in November 2019.

Involved Parties: Frontier Energy, DNV GL, RCPA, TLCD Architecture, County of Sonoma Energy & Sustainability Division, Flannel by HIVE.

Metric: Satisfaction of Grant goals.

Goal: Defined in grant documents.

Immediate Action Two:

Implement an On-Bill Financing Program.

Project: Implement an on-bill financing program.

Status: Staff have developed a customer contract. A program implementer has been hired. This Program was approved by SCP's Board and launch is anticipated to occur concurrently with the opening of the AEC. This Action will be incorporated into the Lead Locally CEC grant above.

Involved Parties: Frontier Energy, Calpine.

Metric: Number participants in the on-bill financing program.

Goal: 100 per year.

Immediate Action Three:

Promote Induction Cooking as an Alternative to Natural Gas.

Project: Loan portable induction cooktops to customers and Induction Kitchen Demonstration Area.

Status: Staff will continue to loan portable induction cooktops to SCP customers so that they can experience the ease and safety of this technology. Cooktops are now being loaned by Daily Acts in Petaluma. SCP staff are seeking other partners. The induction lending program is currently on hold due to COVID 19. The Advanced Energy Center will provide an onsite opportunity to touch and feel different induction cooktops combined with a convection oven. Staff hope to attract culinary schools and other educational programs to the Induction Cooking Demonstration Area.

Involved Parties: SCP Staff, Daily Acts.

Metric: Number of cooktops lent.

Goal: Loan out 100 induction cooktops per year.

Expand program to Mendocino County and rural areas of our service territory.

Immediate Action Four

Develop an Education Program to be Facilitated through the Advanced Energy Center

Project: Develop an education program that will inform contractors, retailers, and the public of the advantages of using various energy efficiency technologies or building techniques.

Status: SCP will be working with parties below to develop a yearlong training calendar.

Involved Parties: Sonoma County, RCPA, Design Avenues LLC.

Metric: Number of classes staged and number of participants in those classes per calendar/fiscal year.

Goal: Host 50 classes per calendar year and 1,000 attendees.

Immediate Action Five:

Implement the Advanced Energy Build Incentive Program.

Sonoma Clean Power Programs Group Strategic Action Plan

Project: Design an incentive program that will accelerate the adoption of “pre-wired” and all electric new construction homes in SCP’s service territory.

Status: SCP has received Board of Directors approval for the program budget and a contract for program administration has been executed with TRC Engineers, Inc. Program launch is expected to be July 1, 2020.

Involved Parties: TRC

Metric: Number of dwellings participating in the program

Goal: 500

Immediate Action Six:

Provide a tool that will educate customers on electrification and help in the transition to full electrification.

Project: Contract or develop a web tool that is designed to educate customers about electrification technologies/measures, help evaluate the potential GHG and dollar savings, and motivate them to take action that will result in reductions in GHG emissions.

Status: Staff has contracted with YellowTin to provide SCP Electrify, a cloud-based electrification engagement platform. The webtool is expected to launch in August 2020.

Involved Parties: YellowTin.

Metric: Number of website hits and number of accounts on the platform.

Goal: 500 unique website hits in the calendar year.
100 residential accounts on the platform by the first anniversary of the launch of the Program.

Immediate Action Seven:

Explore Partnerships with other local non-profits.

Project: Develop partnerships with other non-profits that are promoting energy efficiency, workforce development and electric vehicles.

Status: SCP staff have reached out to the LIME Foundation and will make contact with SOMAH, Grid Alternatives and other similar organizations.

Involved Parties: LIME Foundation, SOMAH, Grid Alternatives.

Metric: TBD

Goal: TBD

Near Term Action One:

Investigate the potential for an electrification program for the benefit of renters.

Project: Develop a program focused on rental properties that allows renters to upgrade the appliances in their homes through cooperation with landlords.

Status: In development.

Involved Parties: TBD

Metric: TBD

Goal: TBD

///End of Strategy Two\\

Program Strategy Three

(PS3)

Identify and Apply for External Funding to Support Programs

This strategy fulfills the following goals of SCP's JPA:

- c. Carrying out programs to reduce total energy consumption and;*
- d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.*

Immediate Action One:

Monitor Existing Funding Channels for Potential Opportunities.

Project: Monitor funding channels such as the DOE, CEC, CPUC, Air Districts, etc. for potential partnership opportunities.

Status: SCP is partnering with EPRI on several grant solicitations sponsored by the CEC and DOE.

Involved Parties: CEC, to be determined.

Metric: N/A

Long-Term Action One:

Monitor Programs that Could Scale with CPUC Energy Efficiency Funds.

Project: Monitor potential programs that could meet CPUC requirements for the use of publicly funded energy efficiency funds.

Status: Ongoing.

Involved Parties: To be determined based on program offering.

Metric: To be determined

Goal: To be determined

///End of Strategy Three\\

Program Strategy Four

(PS4)

Promote the Aggregation of Loads and Resources

This strategy fulfills the following goals of SCP's JPA:

- b. Providing electric power and other forms of energy to customers at a competitive cost;*
- c. Carrying out programs to reduce total energy consumption;*
- d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources; and*
- e. Promoting long-term electric rate stability, energy security, reliability, and resilience.*

Immediate Action One:

Implement GridSavvy Community.

Project: Develop a contract with a "Scheduling Coordinator" to aggregate the "technical aggregators" operating in SCP territory and manage bidding of a demand response program into the CAISO DRRS. This process is necessary to ensure SCP remains in compliance, but also to maximize the value of the various resources available to the public.

Status: We have entered into a contractual relationship with Olivine to administer a demand response program called GridSavvy. To date we have been able to dispatch a fleet of electric car chargers. We have recently added smart thermostats and HPWH's to our webstore that can also be dispatched. This effort will dovetail with the CEC grant work described in Program Strategy Two.

Involved Parties: Olivine, Enel X, AO Smith, Rheem, ecobee.

Metric: Number of participants in GridSavvy per technology. Size of dispatchable load participating.

Goal: 800 EVSE, 50 HPWH, 100 thermostats by end of 2020 calendar year. 0.75 MW of flexible resource by December 31, 2020

Near Term Action One:

Investigate Behavioral Demand Response in residential and commercial offerings.

Sonoma Clean Power Programs Group Strategic Action Plan

Project: Develop a program that would incentivize residents and businesses to reduce energy use at a signal from SCP.

Status: In development.

Involved Parties: Olivine

Metric: TBD

Goal: TBD

///End of Strategy Four\\

Program Strategy Five

(PS5)

Support the Integration of Distributed Energy Resources in SCP's Territory

This strategy fulfills the following goals of SCP's JPA:

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

Immediate Action One:

Develop an alternative to mandatory on-site solar systems in new construction.

Project: Work with the CEC on the development and codification of PermaGreen, a commitment from property owners to purchase EverGreen as an alternative to mandatory on-site solar systems in new construction.

Status: SCP has enrolled one residential customer in PermaGreen and continues to monitor progress. New customer enrollments have been paused.

Involved Parties: CEC

Metric: To be determined

Goal: To be determined

Immediate Action Two:

Develop a Residential Battery Storage Program.

Project: In cooperation with Customer Service, develop a residential battery storage program that is designed to offset any negative impacts of the switch to Time of Use billing and assist with resiliency due to PSPS events.

Status: An RFI was circulated and interviews were held with several battery companies. It is most likely that this effort will be

managed through the Advanced Energy Center as described in Program Strategy Two and GridSavvy.

Involved Parties: Sonnen, Tesla, Sun Power.

Metric: Number of participants in program.

Goal: 50 battery systems are installed by the end of the calendar year.

Immediate Action Three:

Investigate how best to pair battery storage with existing or planned solar systems at municipal facilities.

Project: Work with our member agencies to identify existing and planned solar facilities that might benefit from adding a battery storage component.

Status: An agreement has been negotiated and approved by our Board by which Terraverde Inc will perform the work described above.

Involved Parties: SCP member agencies.

Metric: Number of systems analyzed.

Goal: Analysis of 25 solar systems.

Immediate Action Four:

Investigate how best to pair battery storage with existing or planned solar systems at public education facilities.

Project: Work with school districts within our member jurisdictions to identify existing and planned solar facilities that might benefit from adding a battery storage component.

Status: Staff is drafting a scope of work for which Terraverde Inc will perform the work described above.

Involved Parties: TerraVerde, School districts within SCP member jurisdictions.

Metric: Number of systems analyzed.

Goal: Analysis of 50 sites.

///End of Strategy Five\\

Program Strategy Six

(PS6)

Support the Transition to Carbon Free Building Codes and Practices

This Strategy fulfils the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions;*
- c. Carrying out programs to reduce total energy consumption and;*
- d. Stimulating and sustaining the local economy*

Immediate Action One:

Provide Assistance to Commercial Customers in Optimizing Energy Efficiency.

Project: Enter into a contract with the County of Sonoma Energy and Sustainability Division to provide energy audits to businesses in SCP's service territory.

Status: Contract is in place. As of June 1st, 2019, 3 customers have received assistance.

Parties Involved: County of Sonoma Energy & Sustainability Division.

Metric: Number of businesses assisted.

Goal: 10 per calendar year.

Immediate Action Two:

Provide Backup Power Assistance to Commercial Customers in Preparation for PSPS events.

Project: Entered into a contract with the Center for Sustainable Energy to provide energy resiliency audits to essential businesses and businesses impacted by prior PSPS events in SCP's service territory.

Status: Program launched in May 2020 and has started providing audits to 13 sites.

Parties Involved: Center for Sustainable Energy.

Metric: Number of businesses assisted.

Goal: 20 sites by the end of 2020.

Immediate Action Three:

Assist Local Jurisdictions on Ordinances that Encourage Greenhouse Gas Reduction in Local Buildings.

Project: Assist local city and county staff in the investigation and adoption of “reach” codes that push energy efficiency and greenhouse gas reduction measures beyond those required by code.

Status: SCP is actively engaging with interested cities, and reach codes have been passed in Windsor and Santa Rosa.

Involved Parties: Local cities and counties, NRDC, the Building Decarbonization Collation.

Metric: Number of municipalities with Reach Codes adopted.

Goal: Five in SCP jurisdiction.

Near-Term Action One:

Explore programs and strategies for low GHG agriculture.

Project: Assist agricultural customers with low-GHG farming practices, with a focus on reducing methane and nitrous oxide emissions.

Status: In concept phase. Potential to work with wineries and other agricultural customers to participate in a waste-to-energy program.

Parties Involved: TBD

Metric: TBD

Goal: TBD

Long-Term Action One:

Investigate carbon sequestration strategies.

Project: Investigate potential strategies that allow for meaningful sequestration of carbon.

Status: In concept phase.

Parties Involved: TBD

Metric: TBD

Goal: TBD

///End of Strategy Six\\

Program Strategy Seven

(PS7)

Test and Evaluate the Use of New Technologies

This strategy fulfills the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions;*
- b. Providing electric power and other forms of energy to customers at a competitive cost;*
- c. Carrying out programs to reduce total energy consumption and;*
- d. Stimulating and sustaining the local economy, including by developing or promoting local distributed energy resources.*

Near-Term Action One:

Investigate the Use of Biomass Power Generation in SCP Territory.

Project: Identify biomass feed stock supplies in SCP territory (particularly Mendocino County) as well as small scale biomass conversion technologies that may provide cost effective local power generation.

Status: Biomass analysis for Sonoma County completed by Sonoma Water several years ago.

Involved Parties: Sonoma Water.

Metric: TBD

Goal: TBD

Near Term Action Two:

Investigate Vehicle-to-Building technologies.

Project: Investigate potential technologies that allow electric vehicles to provide backup power to buildings through vehicle-to-building technologies.

Status: In concept phase.

Involved Parties: To be determined but may include vehicle manufacturers.

Metric: TBD

Goal: TBD

///End of Strategy Seven\\

Program Strategy Eight

(PS8)

Promote Public Education Involving Energy Efficiency, Fuel Switching, and Electric Vehicles

This strategy fulfills the following goals of SCP's JPA:

- a. Reducing greenhouse gas emissions in Sonoma County and neighboring regions; and*
- e. Promoting long-term electric rate stability, energy security, reliability, and resilience.*

Immediate Action One:

Continue the Switch Program.

- Project:** SCP has for several years funded the Switch Program which provides an electric car “kit” which students can assemble and disassemble in order to learn how electric cars are put together. This familiarity with electric vehicles will make them more likely to incorporate EV's into their lives as well as the potential for students to enter the EV industry.
- Status:** A funding agreement to extend the program has been completed.
- Involved Parties:** CTEF, Switch.
- Metric:** Number of vehicles in the program.
- Goal:** Seven vehicles.

Immediate Action Two:

Continue to Offer Consumer-Facing Educational EV Resources.

- Project:** SCP has for several years offered a number of educational resources to help customers switch to driving an EV. These resources include the EV Buyers Guide, DriveEv.org, the EV Roadmap, EV 101, and EV collateral (e.g. flyers)
- Status:** Tools and materials currently available on [DriveEV.org](https://driveev.org).
- Involved Parties:** SCP Marketing Staff, RCPA.
- Metric:** Number of unique visits and engagement time on website.
- Goal:** 200 unique visits and an average of 2 minutes spent on the website and subsequent tools.

Immediate Action Three:

Continue the Energy Education Program for Schools in SCP Territory.

- Project:** Contract with Sonoma Water to expand their existing education program to include energy efficiency, fuel switching and climate change throughout Sonoma and Mendocino County schools.
- Status:** Contract is in place and curriculum has been developed. SCP coordinated with Sonoma Water on materials and branding. Sonoma Water has implemented the education program for the 2019/20 school year. SCP has contracted with Sonoma Water to continue the program through fiscal year 20-21.
- Involved Parties:** Sonoma Water.
- Metric:** Number of students and teachers reached in the educational calendar year.
- Goal:** Reach 6000 students and 30 teachers in the educational calendar year.

Immediate Action Four:

Continue the DIY Tool Kit Program.

- Project:** The DIY Toolkit Program provides a selection of energy and water saving devices that can be checked out from local libraries. SCP is one of four partners and partial funder of the program in Sonoma County, and one of three partners and full funder in Mendocino County.
- Status:** 32 kits are currently in rotation in Sonoma County Libraries and 13 kits in rotation in Mendocino County Libraries. The kits combined have been checked out over 823 times (768 check outs in Sonoma and 55 in Mendocino). The program is currently suspended due to COVID-19.
- Involved Parties:** Sonoma County General Services Department, Sonoma County Library, Sonoma Water, Sonoma-Marin Saving Water Partnership, Mendocino County Library.
- Metric:** Number of times the toolkits are checked out per year.
- Goal:** Total of 60 checkouts in Mendocino and 350 checkouts in Sonoma each year.

Immediate Action Five:

Develop an Equity Outreach Program.

Project: Work with other non-profits on the development of programs specifically designed to benefit bypassed segments of our local population.

Status: Programs and Marketing staff are developing an outreach strategy.

Involved Parties: TBD

Metric: TBD

Goal: TBD

Near Term Action One:

Develop a targeted Equity Education Program.

Project: Develop an electrification education program targeted to reach equity audiences. Include incentives for completion of trainings.

Status: In development.

Involved Parties: TBD

Metric: TBD

Goal: TBD

///End of Strategy Eight\\

Summary of Actions

Immediate Actions:

- Promote Transit and School Bus Electrification (*PS1*);
- Provide Free Charging Stations (*PS1*);
- Provide electric mobility solutions for local non-profits (*PS1*);
- Implement CALeVIP Program (*PS1*);
- Develop E-bike Incentive Program (*PS1*);
- Project Management for the Lead Locally CEC Grant (*PS2*);
- Implement the On-Bill Financing Program within SCP's Territory (*PS2*);
- Promote Induction Cooking as an Alternative to Natural Gas (*PS2*);
- Develop an Education Program to be Facilitated through the Advanced Energy Center (*PS2*);
- Implement the Advanced Energy Build Incentive Program (*PS2*);
- Provide a tool that will educate customers on electrification and help in the transition to full electrification. (*PS2*)
- Explore Partnerships with other local non-profits (*PS2*)
- Monitor Existing Funding Channels for Potential Opportunities (*PS3*);
- Implement GridSavvy Community (*PS4*);
- Investigate Behavioral Demand Response in residential and commercial offerings (*PS4*);
- Develop an alternative to mandatory on-site solar systems in new construction (*PS5*);
- Develop a Residential Battery Storage Program (*PS5*);
- Investigate how best to pair battery storage with existing or planned solar systems at municipal facilities (*PS5*);
- Investigate how best to pair battery storage with existing or planned solar systems at public education facilities (*PS5*);
- Provide Assistance to Commercial Customers in Optimizing Energy Efficiency (*PS6*);
- Provide Backup Power Assistance to Commercial Customers in Preparation for PSPS events (*PS6*);

Sonoma Clean Power Programs Group Strategic Action Plan

- Assist with Local Jurisdictions on Ordinances that Encourage Greenhouse Gas Reduction in Local Buildings *(PS6)*;
- Continue the Switch Program *(PS8)*;
- Continue to Offer Consumer-Facing Educational EV Resources *(PS8)*;
- Continue the Energy Education Program for Schools in SCP Territory *(PS8)*;
- Continue the DIY Tool Kit Program *(PS8)*;
- Develop an Equity Outreach Program *(PS8)*.

Near-Term Actions:

- Support e-Mobility options *(PS1)*;
- Promote the use of Electric Vehicles in Car Sharing *(PS1)*;
- Foster electric vehicle adoption in low-income communities *(PS1)*;
- Foster electric vehicle charging station expansion in low-income communities *(PS1)*;
- Create a Multi-Family EVSE Program *(PS1)*;
- Investigate the potential for an electrification program for the benefit of renters *(PS2)*;
- Explore programs and strategies for low GHG agriculture *(PS6)*;
- Investigate the use of Bio-Mass Power Generation in SCP Territory *(PS7)*;
- Investigate Vehicle-to-Building technologies *(PS7)*;
- Develop a targeted Equity Education Program *(PS8)*.

Long-Term Actions:

- Promote the use of All-Electric Autonomous Vehicles in SCP Territory *(PS1)*;
- Monitor Cost-Effectiveness of Programs that Could Scale with CPUC Energy Efficiency Funds *(PS3)*;
- Investigate carbon sequestration strategies *(PS6)*.



Staff Report - Item 03

To: Sonoma Clean Power Authority Community Advisory Committee

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

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

Date: July 29, 2020

Requested Committee Action:

Receive Legislative and Regulatory Updates and Provide Feedback as Appropriate.

Regulatory Update

PG&E Energy Resource Recovery Account (ERRA) Compliance

ERRA Compliance Proceedings serve as a review of the utility's portfolio management and accounting practices over the previous year. These proceedings do not evaluate utility-owned generation, but focus on utility contracts with counterparties that make up the bulk of their supply portfolio. This particular ERRA Compliance proceeding governing the year 2019 has been particularly challenging as that was the first year in which PG&E implemented new balancing accounts established in the PCIA Decision adopted by the Commission in October of 2018. It also makes this ERRA Compliance especially important as it will set the precedent for how PG&E and other utilities implement those changes.

SCP and a coalition of Northern California CCAs have uncovered a variety of errors, omissions, and questionable interpretations of Commission policy in PG&E's ERRA Application. Taken in sum, these yield \$175.4 million in additional charges for the year 2019. Of that total, PG&E has agreed to make reductions of \$110 million. The remaining \$65 million remains contested, and composed primarily of a \$34 million forecasting error PG&E cannot explain, and their implementation of a previous ERRA Decision which raises charges by \$26 million.

Testimony outlining these discrepancies was submitted on July 22nd and we are now awaiting a Commission Decision on the topic. Any reductions in charges would be applied to future PCIA fees.

Microgrids

As discussed in a previous update, the CPUC approved a Decision on June 11th which intends to enable accelerated deployment of microgrids to provide resiliency in light of PSPS events. To do so, it aims to streamline the interconnection process, revise existing tariffs, and leverage the role of local governments by granting them more data and visibility into the IOU process. It also places significant new requirements on the IOUs.

To facilitate rapid interconnection of resiliency projects, the Decision directs the utilities to 1) issue pre-approved designs for interconnection of projects, 2) increase the simplicity and transparency of inspection and approval processes, and, 3) prioritize interconnection of resiliency projects for key locations and customers.

To provide guidance to microgrid developers, the IOUs are required to develop a “Resiliency Project Engagement Guide” detailing how local governments can navigate the development process. This guide must contain flowcharts for engaging with the utility, best practices, and a list of the specific data the IOUs will require at each step through the process.

PG&E recently filed 4 Advice Letters to enact the directives in this Decision. These includes modifications to NEM tariffs to allow temporary charging from the grid, removing sizing limits on NEM-paired storage, a Resiliency Project Engagement Guide, PSPS Grid Resiliency Workshops, and a new memorandum account to track expenditures on microgrids. Comments or protests on these Advice Letters are due August 6th.

SCP staff have met with PG&E representatives to identify utility data needed for microgrid planning and to explore ways to collaborate to reduce the scope, duration, and impact of PSPS events. In addition, the CPUC is hosting a workshop evaluating diesel alternatives to powering microgrids and has invited staff from SCP and participating jurisdictions to present. That workshop is scheduled for August 25th.

Legislative Update

The California legislature continues to have a limited schedule for hearings and bills this year due to COVID-19 closures and impacts. The Assembly should return to Sacramento on July 27, when most committees will have a very limited number of sessions.

The most recent attempt to mandate the construction of a large pumped hydropower storage facility in Southern California is AB 1720, which was previously AB 2255 (Eggman). It follows previous attempts with AB 2787 (Quirk, 2018) and SB 772 (Bradford, 2019) which both failed due to environmental concerns, extremely high costs, a lack of any competitive process or consideration of alternative technologies, and the fact that the storage facility has not been identified as a needed resource through the normal CAISO and CPUC processes. CalCCA determined that AB 1720 had all of these same deficiencies and opposes the bill. The letter is attached.

AB 105 (Ting) would provide an exemption for the portion of a commercial or industrial property that has a solar system or a free standing solar energy facility from a proposed ballot initiative that would reassess these properties at their market value rather than the purchase price. This proposal is known as Proposition 15 (split roll property tax initiative) and will be on the November 3, 2020 statewide ballot. CalCCA joined the Solar Energy Industries Association and the Large-Scale Solar Association in support AB 105.



May 4, 2020

OPPOSE AB 2255 (EGGMAN)

As amended May 4, 2020

- California utilities already determine their system needs through legislatively mandated Integrated Resource Plans and the California Public Utilities Commission just issued their new IRP decision which includes pumped storage. A one-off legislative fiat is not needed to ensure we meet our clean energy goals.
- The California Independent System Operator (CAISO) already utilizes its existing Transmission Planning Process to determine transmission-related needs which includes the assessment for specific resources. Any proposal directing CAISO to solicit long-duration bulk storage, paid for by users of the CAISO transmission system, would cost BILLIONS OF DOLLARS without a clear benefit.
- California already suffers from an affordability crisis – given current economic hardships facing Californians, we simply cannot saddle ratepayers with additional costs for a special interest project for an out of state corporation.
- Environmental risks and issues are not factored appropriately with forced procurement. For example, the long-struggling Eagle Crest project carries significant environmental impacts including overdraft of protected desert groundwater aquifers, wildlife and fauna impacts, as well as encroachment on endangered species habitat.
- Sacred sites have been identified at potential long duration bulk storage project sites.
- The Legislature has already rejected multiple “study” proposals that are in reality mandates for expensive long duration bulk storage, AB 2787 (2018) and most recently SB 772 (2019).

**FOR THESE REASONS, WE REMAIN UNITED IN OPPOSITION TO
LEGISLATION THAT BYPASSES ESTABLISHED STATE POLICIES
TO BENEFIT SELECTED BULK STORAGE PROJECTS.**

California Legislature

July 21, 2020

Marybel Batjer, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: IOU cost transparency and affordability

Dear President Batjer:

We are writing to respectfully request the Commission to revise its confidentiality rules to enable greater oversight and transparency of Investor-Owned Utility (IOU) cost assumptions by allowing market participants the ability to verify the accuracy of cost recovery on behalf of ratepayers.

The continuing effort of the Commission at overseeing how IOUs recover their costs through submitted charges on ratepayers is to be commended. It is critical to ensuring rates are just and reasonable. Over the last two decades this oversight has become increasingly important as legislatively driven changes in the California market have led to competitive energy service offerings by energy service providers and community choice aggregators.

A vital component of this oversight process is public participation in cost oversight and accountability proceedings. Public participation has a long and successful history. It has enabled the Commission to ensure it reaches a reasoned decision by aiding Commission staff in the review of voluminous filings, illuminating deficiencies, and bringing voice to the public interest during these dockets.

Because public participation is so vital to the Commission's oversight, we were delighted to see the Commission host a public workshop on May 6, 2020 which focused on data access by public participants. Stakeholders have raised concerns with my office that IOUs are providing insufficient or untimely data to participants in the ERRA, PABA and PCIA rate development process and sometimes denying access to data all together. The intent of this letter is to call attention to the importance of the Commission's role in maintaining a fair balance between two competing obligations: ensuring meaningful public participation in cost recovery proceedings while also providing reasonable protection to market sensitive information that could have an immediate and material impact on utility market pricing.

The Commission's existing confidentiality rules under D.06-06-066 has been in place for over 14 years and IOUs routinely treat all information related to wholesale electric procurement as

confidential making it extremely difficult for participants to verify the accuracy and justify the cost recovery on ratepayers. Finding balance is not always easy, but we urge you to ensure that market participants in Commission cost oversight and accountability proceedings have reasonable access to relevant IOU cost data so they can assist the Commission in its oversight obligations.

As the Commission is aware, the PCIA has increased over 800% in PG&E territory since 2013. From an affordability lens, this statistic alone is concerning. We are additionally concerned to hear that market participants have uncovered errors totaling hundreds of millions of dollars over the course of their participation in cost recovery dockets. It is our understanding that uncovering these errors requires voluminous, time consuming and expensive discovery to trace the accounting and decisionmaking necessary to uncover the discrepancies that led to these egregious errors. Unnecessary burdens to participation such as these must be avoided as the uncovering of this error clearly demonstrates that meaningful public access to utility cost data is vital to ensuring affordability of energy costs and fairness to departed and bundled customers. We encourage the Commission to continue dialogue with all stakeholders coming out of the May workshop to develop reporting metrics and other oversight tools to ensure the public has continued opportunities to continue the proud tradition of public participation at the Commission.

We appreciate your attention to this important policy issue.

Sincerely,



Assemblymember Ash Kalra
27th Assembly District



State Senator Jerry Hill
13th Senate District



State Senator Scott Wiener
11th Senate District



Assemblymember David Chiu
17th Assembly District



State Senator Jim Beall
15th Senate District



State Senator Bob Wieckowski
10th Senate District



Assemblymember Marc Berman
24th Assembly District



Assemblymember Kansen Chu
25th Assembly District



Assemblymember Evan Low
28th Assembly District



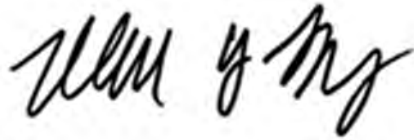
Assemblymember Kevin Mullin
22nd Assembly District



Assemblymember Al Muratsuchi
66th Assembly District



Assemblymember Mark Stone
29th Assembly District



Assemblymember Phil Ting
19th Assembly District

cc: Assemblymember Chris Holden, Chair of the Assembly Utilities and Energy Committee

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Staff Report - Item 04

To: Sonoma Clean Power Authority Community Advisory Committee

From: Nelson Lomeli, Programs Manager
Michael Nicholls, Committee Member

Issue: Discussion on City and County Compliance with AB 1236 - Local Ordinances Requiring Permit Streamlining and Checklist for Electric Vehicle Charging Stations

Date: July 29, 2020

Recommendation: No staff recommendation. Materials provided for background and to assist with discussion on City and County compliance with AB 1236 - Local ordinances requiring permit streamlining and checklist for electric vehicle charging stations in SCP service territory.

Background: On October 8, 2015, California Governor Jerry Brown signed AB 1236, which sought to improve and streamline the permitting process for electric vehicle charging stations (EVCS). The law requires that a city and/or county administratively approve EVCS installation applications through a building permit or similar nondiscretionary permit. The law also requires that a review of the application be limited to the building official's review of whether it meets all health and safety requirements of local, state, and federal law.

The law requires that by September 30, 2017, every city and/or county adopt an ordinance that creates an expedited, streamlined permitting process for EVCS and adopt a checklist of all requirements to comply for expedited review.

As part of the State's efforts to increase electric vehicles in the State and make charging more accessible, the Governor's Office of Business and Economic Development ("GO-Biz") developed the "[EV Charging Station Permitting Streamlining](#)

[Map](#)” as a companion to the [July 2019 Electric Vehicle Charging Station Permitting Guidebook](#).

The map shows that in Sonoma County, the City of Santa Rosa and the City of Petaluma have not yet adopted the ordinance or the checklist and therefore appear to be out of compliance with AB 1236. The maps shows the Town of Windsor and City of Cloverdale have adopted the ordinance but have not developed the checklist and are therefore “In Progress”. In Mendocino County, the map shows none of the cities or the county have adopted the ordinance or the checklist yet and therefore appear to be out of compliance with AB 1236.

The Sonoma County Regional Climate Protection Authority worked with the Redwood Empire Association of Code Officials to develop an [Electric Vehicle Charging Station Permitting and Inspection Streamlining Guidance](#) that includes an ordinance template, Staff report template, and a checklist template for code officials.

Discussion: Discussion by the Committee Chair Dick Dowd and Committee Member Michael Nicholls on compliance with AB 1236 by the Cities and Counties in SCP service territory.

Fiscal Impact: No Fiscal Impact



Staff Report - Item 05

To: Sonoma Clean Power Community Advisory Committee

From: Rebecca Simonson, Power Services Manager
Ryan Tracey, Energy Analyst

Issue: Review and Recommend Board Adoption of SCPA's 2020 Integrated Resource Plan for CPUC Conforming Portfolios

Date: July 29, 2020

Recommendation:

Recommend to Board adoption of SCPA's 2020 Integrated Resource Plan (IRP) for two California Public Utilities Commission (CPUC) Conforming Portfolios: (1) SCPA's Preferred Portfolio in Table 3 of this report, and (2) a mandatory compliance portfolio in Appendix A).

Background:

A final version of SCPA's 2020 IRP is due as a compliance filing to the CPUC by September 1, 2020. It consists of specific elements required by the CPUC including a 46 Million Metric Ton CO₂ (MMT) Statewide 2030 Conforming Portfolio (0.408 MMT benchmark for SCPA's share) and a 2030 Preferred Portfolio which meets or beats a 38 MMT Statewide target (0.326 MMT benchmark for SCPA's share). The version presented herein remains subject to minor edits based on additional CPUC guidance provided up until September 1, 2020.

In October 2015, the California legislature passed SB 350, which requires the CPUC to establish and oversee an Integrated Resource Planning process. IRPs, used in many states across the US, are generally 10-20 year plans that map out both the supply-side and demand-side resources required for meeting customer load. In California, SB 350 has driven Integrated Resource Planning towards helping the State meet its ambitious GHG-reduction targets (40% below 1990 levels by 2030). Accordingly, the CPUC's IRP framework is centered around GHG emissions.

Load Serving Entities (LSEs) are currently required to submit IRPs to the CPUC every other year. SCPA previously submitted a 2018 IRP to the CPUC on August 1, 2018 with the approval by SCPA's Board of Director's obtained on July 12, 2018. The CPUC aggregated all LSEs submitted 2018 IRP Portfolios and analyzed the reliability of the aggregate resource mix provided. From this, the CPUC established that incremental procurement was required above and beyond the resources that were submitted in the aggregate LSEs 2018 IRP portfolios. As such, the CPUC ordered incremental procurement for the years 2021, 2022, and 2023 for all LSEs according to their load share of required resources without regard to existing procured resources by individual LSEs. This resulted in total incremental procurement for SCPA of 43.3 MW over the three years.

CPUC Decision 20-03-028 requires CCAs to share specific elements of their 2020 IRPs with the CPUC by September 1, 2020. SCPA will create and submit a compliance report once a portfolio is approved by the Board.

The CPUC requires SCPA submit a plan showing resources that emit SCPA's share of a statewide 46 MMT scenario (0.408 MMT benchmark for SCPA's share), and allows SCPA to submit a different scenario having a lower amount of GHG emissions as SCPA's Preferred Portfolio. SCPA's Preferred Portfolio is benchmarked against the CPUC's 38 MMT statewide portfolio (0.326 MMT benchmark for SCPA's share). Both portfolios must be "conforming", which means they must use the CPUC inputs and methodologies prescribed in the CPUC's calculator to establish the GHG results for each portfolio.

Discussion

Required Portfolios

CPUC Decision 20-03-028 requires SCPA to provide a conforming portfolio that exactly meets the 2030 GHG benchmarks set for SCPA under the statewide 46 MMT portfolio as well as a portfolio that meets or beats GHG benchmarks for a statewide 38 MMT portfolio. The CPUC requires LSEs to identify which is their Preferred Portfolio. SCPA's Preferred Portfolio beats the GHG benchmarks set for the 38 MMT portfolio. Because SCPA operates under Board approved GHG benchmarks that far exceed the benchmarks set in the 46 MMT portfolio, staff focuses on the Preferred Portfolio herein and provides the 46 MMT portfolio as Attachment 1 purely for mandatory compliance and does not intend to procure resources for that portfolio.

Staff's Preferred Portfolio is based on the targets approved in the Board's adopted 2018 IRP as follows:

- 75 lb CO₂/MWh (0.034 MT CO₂/MWh) by 2030
- 50% RPS-eligible renewable energy by 2020, approximately 6 years ahead of the CPUC requirement
- 60% RPS-eligible renewable energy by 2030

CPUC Compliance and SCPA planning

Staff highlights that this mandatory CPUC IRP compliance filing and its GHG emission results are not consistent with SCPA's internal data and planning processes. In particular, SCPA uses the best available data including forecasted load data as it relates to impacts from COVID-19 while the CPUC process relies on older historic information. Also, most importantly, SCPA relies on the annual third party GHG verification process through The Climate Registry (TCR) to determine annual emissions, while the CPUC calculator uses an hourly approach established by the CPUC. The calculator assumes system energy curtailments and applies GHGs to SCPA during times of CAISO curtailments. SCPA also uses an emission intensity (i.e. lb CO₂/MWh energy) whereas the CPUC benchmark and calculator uses a fixed emission target regardless of the amount of energy delivered.

Another important distinction is that the CPUC Decision orders the Investor Owned Utilities (IOUs) to report the IOU's excess generating resources SCPA customers pay for in their PCIA fee in their baseline portfolios. This has the effect of causing IOU portfolios to significantly overstate their use of renewable energy. In contrast, SCPA includes estimates of PCIA resource allocations within its internal resources planning. This is probably the most cost-effective set of resources SCPA can plan for as they are resources already paid for through PCIA charges, yet not currently applied to the LSEs subject to those PCIA charges. SCPA has already accepted PCIA allocations for hydro and denied nuclear allocations for 2020. SCPA plans for ongoing carbon free hydro allocations as well as RPS allocations starting in 2023 for existing solar, wind, geothermal, biomass, and small hydro for SCP's fair share of PG&E's legacy portfolio. The CPUC has not yet ruled on whether these resources will be allocated in the future, however SCPA assumes that if they are not allocated, they will be made available to the market due to PG&E not needing them to serve their own customer load. In conclusion, while PG&E will formally list these resources in their IRP, SCPA will internally plan for these resources as either an allocation or a market resource.

Staff will bring a review of SCPA's long-range resource plans to the CAC and Board later this year reflecting these matters, following the CPUC compliance process.

Reference System Portfolio (RSP)

The CPUC has established a Reference System Portfolio (RSP) for both the 46 MMT and the 38 MMT statewide portfolios. The RSP is the CPUC's "optimal portfolio" of existing and new generating capacity by resource type and year from 2020 through 2030. The CPUC will utilize the RSP to explore future ordered incremental procurement if the collection of all LSE IRP portfolios do not align or adequately compare to the RSP's GHG results and reliability metrics. SCPA's Preferred Portfolio must be benchmarked against the RSP, not only for compliance, but to mitigate risk of potential ordered incremental procurement. To benchmark against the RSP, SCPA must calculate its load share percentage of CAISO's total resource mix.

Table 1 below shows SCPA's calculated load share of CAISO totals based on SCPA's assigned load within the CPUC's calculator.

Table 1 - SCPA load share of CAISO load

SCPA LOAD SHARE OF CAISO LOAD						
2020	2021	2022	2023	2024	2026	2030
1.15%	1.15%	1.13%	1.13%	1.13%	1.12%	1.12%

Table 2 shows SCPA's share of the 38 MMT RSP in cumulative megawatts (MW) of new resources and total resources. New resources are resources not currently interconnected and delivering energy to the CAISO grid. SCPA is not confined to the exact quantities shown in Table 2, however the Preferred Portfolio should be informed by the market availability and reliability trends reflected in the RSP.

Table 2- SCPA Load Share of CPUC 38 MMT RSP (for benchmarking only; not SCPA's Preferred Portfolio)

New Build Resources (SCPA Load Share Cumulative MW)							
Resource Type	2020	2021	2022	2023	2024	2026	2030
Wind	0	0.4	33.1	33.1	43.1	42.9	58.9
Wind on New Out-of-State Transmission	0	0	0	0	0	0	33.5
Utility-Scale Solar	23.1	46.1	68	90.5	90.4	97.7	133.8
Battery Storage (4-hr)	1.8	28.3	27.8	27.8	35.1	56.6	108.4
Long-duration (8-12 hr) Storage	0	0	0	0	0	18.1	17.9
Shed Demand Response	0	2.6	2.5	2.5	2.5	2.5	2.5
Natural Gas Capacity Not Retained	0	0	0	0	0	0	-22.8
Total Resources- New Build + Existing (SCPA Load Share Cumulative MW)							
Resource Type	2020	2021	2022	2023	2024	2026	2030
Nuclear	33.9	33.8	33.3	33.2	20.2	7.1	7.1
CHP	26.5	26.5	26	26	25.9	25.8	25.6
Natural Gas	318.1	289.6	284.5	284.2	283.8	282.4	279.9
Coal	5.5	5.5	5.4	5.4	5.4	0	0
Hydro (Large)	81.6	81.5	80.1	80	79.9	79.5	78.9
Hydro (Scheduled imports)	32.9	32.9	32.3	32.3	32.2	32.1	31.8
Biomass	10.4	10.4	10.2	10.2	10.2	10.2	10.1
Geothermal	21.4	21.3	21	20.9	20.9	20.8	20.7
Hydro (Small)	11.2	11.2	11	11	11	11	10.9
Customer Solar	113.4	128.4	139.2	150.6	161.5	181.7	223.9
Wind	84.9	86.4	117.6	117.5	127.3	126.7	142.1
Wind on New Out-of-State Transmission	0	0	0	0	0	0	33.5
Utility-Scale Solar	188.2	216.4	236.6	259	258.6	265.1	299.9
Battery Storage (4-hr)	21.3	53.2	53.4	54.7	66.5	89.7	144.8
Long-duration (8-12 hr) Storage	18.5	18.4	18.1	18.1	18.1	36	35.7
Shed Demand Response	25.3	27.9	27.4	27.4	27.3	27.2	27
Natural Gas Capacity Not Retained	0	0	0	0	0	0	-22.8

SCPA Internal Methodology

SCPA developed the recommended Preferred Portfolio herein using the internal methodology discussed below. The resources within the approved Preferred Portfolio will be used to complete the compliance functions of the CPUC IRP process.

To evaluate SCPA's future portfolio emissions and shape, a representative hourly load and supply forecast was established. Staff developed the load forecast using an internal regression model trained on historic meter counts, Net Energy Metering (NEM) solar installations, and weather data. Future meter counts used for forecasting were either taken directly or extrapolated from the COVID-19 economics study completed by Dr. Robert Eyler and Dr. Jon Haveman in Spring 2020. For weather, SCPA entered historic 2007 data to align with the CPUC's modeling for the RSP. The internal model was then adjusted for statewide trends in Electric Vehicle (EV) usage, energy efficiency, and NEM solar growth, using load modifiers developed by the California Energy Commission (CEC). Although the resulting forecast was used to develop SCPA's Preferred Portfolio resources represented in this staff report, the CPUC compliance filing and any CPUC-derived metrics resulting from these Preferred Portfolio resources are based on an outdated CPUC assigned load forecast that did not consider COVID-19 impacts. This underscores the important difference between the compliance process at the CPUC and SCPA's actual load forecast and procurement activities.

Staff developed the hourly resource profile using historic data for physically contracted solar and wind resources and default CPUC profiles for generic resources where the location and specific delivery profiles are unknown. Geothermal is represented as a baseload resource (flat 24x7 profile). For short and long duration storage, SCPA developed charge and discharge profiles that minimize the hourly net open position for a given month and typical weekday or weekend. These same profiles are also input into the CPUC's calculator.

SCPA evaluated candidate portfolios for 2030 using the following metrics: GHG emissions, RPS compliance, load shape alignment, potential curtailment, estimated cost, reliability, alignment with the RSP, and utilization of local resources. All candidate portfolios retained resources already under contract, included anticipated PCIA allocations, and were required to meet SCPA's internal objective of achieving less than 75 lbs CO₂/MWh emissions while meeting or surpassing the statewide requirement of 60% RPS by 2030. In addition to creating scenarios that seek lowest cost, best shape fit, and closest alignment to the RSP, staff also explored portfolios with an emphasis on local resources and another emphasizing the closest fit to the Board's adopted 2018 IRP.

Recommended Preferred Portfolio

The recommended Preferred Portfolio was not the apparent least-cost portfolio. It should be noted that the apparent least-cost portfolio scenario relied heavily on solar

photovoltaic (PV) and import hydro with very limited short-duration (4-hr) storage and no long- duration (8-12-hr) storage. As such, it did not closely match SCPA's load curve nor align with the RSP. Staff believes that while this was the apparent least-cost portfolio, the risks associated with selecting this portfolio would be too great for several reasons. First, the risk of curtailment of solar is increasing. Second, the risk of increased capacity costs for non-solar hours is high. Third, large quantities of import hydro may not be available or may come with additional CPUC constraints that diminish its viability. Fourth, potential additional costs from CPUC ordered procurement and potential non-compliance would outweigh the benefits of the lower cost resources. In addition, any portfolio scenario analyzed that did not heavily consider the RSP, was believed to incur the same risk. As such, SCPA's recommended Preferred Portfolio closely matches the shape of SCPA's load while also using resources identified as available in the RSP in a cost-conscious manner. Staff believes the Preferred Portfolio to be the least-cost risk-adjusted portfolio.

Table 3 shows the recommended 2030 Preferred Portfolio as a result of the scenarios analyzed.

Table 3- Recommended 2030 SCPA Portfolio for IRP

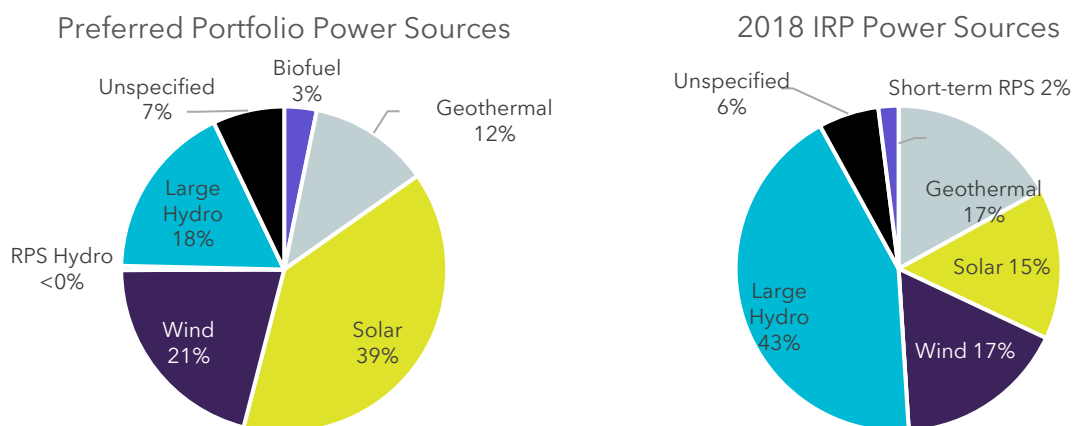
Technology	Existing Contracts for 2030	Additional Procurement for 2030
Solar	Mustang (online) - 70 MW ProFIT - 6 MW Proxima (2023) - 50 MW	New Solar - 91 MW PCIA Allocation/ Market Solar - 124 MW
Wind	Golden Hills (online) - 46 MW Sand Hill C (2021) - 80 MW	PCIA Allocation/ Market Wind - 24 MW
Storage	Proxima (2023) - 5 MW 4-hr	New 4-hr - 84 MW (currently negotiating 35 MW) Long Duration (8-12 hr)- 50 MW (at least 20 MW is newly constructed storage capacity)
Geothermal	<i>Existing 50 MW geothermal contract expires at the end of 2026</i>	Existing Geothermal - 30 MW PCIA Geothermal - 1 MW
Biomass		New Biomass - 5 MW Existing Biomass - 3 MW PCIA Allocation/ Market Biomass - 4 MW
Hydro		Import Hydro - 32 MW PCIA Allocation/ Market Large Hydro - 99 MW PCIA Allocation/ Market RPS Hydro - 3 MW

In addition to the resources listed in Table 3, SCPA will take all commercially reasonable efforts to procure Resource Adequacy (RA) capacity products to meet RA obligations where necessary.

Staff highlights that the recommended Preferred Portfolio resource mix differs significantly from the Board approved 2018 IRP Portfolio. Many LSEs (including CCAs) received strong criticisms that their 2018 IRP portfolios did not adequately address reliability and/or market availability of specific resources. In particular, portfolios that heavily relied on import hydro to provide carbon free power and portfolios that did not incorporate storage and/or natural gas as a component of renewable energy integration were highly criticized. The shortfalls of the aggregate LSE 2018 IRP Portfolios resulted in CPUC ordering incremental procurement for all LSEs. Staff's recommended Preferred Portfolio attempts to address reliability and market availability to mitigate risk of further incremental CPUC ordered procurement.

Figure 1 shows the comparison of staff's recommended 2020 Preferred Portfolio resource mix for 2030 and SCPA's Board approved 2018 IRP portfolio for 2030.

Figure 1. Comparison of 2030 Power Sources between 2020 and 2018 IRPs



The recommended Preferred Portfolio also increases short-duration (4-hr) battery storage by 84 MW and now includes a plan for long-duration (8-12 hr) storage, whereas the 2018 Portfolio did not include battery storage in the resource mix.

Staff recommends the 2030 resource mix for the Preferred Portfolio be adjusted from the approved 2018 IRP as follows:

- Solar- Staff recommends increasing the solar PV procurement from 146 MW to 217 MW. Solar PV is often the most cost-effective renewable energy resource. Staff also recommends planning for PCIA solar PV allocation. The increased solar is paired with plans for short- and long-duration storage to address reliability and load-shaping concerns.
- Storage- Staff recommends increasing 4-hr battery storage from 5 MW to 89 MW. Staff is currently negotiating 35 MW of this total for a battery storage system at an existing solar PV project. Staff also recommends increasing long-duration storage from 0 to 50 MW. Staff believes that planning for 50 MW of long-duration storage will address reliability and load-shaping concerns of incremental renewable integration within SCPA's portfolio. SCPA participated in a joint Request for Information (RFI) on long-duration storage in June 2020. There were 31 responses to the RFI and SCPA is currently reviewing all responses.
- Wind- Staff recommends no change to wind procurement, however, recommends planning for PCIA wind allocation.
- Geothermal- Staff recommends reducing geothermal procurement from 50 MW to 30 MW. This still significantly exceeds SCPA's portion of geothermal in the RSP, however reduces costs from the 2018 approved portfolio. Geothermal is one of the most expensive renewable energy sources in SCPA's current portfolio. Staff also recommends planning for PCIA geothermal allocation.
- Biomass- Staff recommends increasing biomass procurement from 0 MW to 8 MW and planning for PCIA biomass allocation. Staff are currently working with biomass developers to explore using woody debris in Sonoma County from tree trimming and forest thinning operations. If developed, this could also help with long-term wildfire risk and vegetation management.
- Hydro- Staff recommends decreasing SCPA's reliance on imported carbon free hydropower as a result of the RSP identified market availability as well as to address the CPUC criticism of the 2018 IRP Portfolio. Staff recommends procuring only SCPA's load share allotment of the 38 MMT RSP for import hydro and recommends planning for PCIA carbon free and RPS hydropower.

Results

Metrics

The performance of the recommended 2030 Preferred Portfolio is summarized with key metrics in Table 4 below. The portfolio meets SCPA's internal target of CO₂ emissions (using the TCR calculation methodology) while greatly surpassing the statewide 60% RPS requirement and achieving emissions 23% lower than SCPA's CPUC 38 MMT 2030 GHG allotment when represented in the CPUC's calculator. Compared to projected system supply and demand in the CPUC's calculator, 7.2% of contracted energy supply in 2030 is shown as curtailed and the portfolio provides an average 276 MW-month of associated system RA over the year.

Table 4- Metrics for recommended 2030 Preferred Portfolio

Metric	SCPA Target for 2030	Preferred Portfolio Result
TCR CO ₂ Emissions	<= 75.0 lbs/MWh	74.0 lbs/MWh
RPS %	>= 60%	75.4%
38 MMT Curtailed Energy (% MWh)	N/A	7.2%
Annual Average System RA (MW-month)	N/A	276 MW-month
38 MMT CPUC CO ₂ Emissions	<= 0.326 MMT/yr	0.250 MMT/yr

Staff highlights that while the current CPUC Curtailed Energy methodology results in 7.2% MWh curtailed, staff will work to optimize the hourly profile and the CPUC calculation methodology to most effectively utilize storage and demand side management by 2030 to reduce this figure.

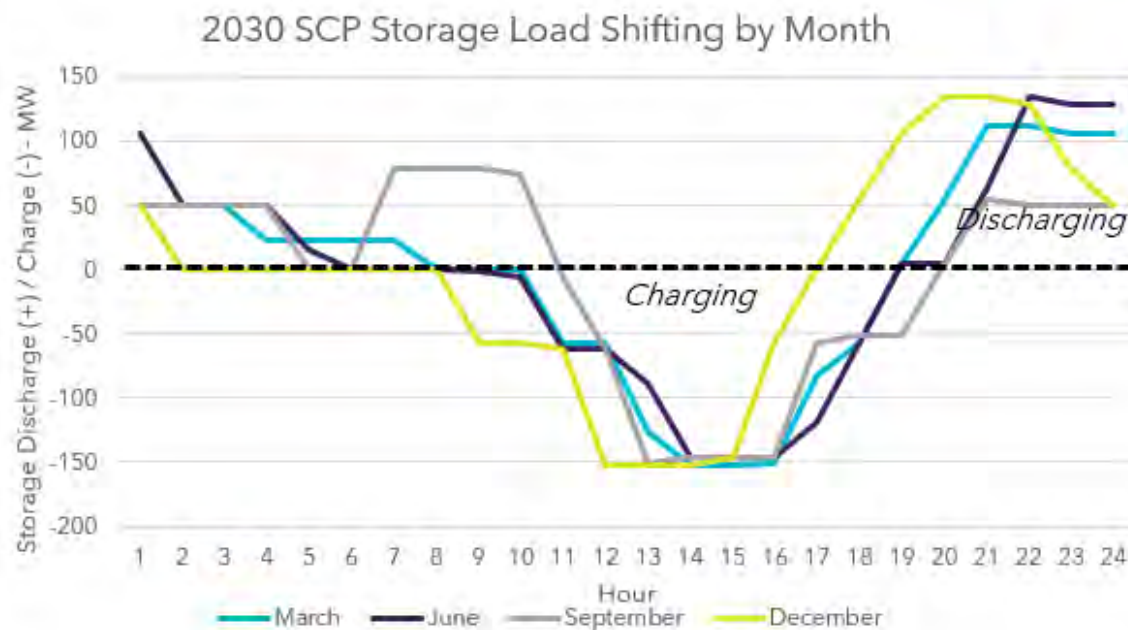
Staff also highlights that if the CPUC Emissions Calculator or the California Energy Commission's AB 1110 hourly emissions protocol will be used to replace SCPA's current annual GHG methodology using TCR, a new Board approved internal GHG target will be necessary in future planning years, since the results are markedly different.

Storage load shifting

Storage is effective in shaping load by charging (increasing demand) during hours of increased resource generation and discharging (decreasing demand) during hours when resource generation is not sufficient to meet load. Effectively, this means that, most of the time, storage charges during the daylight hours when solar generation exceeds SCPA's customer demand and discharges during morning and evening ramping periods.

Figure 2 below represents the anticipated operation of storage in the 2030 recommended Preferred Portfolio. SCPA has optimized the storage profile to minimize the overall net open position by day and month. In all months, charging is concentrated in the early afternoon. Discharging profiles are less similar, with clear shifts in earlier timing for December and later timing for June. The impact on SCPA's net load will be evident in Figures 3 and 4 as represented by "shifted load".

Figure 2- Storage load shifting



Hourly load vs supply

Closely matching SCPA's hourly generation supply to hourly load is one of the key tenets of SCPA's resource planning and hedging strategy. SCPA seeks to closely align hourly resource generation supply with hourly load and minimize the hours that total supply exceeds net demand. To do this effectively from both a resource and financial planning strategy, SCPA must consider the manner in which resources are contracted.

SCPA primarily contracts power from resources through two contracting mechanisms:

1. Contracting mechanism 1- Power Purchase Agreements (PPAs) for specified physical resources in which SCPA can forecast generation deliveries, receive CAISO financial credits for the specific hours of generation, and receive associated RA capacity attributes; and
2. Contracting mechanism 2- Contracts (or allocations of PG&E's PCIA resources) for RPS or carbon free resources where the generation delivery profile cannot be adequately forecast, there are no CAISO financial supply credits, and no capacity attributes. SCPA can contract or accept allocations for a specific monthly, quarterly, or yearly amount, however SCPA has no control over when those deliveries will be made on behalf of SCPA.

Because SCPA receives no financial credit from CAISO for resources under Contracting mechanism 2, only resources that are contracted under PPA for specified physical resources are considered in SCPA's physical and financial hedging strategy. Resources under both contracting mechanisms are considered in the CPUC's calculator, however SCPA can only provide reliable profiles for the specified physical resources and must rely on CPUC generic default hourly profiles for the resources under Contracting mechanism 2. Accordingly, figures of SCPA's 2030 portfolio below are provided for both specified physical resources only and for all resources. In the recommended Preferred Portfolio, SCPA expects all resources to be physical except for those allocated through the PCIA and import hydro.

Figures 3 and 4 below compare the average hourly generation by technology for the recommended Preferred Portfolio versus SCPA's load. Both SCPA's unmodified load (dotted line) and the load shifted by storage resources (solid line) are included (see storage load shifting discussion in previous section). Charging large storage resources during solar hours and discharging them in the evening allows for reasonable alignment of shifted load with the generation profile. Note that these figures show annual averages and do not represent the considerable seasonal variability in both load and supply.

Figure 3- Average Daily Hourly load vs supply- Specified Physical Resources

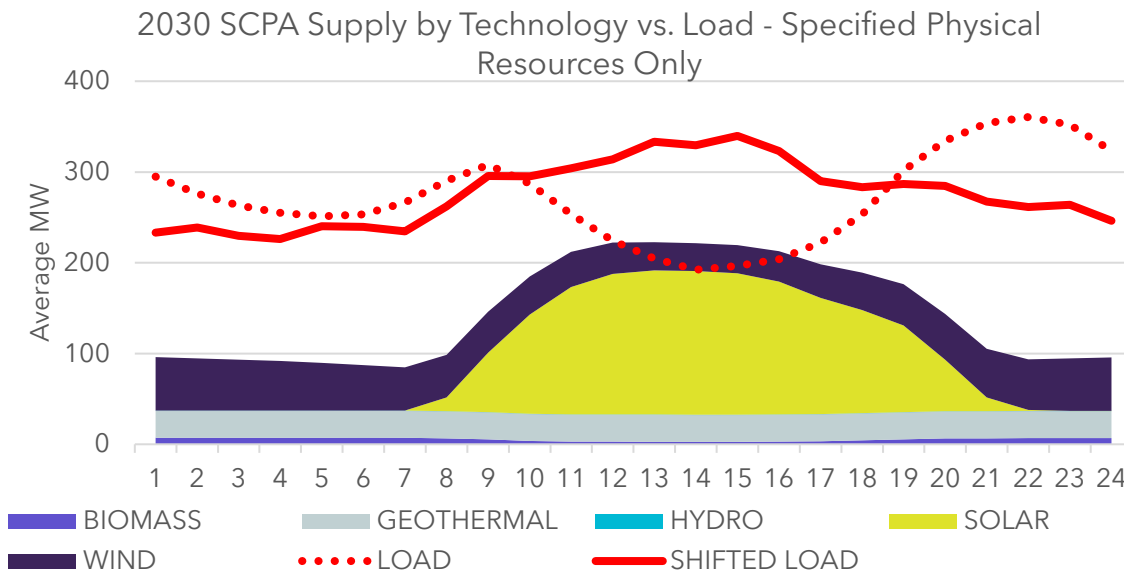
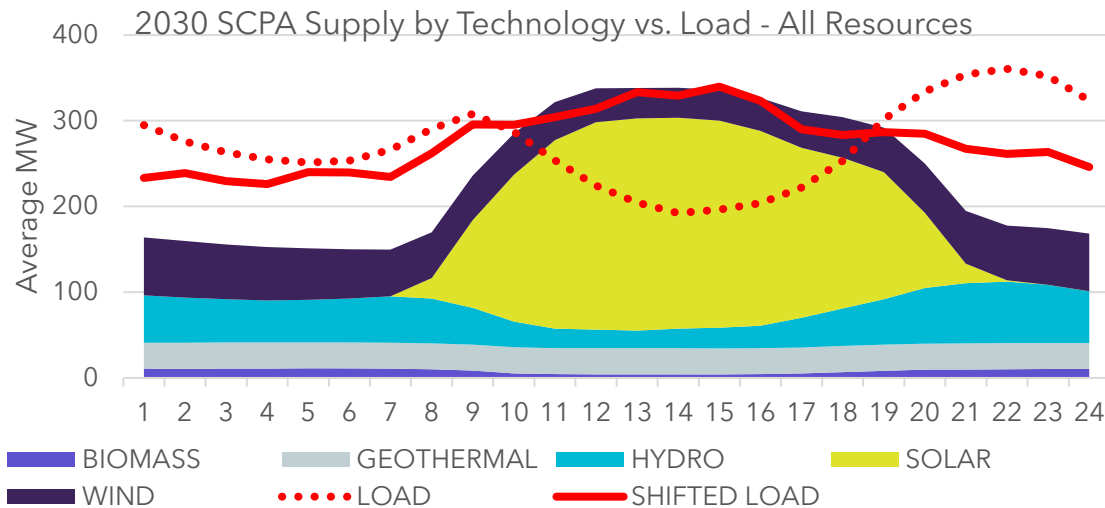


Figure 4- Average Daily Hourly load vs supply- All Resources



Figures 5 and 6 show the hourly net open position for the recommended Preferred Portfolio. Figures 7 and 8 show monthly average hourly net open position. The net open position is the difference between SCPA's shifted load and contracted supply. A positive net open position, which is more prevalent in winter when both NEM and utility-scale solar generation is lower, indicates supply does not meet SCPA's full load requirement for that hour. A negative net open position indicates SCPA's supply exceeds load, and the excess energy is delivered to the grid to serve load elsewhere in CAISO.

Staff highlights that while there are hours of negative open position in the specified physical resources profile in Figures 5 and 7, staff will focus on strategies to minimize these hours by 2030. These strategies include optimizing storage technologies and charging profiles as well as concentrating on demand side management programs such as customer-sited battery storage, demand response programs, and time of use rate design to influence customer energy use behavior, Figures 6 and 8 include resources where there is limited control over delivery profiles, so these are only representative of CPUC default profiles that will not align with actual deliveries.

Figure 5- Hourly Net Open Position of Specified Physical Resources vs Load

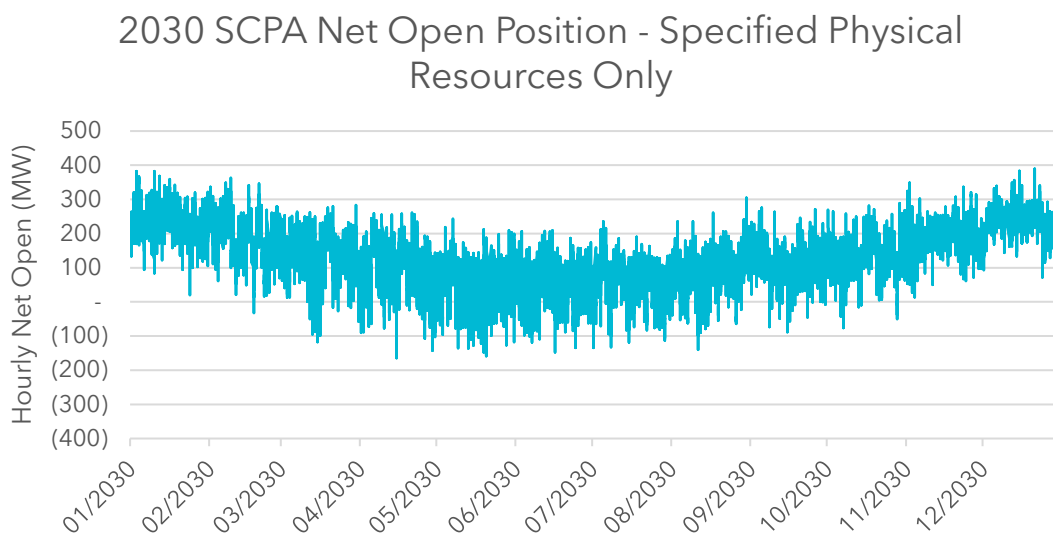


Figure 6- Hourly Net Open Position of All Resources vs Load

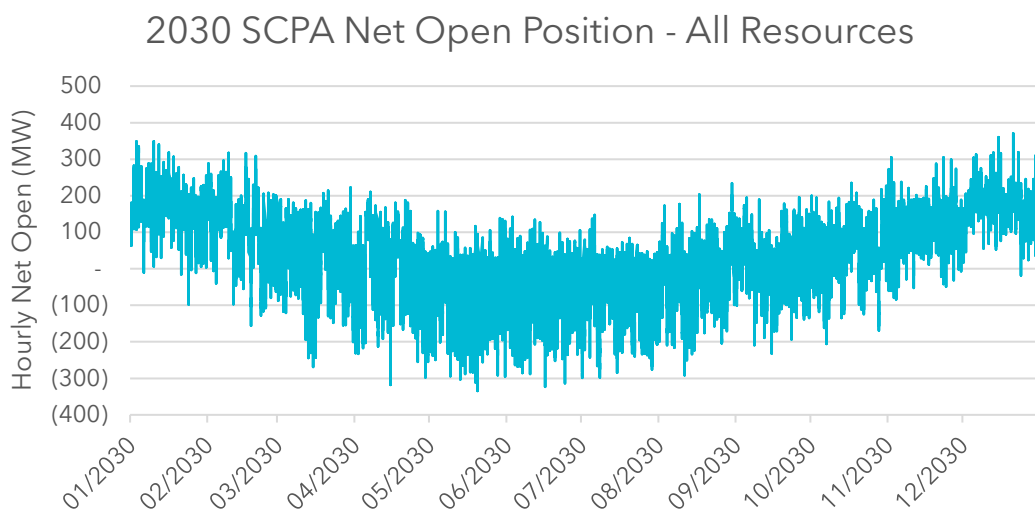


Figure 7- Monthly Average Daily Net Open Position- Physical Resources Only

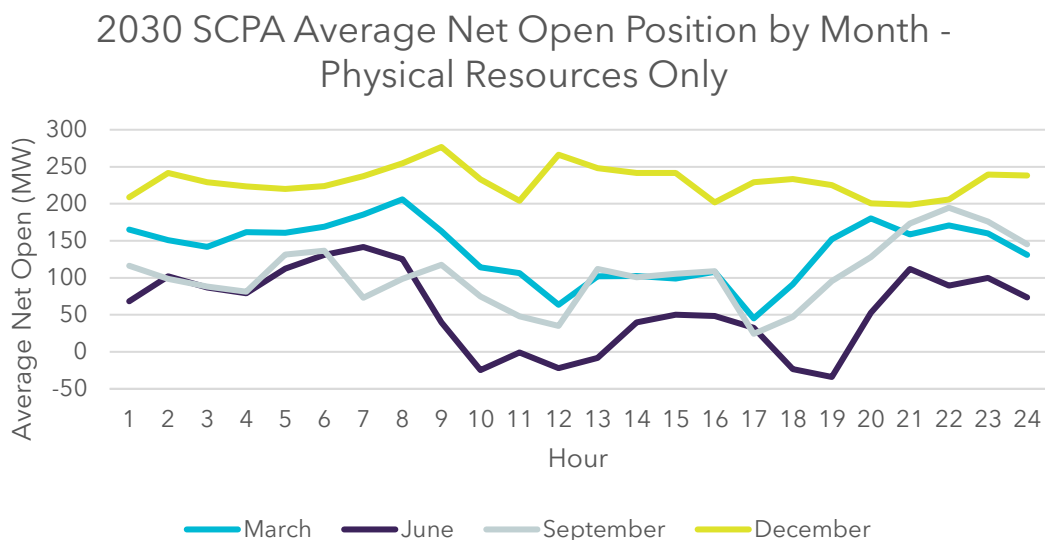
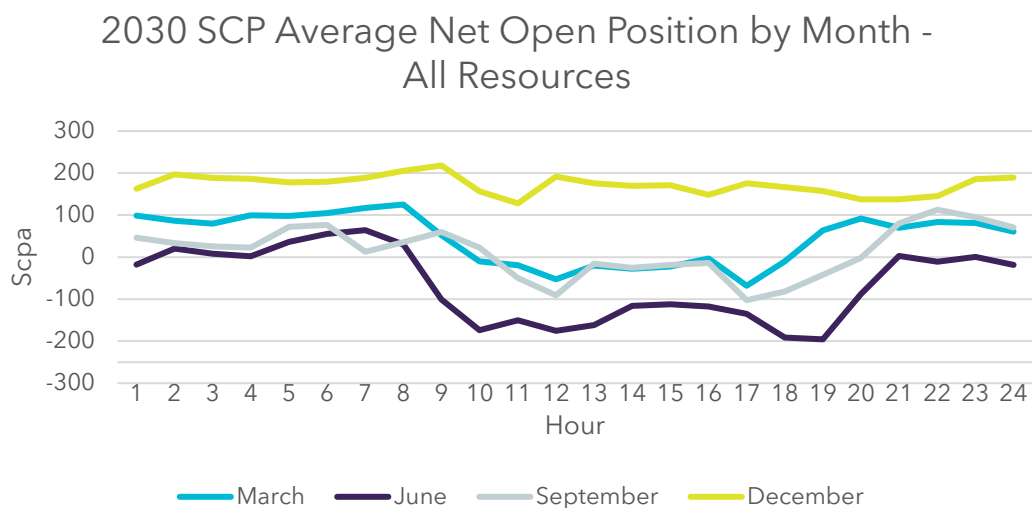


Figure 8- Monthly Average Daily Net Open Position- All Resources



As shown in Figures 5 through 8, there is possibility that by 2030, some resources may be curtailed due to greater delivery of energy than is needed to match load. While staff will work to minimize these hours, curtailments may still happen on the system grid. When a resource is curtailed, the renewable or carbon free attribute of that resource can no longer be applied to the SCPA portfolio. If significant curtailments occur and/or SCPA switches to an hourly GHG accounting protocol in place of the current annual TCR protocol, SCPA may need to explore whether the 2030 GHG goal of 75 lb CO₂/MWh is reasonable.

Portfolio Actions

Table 5 outlines the planned procurement timeline to reach the 2030 recommended Preferred Portfolio. Within each year, staff regularly examines supply against SCPA customer load and RPS goals and solicits to sell excess or purchase additional short-term resources accordingly. These short-term “true-ups” are not included in Table 5.

Table 5 - Cumulative Procurement to achieve recommended 2030 Preferred Portfolio

Cumulative MW procurement

Resource Type	2021	2022	2023	2024	2026	2030
Existing Solar Contracts	76	76	126	126	126	126
New Solar Contracts	0	0	0	0	6	91
PCIA Solar Allocation/ Market Solar	0	0	127	127	127	124
Existing Wind Contracts	126	126	126	126	126	126
PCIA Wind Allocation/ Market Wind	0	0	29	29	29	24
Existing Geothermal Contracts	50	50	50	50	50	0
New Geothermal Contracts	0	0	0	0	0	30
New Biomass Contracts	0	0	0	0	0	8
PCIA Biomass Allocation/ Market Biomass	0	0	5	5	5	4
Existing Hydro Contracts	45	45	26	26	0	0
New Hydro Contracts	6	6	0	0	25	32
PCIA Hydro Allocation / Market Hydro	99	99	103	103	103	103
Existing 4-hr Battery Storage Contracts	0	0	5	5	5	5
New 4-hr Battery Storage Contracts	35	35	35	35	35	79
New Long Duration (8-12 hr) Storage Contracts	0	0	0	0	50	50

To optimize cost, value, and risk, staff also regularly examines and estimates long-term supply and customer demand, including demand trends as they relate to the number of customers served, climate, energy efficiency, distributed generation, electrification of vehicles and buildings, emerging industries, and more recently impacts of Public Safety Power Shutoff (PSPS) events, evacuations, and COVID-19 orders. As such, staff revisits and assesses the appropriateness of the long-term planned portfolio on an annual basis.

Table 6 shows the procurement timeline compared to the CPUC’s 38 MMT RSP for new resources built and for total resource for years within the CPUC calculator (2022, 2026, and 2030). While 2020 is also included in the CPUC calculator, SCPA does not plan for long-term procurement activity within this calendar year. Note that Table 5 represents new and existing resources in terms of SCPA contracts in place, whereas Table 6 represents new and existing resources in terms of status of resource built on

the CAISO grid (i.e. SCPA could have an existing contract for a new resource and vice versa).

Table 6 - Recommended Preferred Portfolio compared to RSP

New Resources Built						
	2022		2026		2030	
Resource Type	38MMT RSP	Preferred Portfolio	38MMT RSP	Preferred Portfolio	38MMT RSP	Preferred Portfolio
Wind	33.1	80	42.9	80	58.9	80
Utility-Scale Solar	68.0	2	97.7	56	133.8	143
Battery (4-hr) Storage	68.0	35	56.6	40	108.4	84
Long-duration (8-12 hr) Storage	0	0	18.1	20	17.9	20
Biomass	0	0	0	0	0	5
Wind on New Out-of-State Transmission	0	0	0	0	33.5	0
Shed Demand Response	2.5	*note	2.5	*note	2.5	*note
Total Resources (Existing CAISO resources + new resources built)						
	2022		2026		2030	
Resource Type	38MMT RSP	Preferred Portfolio	38MMT RSP	Preferred Portfolio	38MMT RSP	Preferred Portfolio
Wind	117.6	126	126.7	155	142.1	150
Utility-Scale Solar	236.6	249	265.1	257	299.9	341
Battery (4-hr) Storage	53.4	35	89.7	40	144.8	84
Long-duration (8-12 hr) Storage	18.1	0	36.0	50	35.7	50
Biomass	10.4	0	10.2	5	10.1	12
Wind on New Out-of-State Transmission	0	0	0	0	33.5	0
Shed Demand Response	27.4	* note	27.2	* note	27.0	* note
Hydro (Large)	80.1	118	79.5	99	78.9	99
Hydro (Scheduled imports)	32.3	32	32.1	25	31.8	32
Geothermal	21.0	50	20.8	51	20.7	31
Hydro (Small)	11.0	0	11.0	3	10.9	3
Nuclear	33.3	0	7.1	0	7.1	0
Natural Gas	284.5	0	282.4	0	279.9	0
Coal	5.4	0	0	0	0	0

*note- SCPA uses the GridSavvy demand respond program to decrease monthly peak MW in load demand and does not currently plan to utilize CAISO markets to bid in as supply.

Fiscal Impact:

SCPA's resource portfolio cost is recovered through revenue from customer rates and other sources of revenue. Customer rates are set in accordance with Board-approved financial policies.

The cost of the portfolio will be determined by the cost of specific resources procured through future solicitation and/or bilateral negotiation. Staff evaluates each resource offered to determine if it is the best fit for SCPA's portfolio. Resource evaluation criteria include viability of projects, status of project interconnection and permitting, counterparty risk assessment, commercial operation dates and delivery term, hourly generation profile as it relates to SCPA's demand profile, CAISO deliverability, location of project, pricing and pricing structure, energy value, congestion costs, operational flexibility and curtailment terms, and collateral terms.

All LSEs must demonstrate compliance with the IRP process and therefore staff believes the recommended portfolio presented will enable SCPA customer bills to remain competitive.

Attachments:

Attachment 1: SCPA 46MMT Conforming Portfolio (for reference only)



Attachment 1- SCPA 46 MMT Conforming Portfolio

Table A1 shows SCPA's load share of the CPUC 46 MMT RSP Portfolio.

Table A1- SCPA Load Share of 46 MMT RSP (for benchmarking only; not SCPA's 46 MMT Portfolio)

New Build Resources (SCPA Load Share Cumulative MW)							
Resource Type	2020	2021	2022	2023	2024	2026	2030
Wind	0	0.4	22.1	22.1	30.9	30.8	31.7
Wind on New Out-of-State Transmission	0	0	0	0	0	0	6.8
Utility-Scale Solar	23.1	46.1	68	90.5	90.4	90	122.9
Battery Storage	1.8	28.3	27.8	27.8	37.3	68.9	99
Pumped (long-duration) Storage	0	0	0	0	0	10.9	10.9
Shed Demand Response	0	2.6	2.5	2.5	2.5	2.5	2.5
Natural Gas Capacity Not Retained	0	0	0	0	0	0	-0.3
Total Resources- New Build + Existing (SCPA Load Share Cumulative MW)							
Resource Type	2020	2021	2022	2023	2024	2026	2030
Nuclear	33.9	33.8	33.3	33.2	20.2	7.1	7.1
CHP	26.5	26.5	26	26	25.9	25.8	25.6
Natural Gas	318.1	289.6	284.5	284.2	283.8	282.4	279.9
Coal	5.5	5.5	5.4	5.4	5.4	0	0
Hydro (Large)	81.6	81.5	80.1	80	79.9	79.5	78.9
Hydro (Scheduled imports)	32.9	32.9	32.3	32.3	32.2	32.1	31.8
Biomass	10.4	10.4	10.2	10.2	10.2	10.2	10.1
Geothermal	21.4	21.3	21	20.9	20.9	20.8	20.7
Hydro (Small)	11.2	11.2	11	11	11	11	10.9
Customer Solar	113.4	128.4	139.2	150.6	161.5	181.7	223.9
Wind	84.9	86.4	106.6	106.5	115.2	114.6	114.8
Wind on New Out-of-State Transmission	0	0	0	0	0	0	6.8
Utility-Scale Solar	188.2	216.4	236.6	259	258.6	257.4	289
Battery Storage	21.3	53.2	53.4	55.3	68.6	101.9	135.4
Pumped (long-duration) Storage	18.5	18.4	18.1	18.1	18.1	28.9	28.7
Shed Demand Response	25.3	27.9	27.4	27.4	27.3	27.2	27
Natural Gas Capacity Not Retained	0	0	0	0	0	0	-0.3

To establish SCPA's 46 MMT Portfolio, staff utilized all existing resources under contract, expected PCIA allocations from PG&E, the RSP share of geothermal, additional solar to meet the 60% RPS requirement and enough import hydro to match SCPA's CPUC assigned GHG benchmark for the 46 MMT Portfolio.

Table A2 shows SCPA's mandatory 46 MMT Portfolio. This portfolio is provided as a required compliance element only and SCPA does not plan its procurement activity based on this portfolio.

Table A2- SCPA 2030 46 MMT Conforming Portfolio

Technology	Existing Contracts for 2030	Additional Procurement for 2030 46 MMT
Solar	Mustang (online) - 70 MW ProFIT - 6 MW Proxima (2023) - 50 MW	New Solar - 17 MW PCIA Allocation/ Market Solar - 124 MW
Wind	Golden Hills (online) - 46 MW Sand Hill C (2021) - 80 MW	PCIA Allocation/ Market Wind - 24 MW
Storage	Proxima (2023) - 5 MW 4-hr	New 4-hr - 50 MW New Long Duration (8-12 hr) - 10 MW
Geothermal	<i>Existing 50 MW geothermal contract expires at the end of 2026</i>	Existing Geothermal - 20 MW PCIA Allocation/ Market Geothermal - 1 MW
Biomass		PCIA Allocation/ Market Biomass - 4 MW
Hydro		Import Hydro - 12 MW PCIA Allocation/ Market Large Hydro - 99 MW PCIA Allocation/ Market RPS Hydro - 3 MW

Table A3 shows the procurement timeline compared to the CPUC's 46 MMT RSP for years within the CPUC's calculator (2022, 2026, and 2030). While 2020 is also included in the CPUC's calculator, SCPA does not plan for long-term procurement activity within this calendar year.

Table A3 - SCPA 46 MMT compared to CPUC 46 MMT RSP

New Resources Built						
	2022		2026		2030	
Resource Type	46 MMT RSP	46MMT SCPA	46 MMT RSP	46MMT SCPA	46 MMT RSP	46MMT SCPA
Wind	22.1	80	30.8	80	31.7	80
Utility-Scale Solar	68.0	2	90.0	56	122.9	69
Battery Storage	27.8	35	68.9	40	99.0	55
Pumped (long-duration) Storage	0	0	10.9	10	10.9	10
Biomass	0	0	0	0	0	0
Wind on New Out-of-State Transmission	0	0	0	0	6.8	0
Shed Demand Response	2.5	*note	2.5	*note	2.5	*note
Total Resources (Existing CAISO resources + new resources built)						
	2022		2026		2030	
Resource Type	46 MMT RSP	46MMT SCPA	46 MMT RSP	46MMT SCPA	46 MMT RSP	46MMT SCPA
Wind	106.6	126	114.6	155	114.8	150
Utility-Scale Solar	236.6	249	257.4	257	289.0	267
Battery Storage	53.4	35	101.9	40	135.4	55
Pumped (long-duration) Storage	18.1	0	28.9	10	28.7	10
Biomass	10.2	0	10.2	0	10.1	0
Wind on New Out-of-State Transmission	0	0	0	0	6.8	0
Shed Demand Response	27.4	*note	27.2	*note	27.0	*note
Hydro (Large)	80.1	118	79.5	99	78.9	99
Hydro (Scheduled imports)	32.3	32	32.1	25	31.8	12
Geothermal	21.0	50	20.8	51	20.7	21
Hydro (Small)	11.0	0	11.0	3	10.9	3
Nuclear	33.3	0	7.1	0	7.1	0
Natural Gas	284.5	0	282.4	0	279.9	0
Coal	5.4	0	0	0	0	0

*note- SCPA uses the GridSavvy demand respond program to decrease monthly peak MW in load demand and does not currently plan to utilize CAISO markets to bid in as supply.

The performance of the 46 MMT Portfolio is summarized with key metrics in Table A4 below. Staff notes that by exactly matching the portfolio CO₂ emissions to the CPUC assigned benchmark, this portfolio does not meet SCPA's internal target of 75 lbs

CO₂/MWh. Accordingly, SCPA will provide this portfolio as a mandatory compliance requirement only and does not plan its procurement activity based on this portfolio.

Table A4- Metrics for 46 MMT 2030 Portfolio

Metric	SCPA Target for 2030	46 MMT Portfolio Result
TCR CO ₂ Emissions	<= 75.0 lbs/MWh	246.2 lbs/MWh
RPS %	>= 60 %	60.4%
46 MMT Curtailed Energy (% MWh)	N/A	6.6%
Annual Average System RA (MW-month)	N/A	185 MW-month
46 MMT CPUC CO ₂ Emissions	= 0.408 MMT/yr	0.408 MMT/yr