svcleanenergy.org

333 W El Camino Real
Suite 330
Sunnyvale, CA 94087

Silicon Valley Clean Energy Authority
Board of Directors Meeting
Wednesday, October 12, 2022
7:00 pm

Cupertino Community Hall
10350 Torre Avenue
Cupertino, CA

Teleconference Meeting
Webinar:
https://cityofcupertino.zoom.us/j/94616542031

Telephone (Audio Only):
US: +1 669-900-6833
Webinar ID: 946 1654 2031

In accordance with California Government Code Section 54953(e), in consideration of the Coronavirus (COVID-19), members of the Silicon Valley Clean Energy Board of Directors and staff have the option to participate in this meeting by teleconference.

Members of the public may also attend this meeting in person, or observe this meeting electronically by accessing the meeting via instructions above. Public Comments can be sent in advance of the meeting via email up to three hours before the meeting begins to Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org and will be distributed to the Board of Directors. The public will also have an opportunity to provide comments during the meeting. Members of the public participating remotely and using Zoom may comment during public comment or the applicable agenda item by using the Raise Hand feature and you will be recognized by the Chair. Those using the telephone (audio only) feature should press star 9 on your phones to initiate the "Raise Hand" function in Zoom. You will then be announced, unmuted, and your time to speak will begin.

The public may provide comments on any matter listed on the Agenda. Speakers are customarily limited to 3 minutes each, however, the Board Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

If you are an individual with a disability and need a reasonable modification or accommodation pursuant to the Americans with Disabilities Act ("ADA") please contact Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org prior to the meeting for assistance.

Pursuant to the Americans with Disabilities Act, if you need special assistance in this meeting, please contact the Clerk for the Authority at (408) 721-5301 x1005. Notification 48 hours prior to the meeting will enable the Authority to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.105 ADA Title II).

AGENDA

Call to Order

Roll Call

Public Comment on Matters Not Listed on the Agenda

The public may provide comments on any matter not listed on the Agenda provided that it is within the subject matter jurisdiction of SVCE. Speakers are customarily limited to 3 minutes each, however, the Board Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

Consent Calendar (Action)

1a) Approve Minutes of the September 14, 2022, Board of Directors Meeting

1b) Approve Minutes of the September 14, 2022, Board of Directors Special Meeting

1c) Receive August 2022 Treasurer Report

1d) Adopt Resolution Authorizing Public Meetings to Continue to Be Held Via Teleconferencing Pursuant to Government Code Section 54953(e) and Making Findings

1e) Adopt FY23 SVCE Strategic Work Plan

1f) Authorize the Chief Executive Officer to Negotiate and Enter into a New Engagement with Meyers | Nave for Legal Services

1g) Review and Approve Updates to SVCE Customer Confidentiality Policy

1h) Approve Audit Committee Membership of Three Members

1i) Receive Q3 2022 Decarbonization Strategy and Programs Roadmap Update

1j) Executive Committee Report

1k) Finance and Administration Committee Report

1l) Audit Committee Report

1m) Legislative and Regulatory Response to Industry Transition 2022 Ad Hoc Committee Report

1n) California Community Power Report

Regular Calendar

2) CEO Report (Discussion)
3) Approve SVCE 2022 Integrated Resource Plan (Action)
4) Authorize the Chief Executive Officer to Approve or Execute Agreements with Firms Providing Services to Initiate SVCE to Execute Its Second Prepay (Action)
5) Updating SVCE's Investment Policy and Directing PFM Asset Management to Implement full Scope of work as SVCE's Investment Advisor (Action)
6) New Construction Reach Code Update (Presentation)

Board Member Announcements and Direction on Future Agenda Items

Public Comment on Closed Session

The public may provide comments regarding the Closed Session item(s) just prior to the Board beginning the Closed Session. Closed Sessions are not open to the public.

Convene to Closed Session

Conference with Legal Counsel – Anticipated Litigation
Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: (one potential case)

Report from Closed Session

Adjourn

svcleanenergy.org

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Silicon Valley Clean Energy Authority
Board of Directors Meeting
Wednesday, September 14, 2022
7:00 pm

Cupertino Community Hall
10350 Torre Avenue
Cupertino, CA

Pursuant to State of California Gov't Code Section 54953 (e) the meeting was conducted via teleconference with an option for members of the Board of Directors and staff to participate in person.

DRAFT MINUTES

Call to Order:
Chair Gibbons called the Regular Meeting to order at 7:00 p.m.

Prior to Roll Call, General Counsel Trisha Ortiz advised Chair Gibbons to report out from the Special Meeting held immediately prior; Chair Gibbons noted there was nothing to report.

Roll Call
Present:
Liz Gibbons (Chair), Campbell
George Tyson (Vice Chair), Los Altos Hills
Jon Robert Willey, Cupertino
Neysa Fligor, Los Altos
Rob Rennie, Los Gatos
Evelyn Chua, Milpitas
Javed Ellahie, Monte Sereno
Yvonne Martinez Beltran, Morgan Hill
Margaret Abe-Koga, Mountain View
Tina Walia, Saratoga
Gustav Larsson, Sunnyvale
Otto Lee, Santa Clara County

Absent:
Zach Hilton, Gilroy

Chair Gibbons, Vice Chair Tyson, Alternate Director Larsson and Director Willey attended in person; all other Directors attended via teleconference.

Public Comment on Matters Not Listed on the Agenda
No speakers.

Consent Calendar

General Counsel Ortiz provided a report summary of Item 1d) *Approve Amendment No. 5 to Employment Agreement for Chief Executive Officer*, noting the amendment reflects the following:

Increases the annual salary from $384,000 to $422,400;
Allows the CEO to elect to receive an additional $1,000 in lieu of participating in the group medical insurance plan as additional compensation; and
Provides additional 80 hours of management leave time to be used before September 30, 2023.

There were no questions or comments from the Board; there were no requests from the public to speak on any matter on the Consent Calendar.

1a) Approve Minutes of the August 10, 2022, Board of Directors Meeting
1b) Receive July 2022 Treasurer Report
1c) Adopt Resolution Authorizing Public Meetings to Continue to Be Held Via Teleconferencing Pursuant to Government Code Section 54953(e) and Making Findings
1d) Approve Amendment No. 5 to Employment Agreement for Chief Executive Officer
1e) Approve General and Administrative Policy #7: Chief Executive Officer Absence Policy

1f) Authorize CEO to Execute a 5-Year Agreement with Adapt2 Solutions, Inc. for Deal Capture and Settlements Software

1g) Adopt Resolution Establishing October 5, 2022 as Clean Air Day

1h) Authorize the Chief Executive Officer to Execute a Two-year Agreement with Braun Blaising Smith Wynne P.C. (“BBSW”)

1i) Authorize the Chief Executive Officer to Execute a Three-Year Agreement with Keyes and Fox, LLP for Legal Services

1j) Authorize the Chief Executive Officer to Execute Agreement with Maher Accountancy for Accountant Services

1k) Authorize the CEO to Approve Agreement with Pisenti & Brinker, LLP for Financial Audit Services for the year ending September 30, 2022

1l) Authorize the Chief Executive Officer to Execute an Agreement for FY22-23 with Richards, Watson & Gershon for Legal Services

1m) Executive Committee Report

1n) Finance and Administration Committee Report

1o) Audit Committee Report
1p) Legislative and Regulatory Response to Industry Transition 2022 Ad Hoc Committee Report
1q) California Community Power Report

MOTION: Director Chua moved and Director Martinez Beltran seconded the motion to approve the Consent Calendar, Items 1a through 1q.

The motion carried unanimously by verbal roll call vote with Director Hilton absent.

Regular Calendar

2) CEO Report (Discussion)

CEO Girish Balachandran addressed the following in his CEO report:

- Introductions of the following new employees: Juliette Pascual, Community Outreach Fellow, and Alhad Dighe, Fleet Electrification Fellow; both provided brief welcome comments;
- Announcement that the SVCE Community Decarbonization Demonstration Grant and Community Decarbonization Engagement Grant would be opening this month;

- Announcement that SVCE would be pursuing a second prepay agreement, noting CFO and Director of Finance and Administration Amrit Singh would be leading the effort;
- Reminder of invitation to an Electrification Reach Code event for elected officials taking place on September 29, 2022; and
- Comments on the recent heat wave that occurred the following week, with gratitude to the Board of Directors for their response in sharing Flex Alert information, SVCE customers who used backup generation during the heat wave, and acknowledgment of staff and their outreach efforts to customers to ensure they had enough warning to get things in place.

Chair Gibbons shared her thanks to all for the heat wave response.

Director Martinez Beltran noted the heat wave affected the City of Morgan Hill particularly hard, and suggested others who may have had a similar experience get together to speak with the CPUC regarding gaps in infrastructure and problems identified.

Chair Gibbons suggested a follow up discussion, possibly at the Executive Committee level, to discuss further.

3) Update on Strategic Plan and Adopt FY23 SVCE Strategic Focus Areas (Action)

CEO Balachandran presented a PowerPoint presentation on the proposed FY23 SVCE Strategic Focus Areas which included:

24x7 Clean Energy: Explore 24x7 clean energy delivery at scale, to improve on the current 100% clean energy goal
Customer Base & Electrification: Grow Customer Base & Offerings, Emphasize Electrification
Inflation Reduction Act: Accelerate deployment of currently adopted decarbonization strategies and goals; evaluate and capitalize on the Inflation Reduction Act & California state budget climate funds to further improve programs
Finance: Leverage Balance Sheet for Structured Financing and use financing solutions to increase impact of decarbonization program offerings, especially to lower-income customers
Employee: Be the Employer of Choice, and Increase Staffing

CEO Balachandran responded to a board member question regarding the mention of accelerated deployment of goals in the Inflation Reduction Act focus area.

Chair Gibbons opened Public Comment.
No speakers.
Chair Gibbons closed Public Comment.

MOTION: Director Martinez Beltran moved and Director Abe-Koga seconded the motion to approve the update on the Strategic Plan and adopt FY23 SVCE Strategic Focus Areas.

The motion carried unanimously by verbal roll call vote with Director Hilton absent.

4) Adopt the FY 2022-23 Recommended Operating Budget and Updated Reserves Policy (Action)

Amrit Singh, CFO and Director of Administrative Services, introduced the item and presented a PowerPoint presentation on SVCE's FY 2022-23 recommended operating budget and updated reserves policy.

Chair Gibbons opened Public Comment.
No speakers.
Chair Gibbons closed Public Comment.

MOTION: Director Martinez Beltran moved and Director Abe-Koga seconded the motion to approve Resolution 2022-21 adopting the FY 2022-23 Operating Budget, and updated Financial Reserves Policy.

The motion carried unanimously by verbal roll call vote with Director Hilton absent.

5) Authorize the Chief Executive Officer to Execute Necessary Agreements for a Resource Adequacy Resource from AES Clean Energy Development, LLC (Action)

Charles Grinstead, Senior Manager of Power Resources, introduced the item and presented a PowerPoint presentation requesting approval of the mid-term reliability Baldy Mesa resource adequacy agreement.

Staff responded to a board member question regarding the extension of Diablo Canyon and its impact on the request.

Chair Gibbons opened Public Comment.
Bruce Karney questioned: 1) demand response as a way to balance consumption of electricity with generation during heat waves and other times, and 2) critical peak pricing. Karney requested the CEO comment on the potential for SVCE offering a critical peak pricing rate plan, and whether the state may begin to accept demand reduction through OhmConnect, and similar programs, as being equally valid to building new generation.

Chair Gibbons closed Public Comment.

CEO Balachandran noted he would be happy to discuss with Mr. Karney offline, and commented critical peak pricing is something SVCE would like to do, OhmConnect is a great idea, and spoke in support of automatic demand response.

MOTION: Director Lee moved and Director Fligor seconded the motion to delegate authority for the CEO to execute the Baldy Mesa RA-only agreement with the following parameters:
10-year term Resource Adequacy Agreement with expected delivery from June 1, 2023;
Up to 75 megawatts (MWs) of lithium-ion battery incremental capacity; and
The total contract amount not-to-exceed $81,477,000

The motion carried unanimously by verbal roll call vote with Director Hilton absent.

6) Integrated Resource Plan Status Update (Discussion)

Maren Wenzel, Senior Manager of Energy Policy and Regulatory Analysis, presented a PowerPoint presentation on SVCE's Integrated Resource Plan, which included procedural background and context, draft results, and next steps.

Chair Gibbons opened Public Comment.
Bruce Karney thanked staff for the presentation and inquired if it is required to file information about the anticipated prices over the next 8-13 years, and if not with the state, can they be shared with the SVCE board next month.

Chair Gibbons closed Public Comment.

Senior Manager of Energy Policy and Regulatory Analysis Wenzel responded to Mr. Karney that CCAs are not obligated to discuss their rate forecasts, but there is an obligation to discuss the associated costs of the portfolios.

Senior Manager of Energy Policy and Regulatory Analysis Wenzel provided additional information on the draft results summary.

Board members provided comments and feedback on the recommended approach for the IRP.

7) New Construction Reach Code Update (Presentation)

Zoe Elizabeth, Deputy Director of Decarbonization Programs and Policy, presented a PowerPoint presentation providing a status update on reach code efforts and upcoming action items.

Chair Gibbons opened Public Comment.
No speakers.
Chair Gibbons closed Public Comment.

<u>Board Member Announcements and Future Agenda Items</u>

Director Abe-Koga announced the City of Mountain View City Council voted to accept a grant from SVCE to build a community center resiliency hub, which would be used to build a battery storage system to connect with the Mountain View Community Center's solar system. Director Abe-Koga encouraged other member agencies to pursue the grants from SVCE on energy conservation and resiliency projects.

Director Chua announced the City of Milpitas would be launching a Simple Mobile Access to Reliable Transit (SMART) pilot program aimed at providing a transit solution to the City of Milpitas.

Director Martinez Beltran announced the City of Morgan Hill would be launching MoGo Morgan Hill Quick Ride rideshare service.

Chair Gibbons encouraged the Board of Directors and member agency electeds to attend the virtual reach code event on September 29, 2022.

<u>Adjourn</u>
Chair Gibbons adjourned the meeting at 8:50 p.m.

ATTEST:

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Andrea Pizano, Board Secretary

Silicon Valley Clean Energy Authority
Board of Directors Special Meeting
Wednesday, September 14, 2022
6:30 pm

Cupertino Community Hall
10350 Torre Avenue
Cupertino, CA

Pursuant to State of California Gov't Code Section 54953 (e) the meeting was conducted via teleconference with an option for members of the Board of Directors and staff to participate in person.

DRAFT MINUTES

Call to Order:
Chair Gibbons called the Special Meeting to order at 6:33 p.m.

Roll Call

Present:
Liz Gibbons (Chair), Campbell
George Tyson (Vice Chair), Los Altos Hills
Jon Robert Willey, Cupertino
Neysa Fligor, Los Altos
Rob Rennie, Los Gatos
Evelyn Chua, Milpitas (arrived following roll call)
Margaret Abe-Koga, Mountain View
Tina Walia, Saratoga
Gustav Larsson, Sunnyvale
Otto Lee, Santa Clara County

Absent:
Zach Hilton, Gilroy
Javed Ellahie, Monte Sereno
Yvonne Martinez Beltran, Morgan Hill

Chair Gibbons, Vice Chair Tyson, and Alternate Director Larsson attended in person; all other Directors attended via teleconference.

Public Comment on Matters Not Listed on the Agenda
No speakers.

Public Comment on Closed Session
No speakers.

Convene to Closed Session
Public Employee Performance Evaluation
Title: Chief Executive Officer

Conference with Labor Negotiators
Agency Representatives: Liz Gibbons, Chair, Board of Directors,
George Tyson, Vice Chair, Board of Directors
Unrepresented Employee: Chief Executive Officer

Report from Closed Session
Prior to roll call during the regular meeting at 7:00 p.m., Chair Gibbons noted there was nothing to report from Closed Session.

Adjourn
The meeting was adjourned to the Regular Meeting at 7:00 p.m.

ATTEST:

____
Andrea Pizano, Board Secretary

TREASURER REPORT

Fiscal Year to Date
As of August 31, 2022

(Preliminary & Unaudited)

Issue Date: October 12, 2022

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SILICON VALLEY CLEAN ENERGY AUTHORITY
Financial Statement Highlights* ($ in 000's)

Financial Highlights for the month of August 2022:

> SVCE operations resulted in a change in net position for the month of $13.2 million and fiscal-year-to-date (FYTD) change in net position of $44.2 million.

> Retail GWh sales for the month landed -5.2% below budget.

> FYTD operating margin of $62.1 million or ~19.4% is below budget expectations of 26.6% operating margin for the fiscal year to date.

> FYTD Power Supply costs are 5% above budget.

> SVCE is investing ~92% of available funds generating FYTD investment income of $0.26 million.

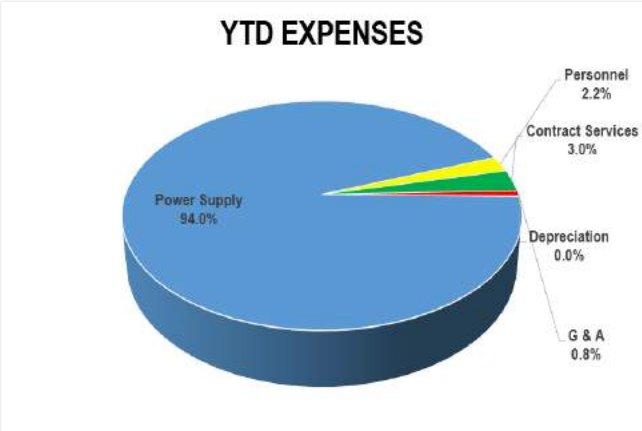
Change in Net Position	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Amended Budget
Actual	1,532	(4,526)	(2,237)	(6,275)	(5,774)	1,734	10,904	6,764	13,067	15,819	13,165		44,172	61,611

Power Supply Costs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Amended Budget
Energy & REC's	11,938	15,483	13,478	17,209	15,665	20,556	11,419	14,537	15,435	17,504	17,603		170,828	
Wholesale Sales	(195)	(15)	-	(82)	(182)	(208)	(236)	(23)	(56)	(18)	(18)		(1,031)	
Capacity	2,890	2,207	2,324	3,281	3,557	3,544	3,923	4,236	4,965	5,550	7,046		43,522	
CAISO Charges	(1,301)	205	2,286	1,116	1,004	(328)	(1,124)	(2,066)	1,721	2,130	1,030		4,675	
NEM Expense	3	152	(187)	(200)	(30)	151	39	617	897	761	674		2,878	
Charge/Credit (IST/Net Rev)	1,189	(125)	759	1,855	2,020	3,029	4,966	5,864	7,316	3,955	6,621		37,450	
Net Power Costs	14,525	17,908	18,660	23,179	22,035	26,744	18,989	23,166	30,279	29,882	32,957	-	258,323	274,979

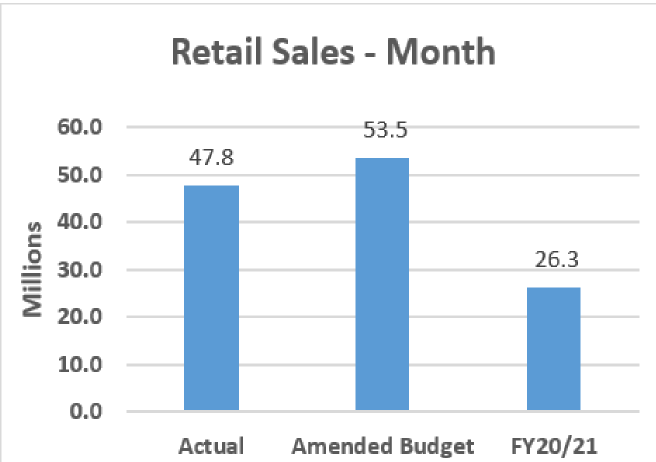
Other	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Amended Budget
Capital Expenditures	4	13	10	-	5	18	-	21	-	56	4		133	150
Energy Programs	68	123	116	220	114	134	121	172	112	179	163		1,521	8,582

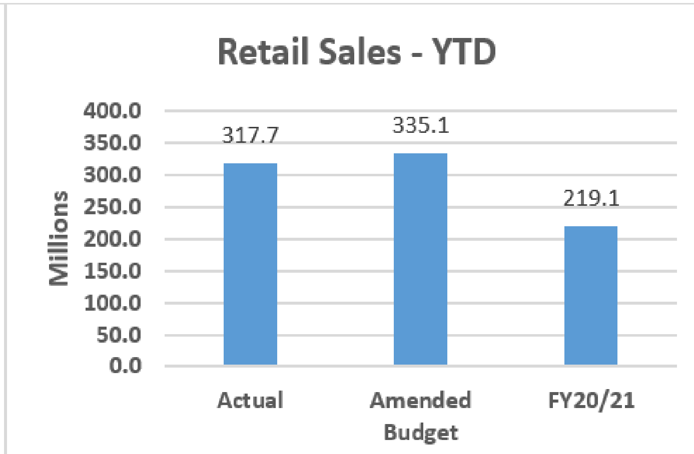
Load Statistics - GWh	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Amended Budget
Retail Sales Actual	302	288	327	322	286	306	284	294	322	347	343		3,421	
Retail Sales Budget	302	288	327	322	296	311	297	313	337	350	362	339	3,844	3,844

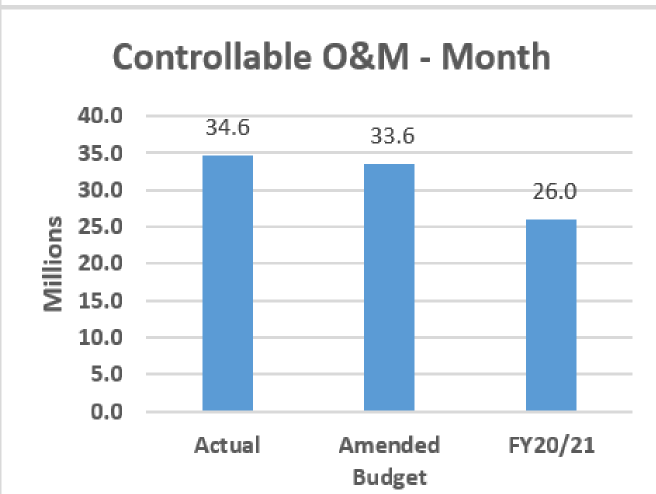
** The financial results in this report are preliminary and subject to change pending closing of the books for the fiscal year. Any potential changes are not expected to be significant.*

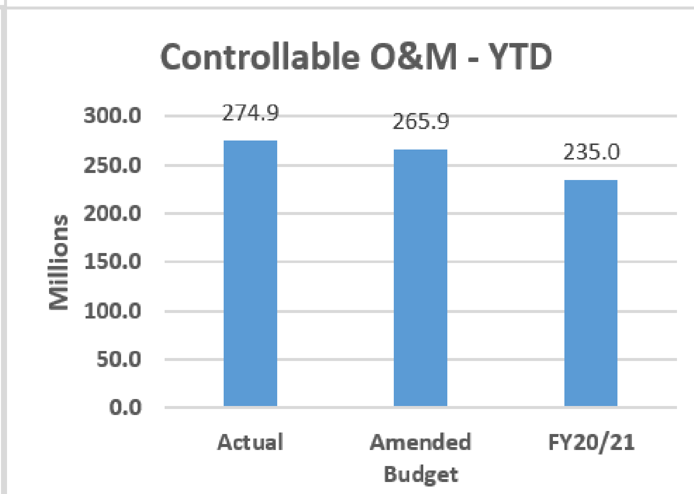


Other Statistics and Ratios	
Working Capital	$216,719,947
Current Ratio	5.2
Operating Margin	18.7%
Expense Coverage Days	227
Long-Term Debt	$0
Total Accounts	277,415
Opt-Out Accounts (Month)	89
Opt-Out Accounts (FYTD)	532
Opt-Up Accounts (Month)	(5)
Opt-Up Accounts (FYTD)	211









SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF NET POSITION
As of August 31, 2022

ASSETS		
Current Assets		
Cash & Cash Equivalents	$	180,020,331
Accounts Receivable, net of allowance		52,086,392
Accrued Revenue		28,239,762
Other Receivables		23,550
Prepaid Expenses		2,341,870
Deposits		5,555,431
Restricted cash		161,951
Total Current Assets		**268,429,287**
Noncurrent assets		
Capital assets, net of depreciation		358,374
Deposits		45,330
Total Noncurrent Assets		**403,704**
Total Assets		**268,832,991**
LIABILITIES		
Current Liabilities		
Accounts Payable		841,355
Accrued Cost of Electricity		37,148,035
Other accrued liabilities		850,834
User Taxes and Energy Surcharges due to other gov'ts		1,532,165
Supplier securit deposits		11,175,000
Total Current Liabilities		**51,547,389**
Noncurrent Liabilities		
Supplier security deposits		7,031,250
Total noncurrent liabilities		7,031,250
Total Liabilities		58,578,639
NET POSITION		
Net investment in capital assets		358,374
Restricted for security collateral		161,951
Unrestricted (deficit)		209,734,027
Total Net Position	**$**	**210,254,352**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
October 1, 2021 through August 31, 2022

OPERATING REVENUES	
Electricity Sales, Net	$ 313,676,123
GreenPrime electricity premium	1,597,123
Other income	22,750
Liquidated damages	2,371,250
TOTAL OPERATING REVENUES	**317,667,246**
OPERATING EXPENSES	
Cost of Electricity	258,320,039
Contract services	8,292,088
Staff compensation and benefits	6,084,036
General & Administrative	2,138,420
Depreciation	90,828
TOTAL OPERATING EXPENSES	**274,925,411**
OPERATING INCOME(LOSS)	**42,741,835**
NONOPERATING REVENUES (EXPENSES)	
Grant Income	1,294,077
Interest Income	259,167
Financing costs	(123,213)
TOTAL NONOPERATING REVENUES (EXPENSES)	**1,430,031**
CHANGE IN NET POSITION	44,171,866
Net Position at beginning of period	166,082,486
Net Position at end of period	**$ 210,254,352**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS
October 1, 2021 through August 31, 2022

CASH FLOWS FROM OPERATING ACTIVITIES	
Receipts from customers	$ 280,651,409
Receipts from liquidated damages	$ 2,371,250
Other operating receipts	11,275,501
Payments to suppliers for electricity	(256,215,979)
Payments for other goods and services	(11,144,967)
Payments for staff compensation and benefits	(6,022,225)
Tax and surcharge payments to other governments	(4,826,382)
Net cash provided (used) by operating activities	**16,088,607**
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES	
Grant revenue received	1,294,077
Finance costs paid	(135,697)
Net cash provided (used) by financing activities	**1,158,380**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
Acquisition of capital assets	(132,436)
CASH FLOWS FROM INVESTING ACTIVITIES	
Interest income received	259,167
Net change in cash and cash equivalents	17,373,718
Cash and cash equivalents at beginning of year	162,808,564
Cash and cash equivalents at end of period	**$ 180,182,282**
Reconciliation to the Statement of Net Position	
Cash and cash equivalents (unrestricted)	$ 180,020,331
Restricted cash	161,951
Cash and cash equivalents	**$ 180,182,282**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS (Continued)
October 1, 2021 through August 31, 2022

RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES

Operating Income (loss)	$ 42,741,835
Adjustments to reconcile operating income to net cash provided (used) by operating activities	
Depreciation expense	90,828
Revenue adjusted for uncollectible accounts	(500,000)
(Increase) decrease in net accounts receivable	(25,596,208)
(Increase) decrease in energy settlements receivable	269,012
(Increase) decrease in other receivables	206,935
(Increase) decrease in accrued revenue	(13,829,142)
(Increase) decrease in prepaid expenses	36,366
(Increase) decrease in current deposits	(4,829,347)
Increase (decrease) in accounts payable	(696,021)
Increase (decrease) in accrued cost of electricity	1,022,146
Increase (decrease) in accrued liabilities	221,275
Increase (decrease) in energy settlements payable	5,298,798
Increase (decrease) in taxes and surcharges due to other governments	477,130
Increase (decrease) in supplier security deposits	11,175,000
Net cash provided (used) by operating activities	**$ 16,088,607**

SILICON VALLEY CLEAN ENERGY AUTHORITY
BUDGETARY COMPARISON SCHEDULE
October 1, 2021 through August 31, 2022

	FYTD	FYTD	Variance		FY 2021-22	FY 2021-22
OPERATING REVENUES	**Actual**	**Amended Budget**	**$**	**%**	**Amended Budget**	**Remaining Budget**
Energy Sales	$316,405,263	$334,118,788	-$17,713,525	-5%	$384,498,000	$68,092,737
Green Prime Premium	1,597,123	964,455	632,668	66%	1,005,000	(592,123)
Liquidated damages	2,371,250		2,371,250			
TOTAL OPERATING REVENUES	**320,373,636**	**335,083,243**	**(14,709,607)**	**-4%**	**385,503,000**	**67,500,614**
ENERGY EXPENSES						
Power Supply	258,320,039	246,026,791	12,293,248	5.0%	274,979,000	16,658,961
Operating Margin	**62,053,597**	**89,056,452**	**(27,002,855)**	**-30%**	**110,524,000**	
					28.7%	
OPERATING EXPENSES						
Data Management	2,912,964	2,978,628	(65,664)	-2%	3,249,000	336,036
PG&E Fees	1,083,152	1,329,116	(245,964)	-19%	1,450,000	366,848
Salaries & Benefits	6,084,036	7,823,421	(1,739,385)	-22%	8,535,000	2,450,964
Professional Services	2,674,555	5,219,864	(2,545,309)	-49%	5,669,000	2,994,445
Marketing & Promotions	524,989	833,318	(308,329)	-37%	908,000	383,011
Notifications	116,430	120,313	(3,883)	-3%	131,000	14,570
Lease	458,631	481,250	(22,619)	-5%	525,000	66,369
General & Administrative	1,131,297	1,038,564	92,733	9%	1,225,000	93,703
TOTAL OPERATING EXPENSES	**14,986,054**	**19,824,474**	**(4,838,420)**	**-24%**	**21,692,000**	**6,705,946**
OPERATING INCOME/(LOSS)	**47,067,543**	**69,231,978**	**(22,164,435)**	**-32%**	**88,832,000**	**41,764,457**
NON-OPERATING REVENUES						
Other Income	22,750	45,833	(23,083)	-50%	50,000	27,250
Investment Income	259,167	275,000	(15,833)	-6%	300,000	40,833
TOTAL NON-OPERATING REVENUES	**281,917**	**320,833**	**(38,916)**	**-12%**	**350,000**	**68,083**
NON-OPERATING EXPENSES						
Financing	123,213	36,667	86,546	236%	40,000	(83,213)
CAPITAL EXPENDITURES, TRANSFERS, & OTHER						
Capital Outlay	132,527	137,500	(4,973)	-4%	150,000	17,473
Transfer to Programs Fund	6,216,337	6,216,337	-	0%	6,781,000	564,663
Nuclear Allocation	550,000	550,000	-	0%	600,000	50,000
Double Down Programs Allocation	15,583,333	15,583,333	-	0%	17,000,000	1,416,667
Customer Bill Relief	1,435,063	2,750,000	(1,314,937)	-48%	3,000,000	1,564,937
TOTAL OTHER USES	**23,917,260**	**25,237,170**	**(1,319,910)**	**-5%**	**27,531,000**	**3,613,740**
NET INCREASE(DECREASE) IN AVAILABLE FUND BALANCE	**$23,308,987**	**$44,278,974**	**-$20,969,987**	**-47%**	**$61,611,000**	

SILICON VALLEY CLEAN ENERGY AUTHORITY
PROGRAM FUND
BUDGETARY COMPARISON SCHEDULE
October 1, 2021 through August 31, 2022

REVENUE & OTHER SOURCES:	**Amended BUDGET**	**ACTUAL**	**ADOPTED BUDGET REMAINING**	**ACTUAL/ ADOPTED BUDGET**
Transfer from Operating Fund	$ 24,381,000	$ 22,349,670	$ 2,031,330	91.7%
EXPENDITURES & OTHER USES:				
Program expenditures	8,581,851	1,521,168	7,060,683	17.7%
Net increase (decrease) in fund balance	**$ 15,799,149**	**$20,828,502**		
Fund balance at beginning of period		5,837,711		
Fund balance at end of period		$26,666,213		

CUSTOMER RELIEF & COMMUNITY RESILIENCY FUND
BUDGETARY COMPARISON SCHEDULE
October 1, 2021 through August 31, 2022

REVENUE & OTHER SOURCES:	**Amended BUDGET**	**ACTUAL**	**ADOPTED BUDGET REMAINING**	**ACTUAL/ ADOPTED BUDGET**
Transfer from Operating Fund *	$ -	$ -	$ -	
EXPENDITURES & OTHER USES:				
Program expenditures *	2,850,000	7,322	2,842,678	0.3%
Net increase (decrease) in fund balance	**$ (2,850,000)**	**(7,322)**		
Fund balance at beginning of period		7,990,315		
Fund balance at end of period		$7,982,993		

SILICON VALLEY CLEAN ENERGY AUTHORITY

OPERATING FUND
BUDGET RECONCILIATION TO STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
October 1, 2021 through August 31, 2022

Net Increase (decrease) in available fund balance per budgetary comparison schedule	$	23,308,987
Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position		
Subtract depreciation expense		(90,828)
Subract program expense not in operating budget		(1,521,168)
Subract CRCR expense not in operating budget		(7,322)
Add back transfer to Program fund		22,349,670
Add back capital asset acquisition		132,527
Change in Net Position		**44,171,866**

SILICON VALLEY CLEAN ENERGY AUTHORITY
STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
October 1, 2021 through August 31, 2022

	October	November	December	January	February	March	April	May	June	July	August	September	YTD
OPERATING REVENUES													
Electricity sales, net	$ 17,365,080	$ 14,621,707	$ 17,815,729	$ 17,228,581	$ 16,277,554	$ 29,781,167	$ 31,256,974	$ 31,334,686	$ 44,768,429	$ 45,749,089	$ 47,477,127		$ 313,676,123
Green electricity premium	80,961	$ 60,556	$ 95,594	$ 462,687	$ 103,634	$ 131,601	$ 116,747	$ 141,505	$ 131,322	$ 132,086	$ 140,430		1,597,123
Other Income	1,000	$ 2,500	$ 1,000	$ 3,500	$ 2,250	$ 5,251	$ 1,000	$ 2,000	$ 1,000	$ 1,000	$ 2,249		22,750
Liquidated damages				922,250	$ 1,302,000	$ -	$ -	$ -	$ -	$ -	$ 147,000		2,371,250
Total operating revenues	17,447,041	14,684,763	17,912,323	18,617,018	17,685,438	29,918,019	31,374,721	31,478,191	44,900,751	45,882,175	47,766,806	-	317,667,246
OPERATING EXPENSES													
Cost of electricity	14,524,607	17,907,845	18,660,060	23,179,137	22,034,894	26,743,821	18,988,683	23,163,741	30,278,708	29,881,798	32,956,745		258,320,039
Staff compensation and benefits	448,844	465,162	593,320	572,350	538,861	551,232	540,655	555,023	630,611	555,633	632,345		6,084,036
Data manager	263,759	263,759	262,863	263,514	264,092	264,817	265,002	-	531,059	266,835	267,264		2,912,964
Service fees - PG&E	97,254	96,768	104,341	97,053	97,084	97,331	97,671	-	199,269	98,199	98,182		1,083,152
Consultants and other professional fees	370,413	341,404	376,273	473,924	393,452	363,558	395,856	744,189	28,855	318,955	489,093		4,295,972
General and administration	209,985	134,289	152,437	306,490	129,063	161,762	179,349	247,909	175,222	255,408	186,506		2,138,420
Depreciation	7,289	8,162	7,774	7,716	7,853	8,168	8,169	8,558	8,558	9,230	9,351		90,828
Total operating expenses	15,922,151	19,217,389	20,157,068	24,900,184	23,465,299	28,190,689	20,475,385	24,719,420	31,852,282	31,386,058	34,639,486	-	274,925,411
Operating income (loss)	1,524,890	(4,532,626)	(2,244,745)	(6,283,166)	(5,779,861)	1,727,330	10,899,336	6,758,771	13,048,469	14,496,117	13,127,320	-	42,741,835
NONOPERATING REVENUES (EXPENSES)													
Grant Income										1,294,077	-		1,294,077
Interest income	18,545	18,382	19,370	18,957	16,791	17,596	15,861	16,059	29,596	39,531	48,479		259,167
Financing costs	(11,042)	(11,626)	(12,027)	(11,042)	(11,226)	(11,042)	(11,042)	(11,041)	(11,042)	(11,042)	(11,041)		(123,213)
Total nonoperating revenues (expenses)	7,503	6,756	7,343	7,915	5,565	6,554	4,819	5,018	18,554	1,322,566	37,438	-	1,430,031
CHANGE IN NET POSITION	**$ 1,532,393**	**$ (4,525,870)**	**$ (2,237,402)**	**$ (6,275,251)**	**$ (5,774,296)**	**$ 1,733,884**	**$ 10,904,155**	**$ 6,763,789**	**$ 13,067,023**	**$ 15,818,683**	**$ 13,164,758**	**$ -**	**$ 44,171,866**

SILICON VALLEY CLEAN ENERGY AUTHORITY
INVESTMENTS SUMMARY
October 1, 2021 through August 31, 2022

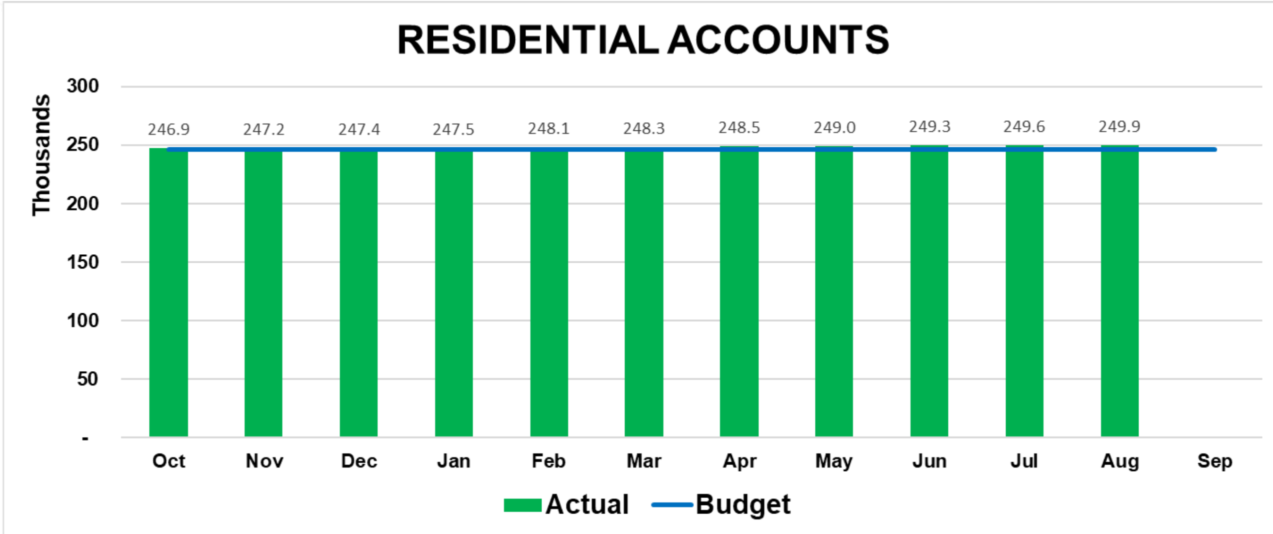
Return on Investments	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**YTD Total**
	$18,545	$18,382	$19,370	$18,957	$16,791	$17,596	$15,861	$16,059	$29,596	$39,531	$48,479	$0	**$259,167**
Portfolio Invested													
*Average daily portfolio available to invest**	152,976,979	155,897,345	155,743,105	157,270,808	153,138,549	145,837,752	137,341,613	133,261,734	132,574,141	145,457,337	153,975,169		
Average daily portfolio invested	141,994,910	145,456,026	148,530,962	147,297,741	145,363,213	137,891,490	128,040,211	122,422,665	125,005,246	132,803,050	141,713,500		
% of average daily portfolio invested	92.8%	93.3%	95.4%	93.7%	94.9%	94.6%	93.2%	91.9%	94.3%	91.3%	92.0%		

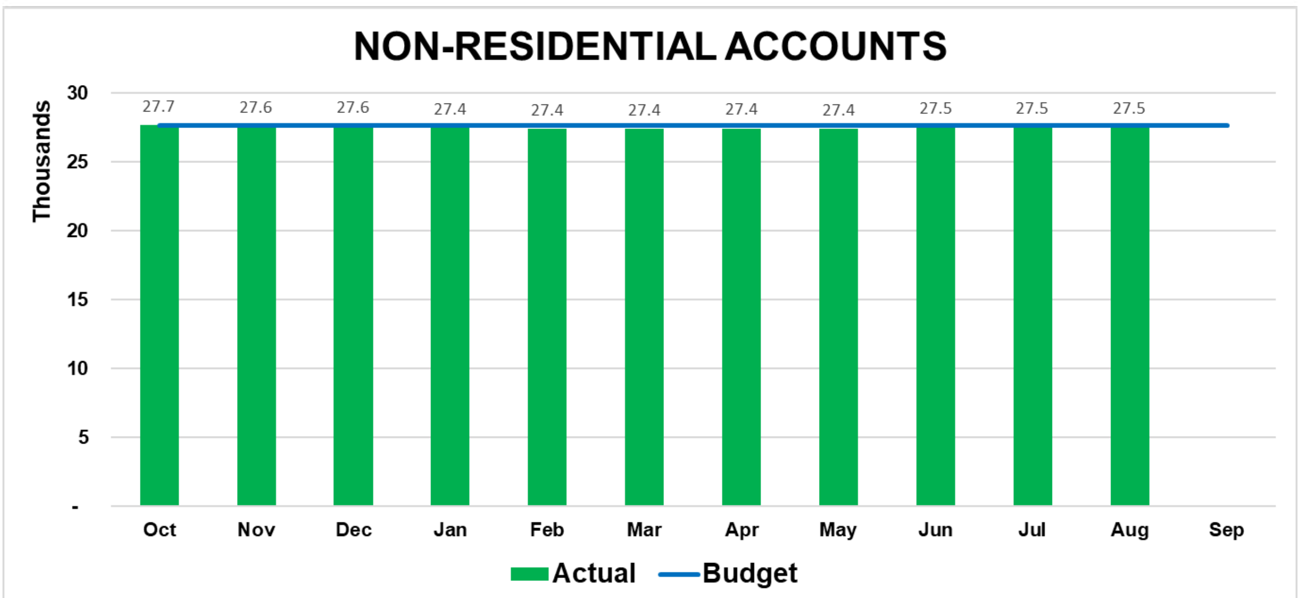
Detail of Portfolio

	Opening Rate	**Current Rate**	**Carrying Value**	**Interest Earned**
Money Market - River City Bank	1.26%	0.36%	$160,949,180	$42,132

* Note: Balance available to invest does not include lockbox funds.

CUSTOMER ACCOUNTS

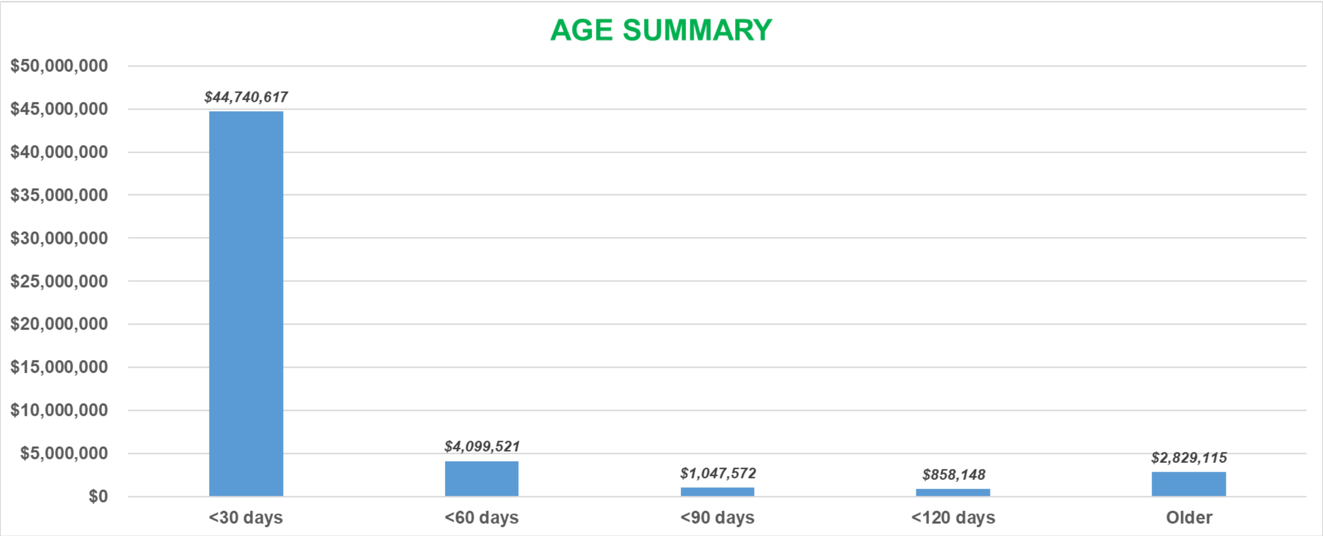




SILICON VALLEY CLEAN ENERGY AUTHORITY
ACCOUNTS RECEIVABLE AGING REPORT

	October	November	December	January	February	March	April	May	June	July	August	September
0 to 30 days	74.6%	66.6%	67.7%	70.4%	73.9%	77.7%	83.0%	80.6%	81.6%	84.6%	83.5%	
31 to 60 days	8.3%	11.6%	9.1%	5.4%	6.9%	6.7%	4.5%	7.6%	7.6%	5.6%	7.7%	
61 to 90 days	3.1%	3.7%	5.1%	3.9%	2.7%	2.7%	2.2%	2.0%	2.4%	2.4%	2.0%	
91 to 120 days	2.0%	2.9%	3.0%	3.2%	2.5%	1.7%	1.7%	1.6%	1.3%	1.6%	1.6%	
Over 120 days	12.0%	15.1%	15.0%	17.1%	14.1%	11.1%	8.6%	8.1%	7.1%	5.9%	5.3%	

Accounts Receivable Days
51 Days
$53,574,972
TOTAL DUE
Bad Debt % (*Budget*)
1%



SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1d

Item 1d:	**Adopt Resolution Authorizing Public Meetings to Continue to Be Held Via Teleconferencing Pursuant to Government Code Section 54953(e) and Making Findings**
From:	Trisha Ortiz, General Counsel
Prepared by:	Trisha Ortiz, General Counsel
Date:	10/12/2022

RECOMMENDATION

To continue meetings to be held via teleconferencing pursuant to Government Code Section 54953(e), adopt the attached Resolution 2022-22 making the findings required by Section 54953(e)(3).

BACKGROUND

Pursuant to Government Code Section 54953(b)(3) legislative bodies may meet by "teleconference" only if the agenda lists each location a member remotely accesses a meeting from, the agenda is posted at all remote locations, and the public may access any of the remote locations. Additionally, a quorum of the legislative body must be within the legislative body's jurisdiction.

Due to the COVID-19 pandemic, the Governor issued Executive Order N-29-20, suspending certain sections of the Brown Act. Pursuant to the Executive Order, legislative bodies no longer needed to list the location of each remote attendee, post agendas at each remote location, or allow the public to access each location. Further, a quorum of the legislative body does not need to be within the legislative body's jurisdiction. After several extensions, Executive Order N-29-20 expired on September 30, 2021.

On September 16, 2021 Governor Newsom signed AB 361, new legislation that amends the Brown Act to allow local agencies to meet remotely during Governor declared emergencies under certain conditions. AB 361 authorizes local agencies to continue meeting remotely without following the Brown Act's standard teleconferencing provisions if the meeting is held during a state of emergency proclaimed by the Governor and either of the following applies: (1) state or local officials have imposed or recommended measures to promote social distancing; or (2) the agency has already determined or is determining whether, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

Due to the rise in COVID-19 cases caused by the Delta Variant, on September 21, 2021, the Santa Clara County Health Officer issued a recommendation that public bodies meet remotely due to the increased protection provided by social distancing. The Health Officer cited "unique characteristics" of government meetings that lead to increased risk of transmission, including the gathering of people from across communities, the need for everybody to participate (including those who are immunocompromised or unvaccinated), and difficulty ensuring compliance with vaccination and safety recommendations. In addition, the Health Officer has described the new Omicron variant as significantly more transmissible than prior variants of the virus.

Agenda Item: 1d **Agenda Date: 10/12/2022**

On October 13, 2021, the Board adopted its Resolution 2021-23 to authorize public meetings to be held via teleconferencing pursuant to Government Code section 54953(e).

Within thirty days after the first teleconferenced meeting held under AB 361, and every thirty days thereafter, in order to continue meeting by teleconference, the local agency's legislative body must find that it has reconsidered the circumstances of the state of emergency and that either: (1) The state of emergency continues to directly impact the ability of the members to meet safely in person; or (2) State or local officials continue to impose or recommend measures to promote social distancing.

The list below identifies the board meeting dates and corresponding resolutions authorizing public meetings to continue to be held via teleconferencing pursuant to Government Code Section 54953(e) and directing staff to return with a resolution to make the findings necessary to continue meeting pursuant to Government Code section 54953(e):

November 10, 2021: 2021-26;
December 8, 2021: 2021-27;
January 12, 2022: 2022-02;
February 9, 2022: 2022-03;
March 9, 2022: 2022-07;
April 13, 2022: 2022-11;
May 11, 2022: 2022-13;
June 8, 2022: 2022-14, and
August 10, 2022: 2022-18; and
September 14, 2022: 2022-19

STRATEGIC PLAN

SVCE's Board-adopted Strategic Plan identifies engaging the public as a goal of SVCE and remote meetings will better engage the public as long as COVID-19 is a threat to public health.

FISCAL IMPACT

Continuing to conduct remote public Board of Directors and Standing Committee meetings will not increase the cost of meetings.

ANALYSIS & DISCUSSION

The attached Resolution makes the periodic findings necessary to continue holding meetings under Government Code Section 54953(e). Specifically, the attached Resolution makes findings that the Board has reconsidered the circumstances of the COVID-19 state of emergency and that local officials continue to recommend measures to promote social distancing. As required by Government Code Section 54953(e)(3), the resolution makes the findings and provides that the findings will cover the period of time until the next regular meeting of the Board. The resolution applies to both the Board of Directors and its Committees.

Staff will continue to monitor the situation and will return to the Board every 30 days or as needed with additional recommendations related to the conduct of public meetings.

ATTACHMENTS

1. Resolution 2022-22 Reconsidering Circumstances Of The COVID-19 State Of Emergency And Making Findings In Connection Therewith To Authorize Public Meetings To Be Held Via Teleconferencing Pursuant To Government Code Section 54953(e)

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2022-22

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY RECONSIDERING CIRCUMSTANCES OF THE COVID-19 STATE OF EMERGENCY AND MAKING FINDINGS IN CONNECTION THEREWITH TO AUTHORIZE PUBLIC MEETINGS TO BE HELD VIA TELECONFERENCING PURSUANT TO GOVERNMENT CODE SECTION 54953(e)

WHEREAS, the Silicon Valley Clean Energy Authority ("Authority") was formed on March 31, 2016 pursuant to a Joint Powers Agreement to study, promote, develop, conduct, operate, and manage energy programs in Santa Clara County; and

WHEREAS, the Board of Directors ("the Board") of Silicon Valley Clean Energy ("SVCE") is committed to public access and participation in its meetings while balancing the need to conduct public meetings in a manner that reduces the likelihood of exposure to COVID-19; and

WHEREAS, all meetings of the Board of Directors and the other legislative bodies of SVCE are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the Board and other legislative bodies conduct their business; and

WHEREAS, pursuant to Assembly Bill 361 legislative bodies of local agencies may hold public meetings via teleconferencing pursuant to Government Code Section 54953(e), without complying with the requirements of Government Code Section 54953(b)(3), if the legislative body complies with certain enumerated requirements in any of the following circumstances:

1. The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.
2. The legislative body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.
3. The legislative body holds a meeting during a proclaimed state of emergency and has determined, by majority vote, that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; and

WHEREAS, on March 4, 2020, Governor Newsom declared a State of

Emergency in response to the COVID-19 pandemic (the "Emergency") which remains in effect; and

WHEREAS, the Santa Clara Public Health Officer recommends that public bodies meet remotely to the extent possible, specifically including use of newly enacted AB 361.

WHEREAS, due to the ongoing COVID-19 pandemic and the need to promote social distancing to reduce the likelihood of exposure to COVID-19, the Board determined that meetings of the SVCE legislative bodies may be held via teleconferencing pursuant to Government Code Section 54953(e).

WHEREAS, to continue meeting pursuant to Government Code Section 54953(e), an agency must make periodic findings that: (1) the body has reconsidered the circumstances of the declared emergency; and (2) that any of the following circumstances exist: (a) the state of emergency continues to directly impact the ability of the members to meet safely in person, or (b) state or local officials continue to impose or recommend measures to promote social distancing.

NOW THEREFORE, the Board of Directors of the Silicon Valley Clean Energy Authority does hereby resolve, determine, and order as follows:

Section 1. The Recitals provided above are true and correct and are hereby incorporated by reference.

Section 2. The Board has reconsidered the circumstances of the COVID-19 state of emergency and local officials continue to recommend measures to promote social distancing.

Section 3. The Board and other legislative bodies of SVCE may continue to conduct their meetings pursuant to Government Code section 54953(e).

Section 4. Staff is hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution. Such action includes returning to the Board within 30 days and every 30 days thereafter to make the findings required by Section 54953(e)(3).

Section 5. This Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED this 12th day of October 2022, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Willey				
City of Gilroy	Director Hilton				
City of Los Altos	Director Fligor				

Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Ellahie				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

____
Chair

ATTEST:

____
Andrea Pizano, Board Clerk

Staff Report – Item 1e

Item 1e:	**Adopt FY23 SVCE Strategic Work Plan**
From:	Girish Balachandran, CEO
Prepared by:	Sanjay Natu, Internal Operations Program Manager
Date:	10/12/2022

RECOMMENDATION

Staff recommends the SVCE Board of Directors adopt SVCE's detailed Strategic Work Plan. This Strategic Work Plan will guide SVCE toward its mission of reducing dependence on fossil fuels by providing carbon free, affordable, and reliable electricity and innovative programs for the SVCE community.

BACKGROUND

On September 14, 2022, the SVCE Board approved five Strategic Focus Areas to guide the agency through the next fiscal year. These focus areas are also mirrored in the CEO's annual goals. As part of the multiple discussions with the Board and committees from May through September, it was decided that the Mission and Measure of meeting the mission would not change. The CEO also reported that the detailed work plan would be updated and presented to the Board at the October meeting for approval.

The accompanying document details the goals and measures that comprise the detailed SVCE Strategic Work Plan. **The workplan is a living document, managed in monthly meetings and priorities/changes will be discussed quarterly. We anticipate changes to the workplan in the following emerging areas:**

- Next developments in Inflation reduction act

The attached SVCE Strategic Work Plan for 2022-23 outlines 21 goals and 81 measures.

The Mission did not change;
The Measure of Meeting the Mission did not change.

The following tables show how the strategic focus areas have changed from the previous fiscal year. The second table shows how each of the Board-approved strategic focus areas map to multiple goals and measures in the detailed work plan.

2021-22 Strategic Focus Areas
Additional Staffing to Maintain Capacity & Organization Succession Planning
Operations Mode with PPA's coming online
Procurement, Clean Energy Mix & Integration
Financial Stability & Trade-Offs
Internal Operations & Cyber Risk Management
Grow the organization to expand our strategic efforts on climate change and decarbonization

2022-23 Strategic Focus Areas		**Related Strategic Workplan Plan Goals/Measures (G/M)**
24x7 CLEAN ENERGY: Explore 24x7 clean energy delivery at scale, to improve on the current 100% clean energy goal	➡	G1/M1, G8/M1, G2/M2, G1/M2, G10/M6
CUSTOMER BASE & ELECTRIFICATION: Grow Customer Base & Offerings, Emphasize Electrification	➡	G7/M4, G8/M4, G8/M5, G8/M6, G8/M2, G6/M1, G6/M2, G10/M7, G7/M2,G8/M7
INFLATION REDUCTION ACT: Accelerate deployment of currently adopted decarbonization strategies and goals; evaluate and capitalize on the Inflation Reduction Act & California state budget climate funds to further improve programs	➡	G2/M4, G10/M1, G10/M2, G10/M8, G9/M4, G10/M3, G7/M5, G14/M1, G10/M5, G10/M9, G4, G9/M1, G9/M2, G9/M3, G7/M2, G5/M3, G7/M1
FINANCE: Leverage Balance Sheet for Structured Financing and use financing solutions to increase impact of decarbonization program offerings, especially to lower-income customers	➡	G18/M1, G3/M4, G7/M4, G8/M4, G8/M5, G8/M6, G18/M5
EMPLOYEES: Be The Employer of Choice, & Increase Staffing	➡	G15/M5, G16/M3, G16/M1

The following changes were made:

- New goal added in legislative area to address Inflation reduction Act: Evaluate and capitalize on the Inflation Reduction Act, improving on currently adopted decarbonization strategies and goals.
- Two overlapping legislative goals related to engagement with regulators, legislators, and local elected officials engagement were combined in one.

All the measures were reviewed by staff in context of discussions and direction from the Board related to the Strategic Focus Areas and existing priorities. These were updated to reflect current conditions. Internal documents with more detail to guide each department's work have been developed and these will be updated as needed in monthly and quarterly meetings with staff.

Staff is also working on re-framing the work plan into a customer facing document. This will be developed over the next few weeks and posted to the web and also provided to the Board and Alternate Board members.

ATTACHMENTS

1. SVCE 2022 – 2023 Strategic Workplan with Goals & Measures

SVCE 2022 – 2023 Workplan Preamble and Goals

SVCE Mission

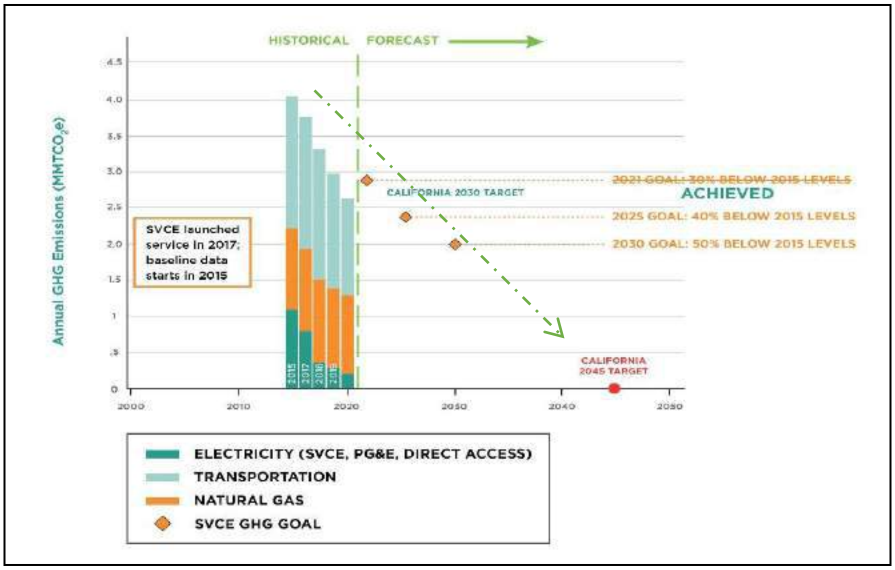
Reduce dependence on fossil fuels by providing carbon free, affordable, and reliable electricity and innovative programs for the SVCE community

Measure of Meeting the Mission

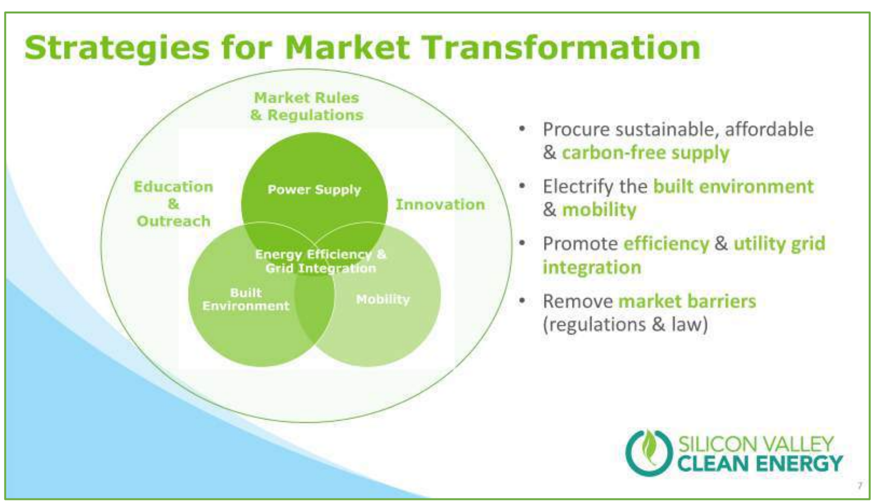
SVCE, working with SVCE member agencies, aspires to achieve energy and transportation GHG reductions of 30% from the 2015 baseline by 2021, 40% by 2025, and 50% by 2030

SUMMARY:

SVCE was founded to address climate change, the greatest existential threat of our time. We will play a vital role in this decades-long endeavor, with the ongoing support of our community and our Board. In addition to the most complex, expensive, and regulated sector of providing carbon-free electricity, we are reinvesting in our region and expanding our toolset for furthering emissions reductions by launching decarbonization and grid innovation programs. These programs represent the next stage in SVCE's maturity and are the mechanism by which SVCE will further engage our communities to achieve our mission.



We embody the entrepreneurial and innovative spirit of the community in which we live and work, the spirit of Silicon Valley, to bend the carbon curve downwards and improve the lives of our community members. This means taking calculated risks and demonstrating novel approaches that have the potential to make big impacts – our results serve to inform, inspire, and influence the rest of the market to achieve outsized results.



We prioritize collaborating with our peers and stakeholders to broaden our impact, for instance by forming regional efforts; widely disseminating results (including unanticipated ones) so that others can learn from our experience; and build on the promising approaches pioneered by others.

Here are our **Workplan Goals**, followed by narrative leading to these goals and how we will measure achieving these goals:

1. Plan for resources to meet SVCE's mission while balancing multiple stakeholder objectives
2. Acquire clean and reliable electricity in a cost effective, equitable and sustainable manner
3. Manage and optimize power supply resources to meet affordability, GHG reduction and reliability objectives
4. Advocate for policies that protect CCA customer investments and furthers decarbonization, grid reliability, affordability, and social equity with federal and state elected officials and regulators
5. Develop and enhance internal processes related to Supplier Diversity, Staffing and Compliance
6. Empower customers with the awareness, knowledge and resources needed to make effective clean energy choices
7. Support communication and engagement with public, private, and non-profit stakeholders to leverage our decarbonization efforts
8. Enact and maintain competitive service offerings for SVCE customers that deliver measurable economic and environmental benefits
9. Work with the community to plan for and track achieving energy and transportation GHG reductions of 30% from the 2015 baseline by 2021, 40% by 2025, and 50% by 2030
10. Coordinate development of decarbonization and resilience strategy, lead design of local policy, and design and deploy programs
11. Enable data-driven decision-making across the organization
12. Support legislation which advances SVCE's mission to reduce dependence on fossil fuels by supporting the development of a low carbon, affordable, and reliable electric system while simultaneously advancing economy-wide decarbonization
13. Engage elected officials to inform them of SVCE's work and to partner on advancing policies
14. Evaluate and capitalize on the Inflation Reduction Act, improving on currently adopted decarbonization strategies and goals
15. Build and maintain a high-performing team to be an employer of choice
16. Maintain an enjoyable and rewarding workplace to be an employer of choice
17. Get great at prioritizing, and rebalancing to align SVCE work with SVCE strategic focus areas
18. Commit to maintaining a strong financial position
19. Avoid failures in management of market risk, credit risk, liquidity risk, operational risks, and enterprise risks
20. Ensure SVCE's Information Technology infrastructure is secure, reliable, and disaster resilient to provide 24/7/365 online access
21. Enable data-driven decision-making across the organization; automate, integrate, and streamline business processes to minimize operational risk and move organization toward industry best practices from its startup phase

2022-23 BOARD STRATEGIC FOCUS AREAS:

During the period from May-September 2022, the Board identified and approved 5 Focus Areas for the next year. This table shows the strategic plan goals where we address these focus areas.

SVCE 2022 – 2023 Workplan Preamble and Goals

2022-23 Strategic Focus Areas		Related Strategic Workplan Plan Goals/Measures (G/M)
24x7 CLEAN ENERGY: Explore 24x7 clean energy delivery at scale, to improve on the current 100% clean energy goal	➡	G1/M1, G8/M1, G2/M2, G1/M2, G10/M6
CUSTOMER BASE & ELECTRIFICATION: Grow Customer Base & Offerings, Emphasize Electrification	➡	G7/M4, G8/M4, G8/M5, G8/M6, G8/M2, G6/M1, G6/M2, G10/M7, G7/M2, G8/M7
INFLATION REDUCTION ACT: Accelerate deployment of currently adopted decarbonization strategies and goals; evaluate and capitalize on the Inflation Reduction Act & California state budget climate funds to further improve programs	➡	G2/M4, G10/M1, G10/M2, G10/M8, G9/M4, G10/M3, G7/M5, G14/M1, G10/M5, G10/M9, G4, G9/M1, G9/M2, G9/M3, G7/M2, G5/M3, G7/M1
FINANCE: Leverage Balance Sheet for Structured Financing and use financing solutions to increase impact of decarbonization program offerings, especially to lower-income customers	➡	G18/M1, G3/M4, G7/M4, G8/M4, G8/M5, G8/M6, G18/M5
EMPLOYEES: Be the Employer of Choice, & Increase Staffing	➡	G15/M5, G16/M3, G16/M1

FUNCTIONAL NARRATIVES AND MEASURES:

A. 4PRO: POWER POLICY, PLANNING, PROCUREMENT, REGULATORY AND OPERATIONS

SVCE's Power Resource Team is responsible for policy and regulatory advocacy, planning, acquiring, operating and managing power supply resources to meet the community's clean energy goals and state-mandated power and reliability requirements. This is done through a balanced approach which considers cost, risk, long-term value, and best fit in meeting community goals. This requires sustainable planning, innovative thinking, prudent risk management and the constant search for the best solutions and mix of resources to meet SVCE's clean energy goals in an affordable and reliable manner, while putting SVCE on a path to carbon-free on a 24x7 basis. Going forward, to be successful SVCE must adapt to new climate and social challenges; customer specific needs; support region-wide decarbonization and electrification goals; integrate distributed energy resources; collaborate and leverage opportunities for joint procurement; and become technology and data driven.

The regulatory processes wield critical influence over SVCE's ability to serve our customers and fulfill our core goals and mission. SVCE proactively promotes a stable, long-term regulatory infrastructure that supports our vision to decarbonize and electrify the grid. SVCE will work to align regulatory directives with SVCE's mission, incentivize resources that decarbonize the grid, and serve our customers' needs within the evolving energy market.

SVCE 2022 – 2023 Workplan Preamble and Goals

SVCE will actively engage with the regulatory stakeholders to enhance our ability to mitigate greenhouse gas emissions, protect the large investments made by SVCE on behalf of our customers, minimize rate volatility, encourage regulatory certainty, and help build a policy framework that supports innovation in an equitable and cost-effective manner.

Goals	Measures
G1: Plan for resources to meet SVCE's mission while balancing multiple stakeholder objectives	M1: Integrated Resource Planning - develop pathway to affordable, reliable, and carbon-free power supply by 2035 and beyond (2045)
	M2: Develop a platform to integrate wholesale market driven VPP into supply planning and operations
	M3: Deploy new forecasting function to integrate software and resources to expand insights, planning and reporting
G2: Acquire clean and reliable electricity in a cost effective, equitable and sustainable manner	M1: Achieve SVCE 100% Clean goals; meet RPS mandates; meet RA obligations; meet IRP procurement mandates; Meet MTR, FCR, and LDS mandates
	M2: Meet SVCE's standard retail rate product offerings (i.e., GreenPrime, GreenPrime Direct and GreenStart) and assist in the development of sustainable, strategic and risk managed GreenPrime Direct and other Commercial Industrial custom product offerings.
	M3: Deploy joint procurement of cost effective renewable, with special consideration for resource adequacy reform, and standalone and paired storage resources.
	M4: Evaluate the impacts and opportunities under the IRA including clean energy asset ownership to structurally lower costs and lower risk
G3: Manage and optimize power supply resources to meet affordability, GHG reduction and reliability objectives	M1: Manage Power Supply Portfolio and Energy Risk, and Optimize Market Participation
	M2: Implement and Operate Power Purchase Agreements to enhance value to SVCE
	M3: Ensure SVCE adopts the appropriate tools, systems, and resources to support new resource valuations, portfolio optimization, risk management, load forecasting, compliance, and settlements
	M4: Effectively manage portfolio through timely and accurate validation and reconciliation of portfolio performance and costs
G4: Advocate for policies that protect CCA customer investments and further decarbonization, grid reliability, affordability, and social equity with federal and state elected officials and regulators.	M1: Actively advocate in resource planning proceedings (RA, IRP) at the CPUC and CEC to ensure any regulations are aligned with SVCE procurement.
	M2: Advocate at the CAISO to ensure procurement requirements are aligned with SVCE priorities and coordinated with CPUC regulations.
	M3: Advocate for policies that help reduce PCIA volatility and uphold customer indifference and don't penalize CCA customers for taking service from a CCA over another LSE.
	M4: Advocate for increased data access and an open access platform in the CPUC Distributed Energy Resources (DER) proceeding.
G5: Develop and enhance internal processes related to	M1: Adopt agency-wide Diversity Equity and Inclusion (DEI) Framework

Supplier Diversity, Staffing and Compliance	M2: Develop an enterprise-wide compliance structure for SVCE
	M3: Develop PPA & Organization-wide procurement guidelines and/or policies to promote fair labor/workforce, environmental practices, and community benefits

B. ESCR: ENERGY SERVICES AND COMMUNITY RELATIONS

Core to SVCE's mission is delivery of high-value clean energy services and programs for our customers, who range from individual residents and small businesses to some of the world's largest and most innovative tech companies. By providing reliable and responsive carbon-free electricity service at competitive rates, SVCE maintains a high customer participation rate and a strong financial foundation. Access to carbon-free electricity has helped our communities take a major step in fighting climate change, reducing local emissions by more than 35%. Yet supplying clean electricity is just the start. To be the 'provider of choice' and meet longer-term community decarbonization goals, SVCE must continue to provide competitive energy services, and innovative programs for electrification at scale in transportation and the built environment. These must be well-tailored to the needs of our customers, including those traditionally underserved or difficult to reach, and large commercial customers with access to many other providers.

It is essential that SVCE engage our 270,000+ residential and commercial electricity customers in the electrification journey and take the necessary next steps. To do so, SVCE must continue to inspire and educate customers, and enable relevant action. This means expanding awareness and becoming a trusted advisor for electrification and leveraging direct digital engagement with customers via the web, email, and hosted online services. Supporting information and tools must be engaging, factual and easy to understand for customers, and useful for stakeholders including community leaders, local elected officials, labor, and private sector partners.

Given the scale of the challenge, effective public communication is critical. This includes regular communications to key stakeholder groups, and more broadly, telling the essential 'stories' behind electrification and decarbonization. To win hearts and minds, SVCE must work to illustrate the full range of social, environmental, and economic benefits and consequences at stake. In addition, SVCE must cultivate customer and stakeholder relationships in a leveraged way - using an array of channels that bring value to all segments of the communities we serve.

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Goals	Measures
G06: Empower customers with the awareness, knowledge and resources needed to make effective clean energy choices	M1: Deploy building and transportation electrification awareness advertising campaigns locally
	M2: Enable customer education, engagement and action related to electrification and decarbonization, via online tools, resources, and promotions
	M3: Provide awareness-building and education via local events, sponsorships, demonstrations and support of educational grants

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	M4: Program marketing and communications
G07: Support communication and engagement with public, private, and non-profit stakeholders to leverage our decarbonization efforts	M1: Develop and expand relationships, education and engagement with labor and the local contractor community
	M2: Maintain and expand community communications and engagement via member agency channels, electrification engagement grants
	M3: Deliver strategic communications that support expanded engagement with legislative and industry audiences
	M4. Maintain and expand relationships, education, and engagement with local business customer community
	M5. Expand outreach and engagement with underserved/hard-to-reach communities
G08: Enact and maintain competitive service offerings for SVCE customers that deliver measurable economic and environmental benefits	M1: Maintain SVCE customer value proposition providing carbon-free energy at competitive rates for all segments and rate classes.
	M2: Establish new rate program(s) to promote electrification, and matching of clean energy supply and demand
	M3: Provide policy support for key customer-facing L&R activities
	M4: Provide responsive customer service, grow customer awareness and satisfaction, and maintain/expand customer participation rate
	M5: Operationalize customized power offerings for large C&I customers
	M6: Establish additional customized power offerings and/or strategic development agreements with large C&I customers
	M7: Develop and implement program(s) for commercial building electrification and expanded deployment of all-electric building technologies, EV charging infrastructure

C. DPP: DECARBONIZATION PROGRAMS & POLICY

SVCE's Decarbonization Programs & Policy team is responsible for leading the design, development, implementation and evaluation of community programs and local policies to drive carbon out of Santa Clara County in an equitable and scalable manner. We take calculated risks to demonstrate novel technologies, programs and approaches that address critical barriers preventing large-scale decarbonization. This emphasis on scaling and removing friction enables us to achieve outsized results through our programs. We take an integrated and collaborative approach that ties together power supply, transportation, the built environment, energy efficiency and grid integration. Our efforts emphasize building the technical, practical, economic, and public-awareness foundation to enable and support local policy adoption. We leverage partnerships, foster innovation, and use data science to deploy initiatives that provide value to our customers and community, and are scalable and transferable beyond our borders.

Goals	Measures
G9. Work with the community to plan for and track achieving energy and transportation	M1. Carry out annual GHG emissions inventory by source and sector to track and report progress toward meeting climate goals, and support Member Agencies with their inventories.

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GHG reductions of 30% from the 2015 baseline by 2021, 40% by 2025, and 50% by 2030 .	M2. Maintain (or license) GHG forecasting model to carry out scenario analyses as well as assess potential impact of proposed policies and programs.
	M3. Update sector-specific analyses on an as-needed basis (e.g., Buildings Baseline Study, DER/electrification potential) to inform the development and updates to strategies for achieving decarbonization and resilience targets.
	M4. Develop and track relevant additional sector specific KPIs (e.g., number of gas accounts, square footage of all-electric buildings, DER deployment, etc. by municipality, sector, SEVI quartile, etc.).
	M5: Share data and communicate progress toward our mission via public-facing websites, dashboards, or other reports.
G10. Coordinate development of decarbonization and resilience strategy, lead design of local policy, and design and deploy programs.	M1. Lead collaborative development, periodic updates, management & reporting of decarbonization and resilience strategies and plans o Decarbonization Strategy & Programs Roadmap o Electric Vehicle Infrastructure Joint Action Plan o Building Decarbonization Joint Action Plan o Community Energy Resilience Roadmap o Double Down Plan for Increased Programs Funding o Track and React to Inflation Recovery Act
	M2. Lead programs on decarbonization focus areas (including topics of mobility, built environment, energy efficiency, innovation, and resilience). Periodically lead prioritization reviews of program portfolio.
	M3. Operationalize the Programs Equity Framework by incorporating equity considerations into program design, implementation, outreach, and evaluation through guidelines and resources for staff to apply to current and future SVCE programs.
	M4. Lead evaluation, measurement & verification activities, and impact reporting for programs, and disseminate results widely.
	M5. Support member agencies in their community's decarbonization efforts by providing funding on key initiatives and helping build capacity at the agency.
	M6. Lead collaboration with 4PRO and ESCR to analyze, develop and deploy effective policies, tools, and frameworks to successfully incorporate behind-the-meter activities into a fully integrated approach to power resource planning and management (e.g., virtual power plant).
	M7. Explore the potential of Financing Programs to support electrification program efforts at scale.
	M8. Increase organizational capacity to rapidly design, deploy, and manage programs at a significantly larger scale (e.g., budget, number of units deployed).
	M9. Lead local policy development and support adoption as a key lever for large-scale decarbonization impacts across SVCE territory and the state.

	M10. Build coalitions, networks, and relationships to inform policy and program development, reduce soft costs, and enable adoption and implementation.
G11: Enable data-driven decision-making across the organization	M1. Update and maintain DAISY as a centralized data hub to enable streamlined analyses, reporting, and key applications.
	M2. Develop and maintain a suite of core reports (e.g., using DataStudio) to visually track and communicate key metrics for use by SVCE staff
	M3. Develop, coordinate, and implement an enterprise-wide training plan for all employees to improve skills that will allow for more self-service from DAISY and core reports.
	M4. Seek out and integrate additional data sources to enhance data-driven insights.
	M5. Provide data and analytics support to teams across SVCE.

D. LEGISLATIVE

Legislation wields critical influence over SVCE's ability to serve our customers and advance our mission. SVCE will work to align legislation with SVCE's mission, incentivize resources that decarbonize the grid, and serve our customers' needs within the evolving energy market.

SVCE will actively engage with legislative stakeholders to enhance our ability to mitigate greenhouse gas emissions, protect the large investments made by SVCE on behalf of our customers, minimize rate volatility, encourage regulatory certainty, and help build a policy framework that supports innovation in an equitable and cost-effective manner. SVCE will promote policies that encourage customers to adopt clean energy choices, transportation electrification, and transition to future fit buildings. SVCE will leverage relationships and build coalitions with organizations with common goals to amplify our message and influence policy. SVCE will use its unique ties to communities and the power of its elected officials to support decarbonization at the state and local level.

Goals	Measures
G12: Support legislation which advances SVCE's mission to reduce dependence on fossil fuels by supporting the development of a low carbon, affordable, and reliable electric system while simultaneously advancing economy-wide decarbonization.	M1: Advocate through the state and federal legislative process for policies that align with the Board-adopted policy platform.
	M2: Analyze and advocate for state and federal funding sources to advance our decarbonization, clean energy, and equity goals.
G13: Engage elected officials to inform them of SVCE's work and to partner on advancing policies.	M1: Regularly communicate with local, state, and federal delegation members on SVCE priorities and accomplishments.
	M2: Work with Decarb. Policy and Government Initiatives Team to educate and engage elected officials and stakeholders in existing building decarbonization policy.

G14: Evaluate and capitalize on the Inflation Reduction Act, improving on currently adopted decarbonization strategies and goals.	M1: Analyze programs in the Inflation Reduction Act. Coordinate with internal team to understand implications of the IRA, improve our strategies and goals, and advocate for program structures in implementation phase that benefit SVCE's community.

E. WORKPLACE & HOW WE GET WORK DONE

Achieving SVCE's ambitious and urgent mission requires a team capable of meeting the tremendous challenges embedded in these goals. SVCE develops and fosters a diverse and talented team that thrives in a dynamic and fast-changing environment. As such, we recruit and retain smart, passionate, innovative, and collaborative employees. We contribute, as a team and as individuals, to continuously build and support a culture of collaboration and trust. We encourage creativity and the free flow of ideas to spur innovation. The workplace environment is adaptable, and technology enabled to drive innovative solutions. We emphasize focus and prioritization across departments to achieve quality, rather than simply quantity of output. We provide a rewarding workplace experience where productivity can be maintained across a variety of work environments. We provide opportunities for growth and engagement, and we support professional and personal development. We offer opportunities that position our people, and in turn SVCE, for success.

Goals	Measures
G15: Build and maintain a high-performing team to be an employer of choice	M1: Implement Management Training Plan; request regular feedback from Directors and staff; use to continually improve training.
	M2: Request feedback after every new hire (recruiting / onboarding) and use to continually improve processes.
	M3: Maintain 90% staffing of existing positions over the course of the year. Fill 90% of new positions within 90 days of posting.
	M4: Regularly assess functional staffing needs (short-term and long-term) around annual budget and use to develop long-term succession plans.
	M5: Provide Competitive Compensation and Benefits for staff, as determined through regular reviews / comparisons with peer organizations.
G16: Maintain an enjoyable and rewarding workplace to be an employer of choice	M1: Regularly assess hybrid workplace policies and use feedback to continually improve tools and processes to achieve organization-wide competency in hybrid work.
	M2: Regularly review organizational policies and procedures and update as needed.
	M3: Foster and develop a workplace culture that supports and empowers staff
G17: Get great at prioritizing, and rebalancing to align SVCE	M1: Develop annual workplan and continue the director level tracking and review process and enhance as necessary

work with SVCE strategic focus areas	M2: Implement and drive Monday.com at SVCE for project planning and management

F. FINANCE AND FISCAL RESPONSIBILITY

SVCE is committed to serving its mission from a sound financial position. Doing so requires the consistent implementation of disciplined fiscal strategies and active enterprise risk management. SVCE manages its financial resources responsibly by setting a high standard of transparency, accountability, efficiency, and strong stewardship. At SVCE, our commitment to fiscal and operational excellence will ensure that processes are efficiently designed to achieve maximum productivity by aligning people, systems, and policies. Adherence to sound fiscal policies and active risk management will help the agency respond to unexpected risk events, maintain a high credit rating, and deliver high-value products and services to our customers.

Goals	Measures
G18: Commit to maintaining a strong financial position	M1: Present balanced budget that achieves cash reserve targets, weighs tradeoffs between customer value proposition and contribution to reserves, and maintains competitive rates
	M2: Board presentation on 5-year financial forecast once a year
	M3: Unqualified audit opinion, qualified audit opinion
	M4: Maintain investment grade credit rating from one of the 3 credit rating agencies
	M5: Capture savings in energy procurement and enhance customer product offerings thru structured financing.
G19: Avoid failures in management of market risk, credit risk, liquidity risk, operational risks, and enterprise risks	M1: Develop appropriate metrics, tools, and training to empower staff to effectively identify, avoid, and mitigate risks to SVCE

G. DATA ANALYTICS, GOVERNANCE & INFORMATION TECHNOLOGY

SVCE is committed to addressing the challenges of delivering IT services in a dynamic environment with new regulations and continuous advancements in science and technology. We take customer information, privacy, and security seriously. Our systems and processes follow best practices and industry standards. Performance metrics are in place to ensure resiliency and high system availability on standard and mobile platforms, supporting staff wherever they work from. Regular upgrades to IT resources ensure continued data security, efficient data access, and support the transition to more digital outreach and community engagement model. As the volume of data generated by the organization's activities expands, IT is focused on enabling greater analysis and utilization of the data available, while ensuring its security and confidentiality.

We understand that data is key to achieving our mission and prioritize maintaining high data and IT infrastructure security. We develop and apply proper data governance that includes establishing standards, policies, and processes to ensure effective data management throughout the enterprise. Through data science, we advance key data-intensive business cases to design and develop innovative customer programs and serve our mission efficiently and effectively.

Goals	Measures
G20: Ensure SVCE's Information Technology infrastructure is secure, reliable, and disaster resilient to provide 24/7/365 online access	M1: Conduct annual IT Audit/Security Assessment to evaluate information security at both the policy and technology (software and hardware) levels and implement all critical recommendations.
	M2: Develop IT continuity plan and align with overall business continuity plan; update annually to reflect changing business needs
	M3: Achieve cybersecurity scorecard targets; Ensure IT infrastructure (network, systems and cloud-based tools) elements are secure, updated and that SVCE is using top rated providers.
	M4: Avoid cybersecurity threats including all instances of unauthorized system access and/or data loss through spoofing, phishing, and hacking
G21: Enable data-driven decision-making across the organization; automate, integrate, and streamline business processes to minimize operational risk and move organization toward industry best practices from its startup phase	M1: Identify and evaluate hardware and software improvements to enhance collaboration
	M2: Develop a comprehensive assessment of SVCE business processes, both technical and functional, to achieve efficiency and optimization and minimize operational risks.
	M3: Empower organization-wide decision making with data, systems, processes, and infrastructure

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1f

Item 1f:	**Authorize the Chief Executive Officer to Negotiate and Enter into a New Engagement with Meyers | Nave for Legal Services**
From:	Girish Balachandran, CEO
Prepared by:	Monica Padilla, COO / Director of Power Resources Zak Liske, Senior Manager of Power Operations
Date:	10/12/2022

RECOMMENDATION

Staff recommends that the Silicon Valley Clean Energy Authority Board ("Board") authorize the Chief Executive Officer ("CEO") to negotiate and enter into a new engagement with Meyers|Nave for legal services for a total amount not to exceed ("NTE") $500,000.

BACKGROUND

SVCE approved an engagement letter with Meyers|Nave in May 2022 to provide legal representation and support with respect to litigation around power purchase agreements. At the time, staff was unsure of the total effort and expense needed to engage in litigation and set an NTE amount for the agreement of $100,000 for the fiscal year term.

ANALYSIS & DISCUSSION

Staff is requesting a new engagement letter with Meyers|Nave for continued legal support around potential litigation related to SVCE's power purchase agreements. If the Board approves staff's request, the CEO will negotiate and execute a new agreement which will include the scope of engagement, fees and personnel and general agreement terms and conditions. A not to exceed amount of $500,000 per fiscal year will also be included in the agreement. This amount is based on analysis of current expense rate under the existing agreement for litigation support around power purchase agreements. Litigation costs are by nature uncertain and staff may return to the Board within the fiscal year if changes to the budget are needed.

STRATEGIC PLAN

Authorizing the CEO to negotiate and enter into an engagement will directly support Goal 5 of the Strategic Plan which is to "Acquire clean and reliable electricity in a cost effective, equitable and sustainable manner".

ALTERNATIVE

If the Board does not delegate authority to the CEO, SVCE will face transactional risk, due to potential lack of legal support given the high demand for legal support and limited capacity.

FISCAL IMPACT

The recommendation results in an estimated fiscal impact of $500,000. The total fiscal impact including the prior engagement with Meyers|Nave is $600,000 and is expected to be across multiple fiscal years. The

Board-approved FY 2022-23 Operating Budget includes sufficient funds to cover legal expenses including a new engagement with Meyers|Nave.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1g

Item 1g:	**Review and Approve Updates to SVCE Customer Confidentiality Policy**
From:	Girish Balachandran, CEO
Prepared by:	Adam Selvin, Director of Energy Services and Community Relations
Date:	10/12/2022

RECOMMENDATION
Staff requests that the SVCE Board approve revisions to the Customer Confidentiality Policy 'Notice for Accessing, Collecting, Storing, Using and Disclosing Energy Usage Information' contained in Attachment 1.

BACKGROUND
The current Customer Confidentiality Policy was reviewed and approved in January of 2017 based on California Public Utility Commission (CPUC) regulations requiring that SVCE develop and post a notice to customers regarding access, collection, storage, use and disclosure of energy usage information. Silicon Valley Clean Energy's current policy on Customer Confidentiality can be found at www.SVCleanEnergy.org/customer-confidentiality.

ANALYSIS & DISCUSSION
Revisions are required to incorporate the addition of customer gas usage data and the ability for SVCE customers to elect to share their electricity and gas usage and billing data with third party services via SVCE services such as Data Hive.

STRATEGIC PLAN
As referenced in SVCE's Strategic Plan, Item 10, creating this Staff Report is in line with efforts to Empower customers with the awareness, knowledge, and resources needed to make effective clean energy choices.

ALTERNATIVE
Maintaining Customer Confidentiality policies and communications is required per CPUC Decision 12-08-045, "Extending privacy protections to customers of gas corporations and community choice aggregators, and to residential and small commercial customers of electric service providers."

FISCAL IMPACT
SVCE will not incur significant financial impacts to revise the current policy.

ATTACHMENT
1. SVCE Customer Confidentiality Policy: Notice for Accessing, Collecting, Storing, Using and Disclosing Energy Usage Information

Note: Revisions to current posted policy are shown in highlighted text for clarity.

Customer Confidentiality Policy

Notice of Accessing, Collecting, Storing, Using, and Disclosing Energy Usage Information

Silicon Valley Clean Energy (SVCE), its employees, agents, contractors, and affiliates shall maintain the confidentiality of individual customers' names, service addresses, billing addresses, telephone numbers, email addresses, account numbers, and electricity and gas consumption, except where reasonably necessary to conduct SVCE's business or to provide services to customers pursuant to the "Rules Regarding Privacy and Security Protections for Energy Usage Data" issued by the California Public Utilities Commission (CPUC). Examples of reasonably necessary business purposes include but are not limited to when such disclosure is necessary to (a) comply with law, regulation, or court order; (b) enable SVCE to provide service to its customers; (c) collect unpaid bills; (d) obtain and provide credit reporting information; (e) resolve customer disputes or inquiries; (f) communicate about demand response, energy efficiency, energy management, and conservation programs, or (g) in situation of imminent threat to life or property. SVCE shall not, under any circumstance, disclose customer information for third-party telemarketing, e-mail, or direct mail solicitation. Aggregated data that cannot be traced to specific customers may be released at SVCE's discretion.

Customer data, including individual customer names, addresses, and electric energy usage data, is collected via PG&E's metering systems. SVCE may share customer data with contractors and vendors for purposes of providing services and operating programs. Contractors and vendors are required to agree to only use customer data for program operational purposes and protect it under the same standards as SVCE. SVCE maintains customer-specific electricity and gas usage and billing information for only as long as is reasonably necessary, typically not more than five years unless otherwise required by law or regulation. Separately, SVCE customers may elect to authorize the secure sharing of their electricity and gas usage and billing data with third parties via SVCE services such as Data Hive.

The effective date of this policy is [October 12, 2022]. Notice of this policy will be provided annually to customers via an on-bill message guiding customers to the most updated version on Silicon Valley Clean Energy's website at www.SVCleanEnergy.org. Any changes to this policy between notification periods will be communicated through Silicon Valley Clean Energy's website. Previous versions of this policy can be requested via email at info@SVCleanEnergy.org or by mailed request to Silicon Valley Clean Energy, Attention: Customer Care Team, 333 W. El Camino Real, Suite 330, Sunnyvale, CA 94087.

Customers having any questions or concerns regarding the collection, storage, use, or distribution of customer information, or who wish to view, inquire about, or dispute any customer information held by SVCE or limit the collection, use, or disclosure of such information, may contact the Customer Care Team via email at info@SVCleanEnergy.org, by phone at (844) 474-7823 or by mail at 333 W. El Camino Real, Suite 330, Sunnyvale, CA 94087.

Staff Report – Item 1h

Item 1h:	**Approve Audit Committee Membership of Three Members**
From:	Girish Balachandran, CEO
Prepared by:	Andrea Pizano, Board Clerk/Executive Assistant
Date:	10/12/2022

RECOMMENDATION

Staff recommends the Board of Directors approve reducing the current membership of the Audit Committee to three members, due to an unexpected vacancy, until new committee appointments are made in February 2023.

BACKGROUND

The Audit Committee was formed by the Board to work with SVCE staff on the initiation and receiving of the annual audit. The Audit Committee meets as needed, and the 2022 committee was appointed at the February 9, 2022 Board of Directors meeting to include the following members: Director Margaret Abe-Koga, Alternate Director Sergio Lopez, Alternate Director Bryan Mekechuk, and Vickie Rahman, Finance Manager for the City of Gilroy (four members total).

ANALYSIS & DISCUSSION

Staff received a letter of resignation from Committee member Vickie Rahman on September 28, 2022 with an effective date of October 1, 2022, which leaves a vacancy on the Audit Committee. Rather than fill this vacant seat with few remaining meetings left in the year, staff is proposing the Board of Directors approve to reduce the membership of the committee to three members until annual appointments of committees are made in February 2023.

ALTERNATIVE

Staff is open to alternatives from the Board of Directors, including filling the vacant seat to keep a four-member committee if desired.

FISCAL IMPACT

No fiscal impact as a result of reducing the membership of the committee to three members.

Staff Report – Item 1i

Item 1i:	**Receive Q3 2022 Decarbonization Strategy and Programs Roadmap Update**
From:	Girish Balachandran, CEO
Prepared by:	Justin Zagunis, Director of Decarbonization Programs and Policy Nupur Hiremath, Manager of Community Programs
Date:	10/12/2022

RECOMMENDATION

Staff recommends the Silicon Valley Board of Directors accept the Q3 2022 Update of the Decarbonization Strategy & Programs Roadmap.

BACKGROUND

To achieve its mission to reduce dependence on fossil fuels by providing carbon-free, affordable and reliable electricity and innovative programs for the community, SVCE established a decarbonization strategy and programs roadmap (abbv. "Roadmap"). In December 2018, the Board approved the Roadmap, and since that time, staff have been working on implementation.

ANALYSIS & DISCUSSION

Attachment 1 is the most recent quarterly update, covering July through September 2022. The quarterly update includes a table with a summary of updates and next steps for each initiative.

STRATEGIC PLAN

This item supports SVCE's 2021-2022 Strategic Plan Goal 8, to "coordinate development of decarbonization strategy, lead design of local policy and programs, and support program deployment," to support achieving energy and transportation GHG reductions of 30% from the 2015 baseline by 2021, 40% by 2025, and 50% by 2030.

FISCAL IMPACT

Accepting the Q3 2022 Update of the Decarbonization Strategy & Programs Roadmap has no fiscal impact.

ATTACHMENTS

1. Decarbonization Strategy & Programs Roadmap – Q3 2022 Update

Decarbonization Strategy & Programs Roadmap
Q3 2022 Update
October 12, 2022 BOD Meeting

Sector	*Program*	*Q3 2022 Activities*	*Q4 2022 Outlook*
Power Supply	**C&I Clean Power Offerings** Develop, market and sell additional SVCE power offerings to address large C&I customers seeking to buy clean power at competitive rates	• Proceeding with work to operationalize 24/7 carbon-free supply agreement with large commercial customer. Includes coordinated work between staff, customer, PG&E and Calpine. • Introduced EcoInvest discount agreement to a second large commercial customer, prepared financial analysis. • General marketing activities and outreach for customer agreements to various qualifying C&I.	• Make final preparations to launch 24/7 agreement with large commercial customers. • Execute the second EcoInvest discount agreement.
Built Environment	**Reach Codes** Provide model energy code supportive of all-electric design and EV infrastructure to member agencies along with consultant support	• Provided outreach support, technical support, and customized resources for all 13 member agencies to support Reach Code adoption. • Hosted virtual forum for elected officials from San Mateo and Santa Clara Counties. Over 65 registrants and nearly 50 attendees.	• SVCE will support agency staff and elected officials through the Reach Code adoption process. • Votes take place October through December.
	All-Electric Showcase Grants.v2 Showcase electric retrofit buildings in preparation for existing building policy conversations with member agencies.	• Reviewed program elements, including customer eligibility, incentives and marketing. • Reviewed plans for key-customer tour. • Determined approach for tracking, monitoring, case study development. • Began program implementation.	• Application period to be announced.

	FutureFit Heat Pump Water Heaters Provide incentives for electric heat pump water heaters and service panel upgrades to residents using natural gas currently	• 482 Program reservations. • Completed 247 water heater installations. • Completed 59 service panel upgrades. • 13 CARE/FERA participants.	• Sunset HPWH program and launch a functional replacement in FutureFit Homes and Buildings. Stop collecting new reservations under legacy program. • Continue servicing registered customers under HPWH until final reservation is installed.
	Permit Modernization Effort Benchmark and streamline member agency's permitting and inspection processes to identify barriers and opportunities to electrification	• Continued to educate Building Officials on legislative trends and pending requirements. • Established contract with lead consultant to refresh baseline and develop report on assistance desired by jurisdictions. • Approved interview guide. • Initiated interviews with agencies.	• Finalize jurisdiction interviews. • Identify prioritized menu of assistance programs desired by jurisdictions. • Continue to inform Building Officials about legislative and regulatory requirements. • Support jurisdictions in applying for State grants.
	Building Decarb Joint Action Plan Develop a joint action plan with member agencies to prioritize strategies and programs to advance building decarbonization	• (COMPLETED)	• (COMPLETED)
	Community Resilience Program Increase the individual and collective capacity of SVCE and our member agencies to reduce the adverse impacts of power outages.	• Launched Resilient Site Selection Tool and held tutorials with several member agencies. • Held internal Lunch and Learn on Program with lessons learned.	• Continue to execute member agency capex and planning grants on a rolling basis. • Publish Resilience Framework.
	FutureFit Fundamentals Provide financial relief to contractors by expanding their knowledge of electrification technologies	• Reached the first milestone of 50 contractors completing the course. • Executed Task Order with SMUD to administer the program.	• Continue direct outreach to contractors for program enrollment. • Assess program and explore "relaunch."
	CRCR Bill Relief Provide immediate bill relief to residential CARE/FERA customers, and to qualifying small business customers	• (COMPLETED)	• (COMPLETED)

	FutureFit Homes & Buildings Provide comprehensive assistance to SVCE customers in navigating and accessing the many existing and forthcoming, non-SVCE led energy programs providing financial assistance for building decarbonization and energy efficiency.	• Planned new suite of incentives in early October, expanding rebates to HP HVAC and pre-wiring for future electrification. Additional emphasis on layering with other BE & EE incentives, such as BayREN. • Program points to updated contractor resources focusing on BayREN and SwitchIsOn electrification contractors.	• Further scoping of concierge service for Phase 2 of FFHB. • Developing and implementing expanded outreach plan.
	Regional Coordination SVCE will initiate regular regional stakeholder convenings to coordinate program alignment across building decarbonization workstreams.	• Actively coordinated with EBCE and PCE on reach code development and adoption. • Began developing priorities for regional coordination on existing building policy.	• Expand SVTEC events to include regional agencies outside of SVCE territory. • Convene group of regional stakeholders to plan existing building decarbonization engagement.
	Accessible Financing Assess feasibility of financing mechanisms to unlock equitable financing for energy efficiency and electrification across the region, particularly for low-income communities.	• Continued to support SVCE proposal to the CPUC Finance proceeding. • Supported development of program operator RFP. • Began engaging with PG&E on bi-weekly basis to discuss CCA-IOU coordination for pilot.	• Prepare reply comments for anticipated CPUC proposed decision. • Supporting selection of program operator • Continuing to engage with PG&E on pilot coordination
	Local Policy to Decarbonize Existing Buildings Assess and support potential policy levers Member Agencies can explore to mitigate emissions from existing buildings.	• Distributed RFP to support program design.	• Launch program design activities.
	Feasibility Assessment for Natural Gas Phase Out By 2045 Carry out a feasibility assessment to identify technical, legal and economic barriers and opportunities for phasing out natural gas service by 2045, in the SVCE service territory.	• On hold.	• On hold.
Mobility	**EV Infrastructure Strategy & Plan** Develop a near- to mid-term strategy for EV infrastructure and a set of program implementation plans	• (COMPLETED)	• (COMPLETED)

	California Electric Vehicle Infrastructure Project (CALeVIP) Work with California Energy Commission to launch a regional CALeVIP project	• Continued to review current Year 2 applications. Significant progress made in moving applications from funds reserved status to funds issued following installations. 8 DCFC and 130 L2 connectors installed and funded to date. • Began tracking data via new Partner Data Dashboard.	• Complete review of current Year 2 applications.
	Priority Zone DCFC Competitive application to receive an additional incentive (on top of CALeVIP) for DCFC in "priority zones" that support nearby SVCE-designated multifamily housing clusters	• Opened the application period for new applications from DCFC installers. • Completed initial outreach to DCFC installers about incentive opportunity. • Received first application.	• Continue outreach to DCFC installers prior to application window closure. • Review and score submitted applications.
	MUD & S/M Workplace Technical Assistance (FutureFit Assist) Technical assistance and help applying for pertinent CALeVIP rebates for charging at multifamily housing and small and medium workplace properties	• Targeted 1,004 customers for technical assistance and completed 27 site assessments since launch. • Continued outreach to additional properties to inform them of the new EVI installation incentive program • Enrolled 4 new properties in program (one small business and 3 MUDs).	• Conduct ongoing outreach. • Continue to develop site assessments for participating properties. • Continue to connect customers to relevant rebates and incentive opportunities.
	MUD Charging Incentives Develop incentive program for EV charging at hard-to-reach multifamily properties	• Continued outreach to interested MUD properties to inform them of new incentive opportunities. Since launch, 7 MUD properties have enrolled in FutureFit Assist, 5 more have scheduled site visits, and at least 4 properties are preparing applications. • First rebate application received and approved for 7 EV charging connectors at an MUD property.	• Continue outreach to MUD properties to inform them of incentive opportunity and free technical assistance • Track progress of applications • Adjust program terms and eligibility to MUD properties beyond FutureFit Assist participants
	Fleet Electrification Grants Competitive application for SVCE's fleet electrification planning support and funding for site upgrades. Targeting a broad set of fleet types, to create widely applicable fleet electrification planning templates	• Conducted general research on fleet electrification case studies. • Identified likely contracting partner and began outlining contract document. • Began identifying fleet owners in SVCE territory.	• Establish contract with consultant. • Conduct initial outreach to fleet owners to identify most interested and priority customers. • Identify timeline for assisting interested fleet owners. • Continue research and development of case studies.
	Silicon Valley Transportation Electrification Clearinghouse (SVTEC) Regional group of key stakeholders focused on	• Held quarterly meeting stimulating thought, discussion, and collaboration.	• Event planning and funding. • Aiming for a November date.

	information sharing, solving critical issues and attracting external funding to the SVCE community in support of EV infrastructure deployment.		

Energy Efficiency & Grid Integration	**GridShift: EV Charging**
	Managed EV charging app that optimizes charging to reduce associated costs and emissions. In-app "events" support additional emission reductions and load flexibility
		• Released app refresh with new features:
		  • **Smart tab** - improved user interface
		  • **Smarter scheduling** - set custom ready-by times for each day of week
		  • **Solar-powered charging** - align charging with rooftop solar generation
		  • **Account deletion** - streamlined process to delete account in-app
		• Conducted survey to gather feedback and new marketing campaign.
		• Offered $50 sign-up bonus for the month of August 2022.
		• Reached first enrollment target of 500 active EVs.
			• Conclude Critical GridShift Hours season.
			• Re-launch low carbon events season.
			• Continue marketing efforts.

	Other Virtual Power Plant Programs Support "virtual power plants" made up of cloud-based aggregations of customer-sited resources to support grid integration and monetize value from connected, controllable loads	• Continued Sunrun program support, and tracking program participation and installs. • Continued work on identifying priorities and needs for an additional VPP program(s) and/or a local DER marketplace.	• May issue RFO for aggregated DER contract to help prepare for summer 2023 reliability issues. • Continue to support Sunrun program, moving into dispatch of resources. • Convene internal team to explore VPP priorities, objectives, and establish next steps for action.

Education & Outreach	**Customer Resource Center (eHub)**
	Develop online customer resource center to enable engagement, education and action related to clean electricity, EVs and home electrification.
		• **167,102 Unique eHub Engagements** since launching in September 2020 to August 2022
		• eHub Metrics July 1 –August 31, 2022:
		  ○ 1,951 unique visits to the SVCE eHub webpages
		  ○ 463 unique visits to the EV Assistant tool
		  ○ 555 unique visits to the Solar+Battery Assistant tool
		  ○ 13,895 unique visits to the Appliances Assistant tool
		• Running promotion from 7/14/2022 - 10/31/2022. Customers receive $50 off portable batteries, evaporation coolers and air purifiers through the Appliance Assistant. Promotion metrics July 14 – August 31, 2022
			• Continue running the Summer Appliance Assistant promotion until 10/30/22
			• Launch a Drive electric sweepstakes during the holiday 11/10 - 12/31
			• Continue tracking eHub engagement metrics
			• Continue sending monthly emails to customers to educate them on the resources available on eHub
			  ○ Energy Awareness Month
			  ○ Solar + Battery
			  ○ Drive Electric Sweepstakes

		○ 52 air purifiers, 48 evaporative coolers, 105 portable batteries • Delivered email campaigns: ○ Summer Appliance Assistant Promotion ○ Value & benefits of electrifying transportation	*Note: Engagements are driven largely by marketing campaigns delivered within the quarter. Distribution of metrics will vary.*
	Community Engagement Grants Partner with local organizations in hard-to-reach customer segments to promote SVCE offerings and programs	• Continued discussions around the use of this program to advance Programs Equity Framework goals.	• Examining next steps for program implementation.
	Portable Batteries for Medical Baseline Customers Pilot program to deploy ~50 portable batteries to qualified customers who rely on power for medical equipment	• Conducted email outreach to 46 customers. • Four application sign ups; one physical application sent into SVILC.	• Continue promotion and outreach.
Innovation	**Innovation Partners** Engage with key strategic partners to participate in the local innovation ecosystem and provide a voice for SVCE customers and the decarb mission	• No activities for Q3.	• No activities for Q4.
	Innovation Onramp Provide small grants to support innovation through pilot projects with external partners	• Continued support for last active pilot.	• Wrapping up last active pilot.

Staff Report – Item 1j

Item 1j:	**Executive Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Andrea Pizano, Board Clerk/Executive Assistant
Date:	10/12/2022

No report as the Executive Committee has not met since August 26, 2022.

The next meeting of the Executive Committee is scheduled for October 28, 2022 at 11:30 a.m.; materials will be posted no later than 72 hours in advance of the meeting.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1k

Item 1k:	**Finance and Administration Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Rob Rennie, Chair of the Finance and Administration Committee
Date:	10/12/2022

The Finance and Administration Committee met on October 5, 2022 and received staff recommendations on updating SVCE's Investment Policy and initiating a second prepay.

Amrit Singh, CFO and Director of Administrative Services, provided a presentation to the committee on proposed changes to the investment policy, hiring an investment advisor, and cashflow analyses supporting the initial investment strategy. Staff proposed that the Finance and Administration Committee recommend that the Board:

- Adopt the proposed revised investment policy;
- Direct PFM Asset Management, per the agreement executed earlier, to implement the full scope of work as SVCE's Investment Advisor;
- Adopt a resolution to join as a Shareholder of the California Asset Management Trust; and
- Adopt a resolution to join the State's Local Agency Investment Fund (LAIF).

Monique Spyke of PFM Asset Management (PFMAM) LLC presented to the committee the proposed changes to the investment policy, reviewed PFMAM recommendations for portfolio maturity structure and performance benchmark, and reviewed the proposed initial investment strategy. The committee voted unanimously to support the staff's recommendation, which is on the regular calendar for the Board's consideration.

CFO and Director of Administrative Services Singh presented a request to the committee to recommend that the Board authorize the CEO to approve or execute agreements with firms providing services to enable SVCE to execute its second prepay transaction for a total cost of $1,000,000, and approve engagement with Morgan Stanley as the Prepay Supplier. Presentation information included the firms SVCE would be doing business with to initiate the second prepay transaction (PFM Financial Advisors LLC & PFM Swap Advisors, Chapman & Cutler, Ballard Spahr, Moody's Investor Service Inc.), information on the fee structure with Morgan Stanley which was the same as that of the first prepay, leveraging the first prepay structure and outlining the comparison of the costs of the first prepay and the proposed costs for the second prepay, and reviewing the fiscal impact and next steps. The committee voted unanimously to support staff's recommendation for the Board's consideration at the October Board of Directors meeting.

Meeting materials can be found on the SVCE website: SVCE Finance and Administration Committee Meeting, October 5, 2022

The next meeting of the Finance and Administration Committee is to be determined; materials will be posted no later than 72 hours prior to the meeting date.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1l

Item 1l:	**Audit Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Bryan Mekechuk, Audit Committee Chair
Date:	10/12/2022

Three of the four members of the Audit Committee met on September 30, 2022 – Chair Bryan Mekechuk, Alternate Director Sergio Lopez, and Committee member Vickie Rahman (Vice Chair Margaret Abe-Koga was absent).

The purpose of this meeting was to kick off the financial statement audit with SVCE's external auditors, Pisenti & Brinker LLP, and discuss their audit approach and audit plans to opine on SVCE's financial statements for the year ended September 30, 2022.

Kellin Gilbert, Audit Partner, and Jenna Blanchard, Engagement Supervisor, both of Pisenti & Brinker LLP, provided information to the Audit Committee on the:

- Financial audit timeline
- Roles and responsibilities of management and auditor
- Communication with the Audit Committee
- Planned risk assessment procedures
- New "Single Audit" as required due to expending over $750,000 of federal funds
- New accounting pronouncement of GASB 87 – Leases
- Other significant areas of focus for the audit

The audit fieldwork and testing is expected to begin in mid-November and take 3-4 weeks. Draft financial statements will be available in early January 2023 with the issuance of the September 30, 2022 financial statements by January 31, 2023.

Committee member Vickie Rahman submitted a notice of resignation for her role on the Audit Committee; staff will recommend that the Audit Committee membership be reduced to three members until February 2023, when new committee assignments are made.

Materials from the September 30, 2022, meeting can be found on the SVCE website: SVCE Audit Committee Meeting, 9/30/22

The next meeting of the Audit Committee will be scheduled based on member availability but will likely take place in January and/or February 2023; materials will be posted no later than 72 hours in advance of the meeting.

Staff Report – Item 1m

Item 1m:	**Legislative and Regulatory Response to Industry Transition 2022 Ad Hoc Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Andrea Pizano, Board Clerk/Executive Assistant
Date:	10/12/2022

No report as the Legislative and Regulatory Response to Industry Transition 2022 Ad Hoc Committee has not met since June 14, 2022.

The next meeting of the Committee will be held near the end of October 2022 and will be scheduled based on member availability.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1n

Item 1n:	**California Community Power Report**
To:	Silicon Valley Clean Energy Board of Directors
From:	Girish Balachandran, CEO
Date:	10/12/2022

Per direction from the SVCE Board on December 9, 2020 for the CEO to provide a report of the ongoing activities of California Community Power (CC Power) after each of its meetings, this is to report CC Power held a regular board meeting on Wednesday, September 21, 2022.

Attached is a summary report from Interim General Manager Timothy Haines; materials from the September board meeting can be found here on the CC Power website: CC Power Meeting, 9/21/22

The next meeting of the board will be October 19, 2022 at 1:00 p.m.; meeting materials can be found on the CC Power website: https://cacommunitypower.org/meetings/

ATTACHMENTS:
CA Community Power Board Meeting Summary from Interim General Manager Timothy Haines, September 21, 2022

California Community Power

70 Garden Court, Suite 300, Monterey, CA 93940 | cacommunitypower.org

TO: CC Power Board of Directors and Alternates **DATE:** 9/21/2022
FROM: Tim Haines – Interim General Manager
SUBJECT: **Report on CC Power Regular Board of Directors Meeting – September 21, 2022**

The CC Power Board of Directors held its regularly scheduled meeting on Wednesday, September 21, 2022, via Zoom. Details on the Board packet, presentation materials, and public comment letters can be found under the Meetings tab at the CC Power website: https://cacommunitypower.org

Highlights of the meeting included the following:

- **Matters subsequent to posting the Agenda.** None.
- **Public Comment.** None.
- **Consent Calendar** - The Board unanimously approved the following items:
  - Minutes of the Regular Board Meeting held on August 17, 2022.
  - Resolution 22-09-01 Determination that Meeting in Person Would Present Imminent Risks to the Health or Safety of Attendees as a Result of the Proclaimed State of Emergency
- **Update from Strategic Business Plan ad hoc Committee**
  - The update to the Strategic Business Plan was provided by Committee lead Sears and Phyllis Currie, consultant hired to complete the plan. Mr. Sears provided an overview of the process and schedule. Of note is the plan will be based on the current statement of purpose of CC Power. The ad hoc committee intended to reflect on this decision in future steps. Ms. Phyllis Currie reviewed the preliminary feedback from interviews she has conducted with some Board members, the key objectives that have been identified to date, near- and longer-term opportunities and challenges, and programs that the plan should not include in the scope. The Board provided feedback on the preliminary finding of the plan and confirmed that the ad hoc Committee should continue as planned. The board took no action.

Staff Report – Item 2

Item 2:	**CEO Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Girish Balachandran, CEO
Date:	10/12/2022

REPORT

SVCE Staff Update

Adam Selvin started with SVCE on September 19th as Director of Energy Services and Community Relations as Don Bray transitions to his new role with SVCE as Director of Strategic Development.

Adam is joining SVCE from CLEAResult, where he has led the C&I Practice as Director, grew new business and improved existing offerings across the Commercial, Industrial, and Agricultural sectors. Before CLEAResult, Adam worked as Principal, Customer Experience at PG&E, where he worked cross-functionally to improve outage notifications, reduce overall call volumes, and communicate rate changes to customers.

Adam is a licensed Professional Engineer and Certified Energy Manager and holds an MBA from UC Berkeley's Haas School of Business. Following is a link to the press release announcing Adam's hiring: Adam Selvin Appointed Director of Energy Services and Community Relations at SVCE

Personnel Officer Update

SVCE has confirmed an offer to a Senior Regulatory Advisor, who will be joining SVCE at the end of October. In addition, SVCE continues to recruit for open positions including a Human Resources Generalist and a Decarbonization Data Engineer. Additional recruitments are being planned for the coming month, for the new positions approved by the Board in the FY22-23 budget. Also approved in the FY22-23 budget were a number of benefit enhancements, which staff have begun to implement with the start of the fiscal year.

CEO Agreements Executed

The following agreements have been executed by the CEO, consistent with the authority delegated by the Board:

1) 3Degrees, Amendment: Support in Generating Low Carbon Fuel Standard Credits, date extended to 12/31/2023
2) Pick My Solar, Agreement: Solar Marketplace Program, 8/26/22-8/25/23
3) EBCE, Amendment: Data Analytics Consulting Services, extends date to 3/31/23
4) NewGen Strategies & Solutions, Amendment: Advice and expert testimony, extends date to 4/30/23
5) Keyes & Fox, Amendment: Legislative Support and Legal Representation, extends date to 4/30/23
6) ADM, Amendment: Evaluation, Measurement and Verification Services, extends date to 9/30/24
7) MRW, Amendment: IRP Development Services, extends date to 9/30/23
8) Keyes & Fox, Agreement: Legal Services, not to exceed $300,000, 10/1/22 – 9/30/25
9) Braun Blaising & Wynne, Agreement: Regulatory and Legal Services, not to exceed $330,000 ($165,000 per year), 10/1/22 – 9/30/24
10) Pisenti & Brinker, Agreement: Financial Audit Services, not to exceed $32,900, 9/15/22 – 9/30/23
11) Maher Accountancy, Agreement: Accounting Services, not to exceed $273,500, 10/1/22 – 9/30/23

12) Claremont Partners, INC, Agreement: Human Resources Services, not to exceed $31,332, 10/1/22 – 9/30/23
13) RWG, Agreement: Legal Services, not to exceed $215,000, 10/1/22 – 9/30/23
14) Amperon Holdings, INC, Agreement: Load Forecasting Software and Consulting, not to exceed $75,000, 9/19/22 – 9/18/23
15) SMUD, Amended and Restated: Program Consulting Services, 6/25/19 – 9/30/24
16) Bryce Consulting, Amendment: Human Resources Consulting Services, extends date to 9/30/23
17) PFM, Amendment: Financial Advisors, LLC, extends date to 9/30/23
18) PEA, Amendment: Technical Consulting Services, extends date to 12/31/22
19) Management Partners, Inc., Amendment: Management Consulting Services, extends date to 3/31/23
20) Beth Sussman Consulting, Amendment: Hogan 360 Degree Feedback Process, not to exceed $45,500, extends date to 12/31/22
21) MMA, Agreement: Health Benefits Consulting Services, not to exceed $30,000, 10/1/22 – 9/30/23

CEO Power Supply Agreements Executed
No agreements to report since our September Board of Directors meeting.

Presentations & Relevant Meetings Attended by CEO
- Participated in CalCCA Monthly board, executive, and legislative meetings;
- CC Power Board Meeting, September 21st, report included on the Consent Calendar
- Participated in California Community Choice Financing Authority Board of Directors Special Meeting, September 23, 2022

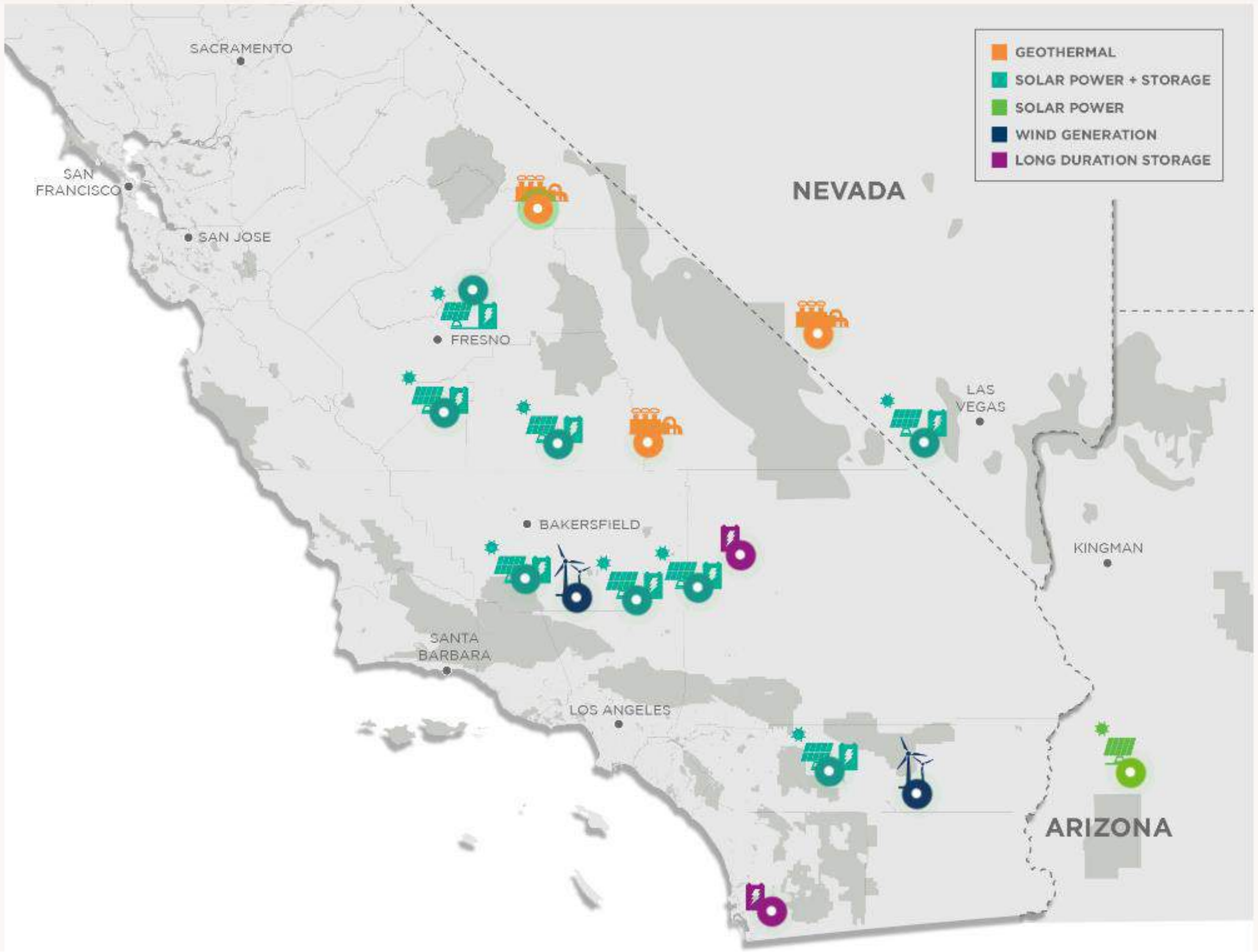
ATTACHMENTS
1. Clean Power Update, October 2022
2. Decarb Programs & Policy Update, October 2022
3. Energy Services & Community Relations Update, October 2022
4. Legislative and Regulatory Update, October 2022
5. Agenda Look Ahead, October 2022 – February 2023

CEO Report
Clean Power Update

SVCE Board Meeting
October 12, 2022

SILICON VALLEY
CLEAN ENERGY

Clean Long-term Power Agreements



- $1.9B+ in commitments
- 16 PPAs signed
  - 13 new build projects
- 676 MW of Renewable Power
- 151 MW lithium-ion storage paired with 445 MW of Solar PV
- 29 MW of Long-duration storage

4 Projects now delivering to SVCE meeting ~20% energy needs:

- COSO geothermal - January 2022
- Slate Solar + Storage – January 2022
- Casa Diablo geothermal – September 2022
- Mountain View wind – July 2022

SVCE Long-term Clean Energy Contracts

	Seller	Project Name	Technology	Generation MW	Storage MW	Approximate % of Annual load in 2025	Term (years)	Lifetime Not to Exceed Authority (MM$)	SVCE Board Approval	Status
1	Goldman Sachs	Slate	Solar + Storage	93.0	46.5	6.7%	17	$198	Oct-18	on-line
2	Ormat	Casa Diablo	Geothermal	7.0		1.4%	10	$43	Feb-20	on-line
3	Atlantica	Coso	Geothermal	43.8		9.6%	15	$331	Mar-20	on-line
4	Leeward	Rabbitbrush	Solar + Storage	40.0	8	3.0%	15	$64	Apr-20	construction
5	NextEra	Yellow Pine	Solar + Storage	50.0	26	4.1%	20	$128	May-20	construction
6	8 Minute Energy	Aratina	Solar + Storage	80.0	20	6.6%	20	$174	Jun-20	Pre-construction
7	174 Power Global	Atlas	Solar	50.0	0	3.8%	10	$27	Jan-21	Pre-construction
8	SB Energy	Angela	Solar + Storage	20.0	10	1.4%	15	$35	Mar-21	Pre-construction
9	AES	Mountain View	Wind	62.5	15.625	3%	20	$128	Apr-21	on-line
10	Origis	San Luis West	Solar + Storage	33.5		4%	15	$74	Apr-21	Pre-construction
11	Clearway	Victory Pass	Solar + Storage	100.0	25	8%	15	$149	May-21	Pre-construction
12	Terra-Gen	Cameron Crest	Wind	77.7		5%	15	$150	May-21	existing
13	LS Power	Tumbleweed	Long Duration Storage		14.6	n/a	15	$100	Feb-22	Pre-construction
14	Onward	Goal Line	Long Duration Storage		14.2	n/a	15	$100	Mar-22	Pre-construction
15	Ormat	Geothermal Portfolio	Geothermal	16.75		3.3%	20	$256	Jun-22	Pre-construction
16	OME	Fish Lake	Geothermal	1.82		0.4%	20	$30	Jun-22	in development

Clean Energy Resources On-line Progress

2022 – Q4

- Rabbitbrush Solar + Storage – ***delivering test energy. COD mid-October!***
- Atlas Solar – ***Pre-Construction - delayed***

2023 – Q1

- Cameron Crest Wind – ***Existing project***

2023 – Q2, Q3

- Yellow Pine Solar + Storage – ***Construction mode - delayed***
- Angela Solar + Storage – ***Pre-construction - delayed***
- Aratina Solar + Storage ***– Pre-construction - delayed***

2023 – Q3, Q4

- Victory Pass Solar + Storage – ***Pre-construction - delayed***
- San Luis West Solar + Storage - ***Pre-construction - delayed***

2024+

- FCR: Ormat and Fish Lake - ***Pre-construction***
- LDS: Goal Line and Tumbleweed - ***Pre-construction***

Project Construction Updates

Rabbitbrush Solar + Storage 40 MW
COD October 2022

Yellow Pine Solar + Storage 50 MW
COD June 2023

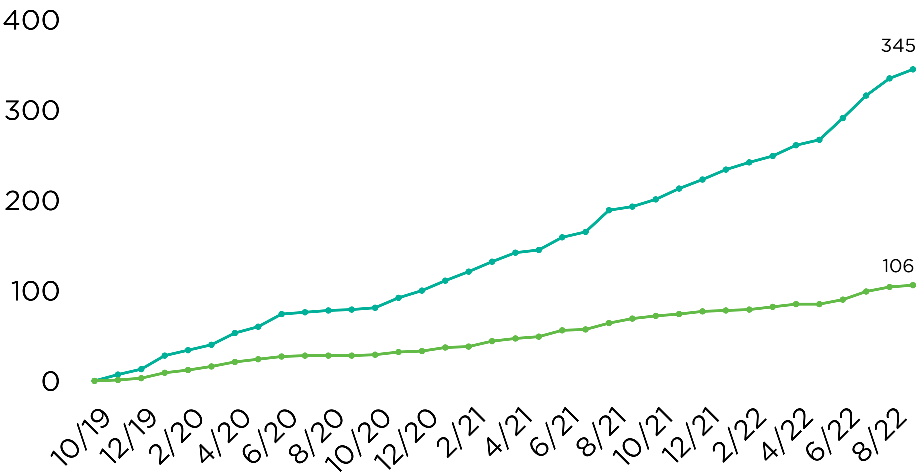
THANK YOU!

ONGOING METRICS

SEPTEMBER 2022

Heat Pump Water Heater

Provide incentives for electric heat pump water heaters and service panel upgrades to residents using gas or electric resistance heaters

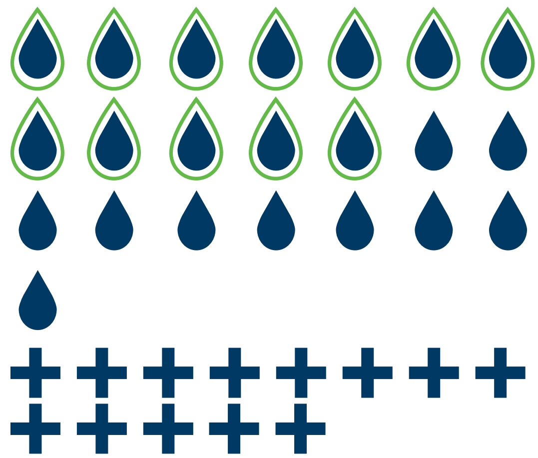


Cumulative HPWH Installations

Cumulative Service Panel Upgrades

Funding: $1.15M

Goal: 220 HPWH by 2022



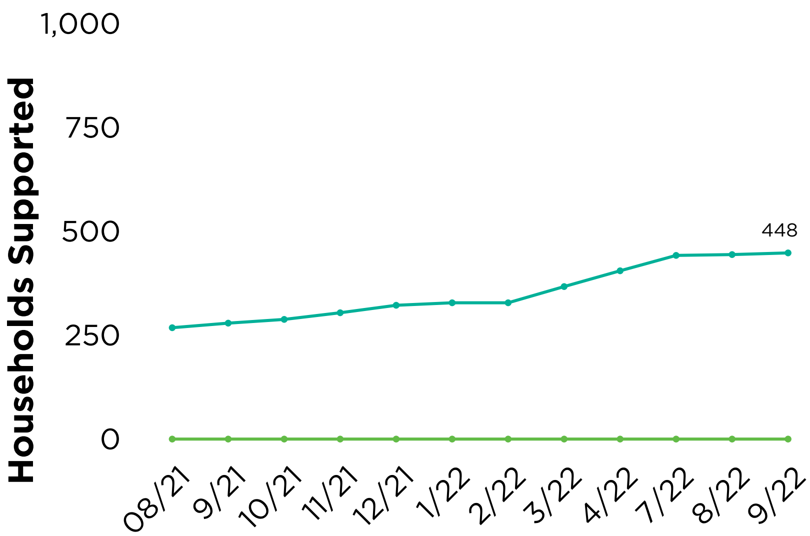
 = 10 Completed Installations

 = 10 Completed Installations Above the Initial Goal

 = 1 CARE/FERA Installation

Lights On Silicon Valley

Provide incentives for enrolling solar and battery systems in the SVCE grid services program



Single-Family Multi-Family

Funding: ≤ $7.4M

Goal: 750 Single-Family + 5 Multi-Family Projects Completed by 2023

 = 25 Single-Family Projects

 = 1 Multi-Family Property Project (Number of households varies)

ONGOING METRICS

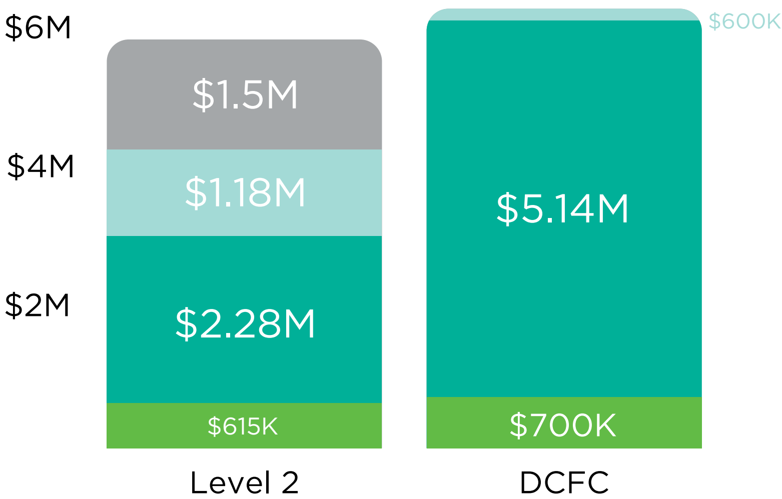
SEPTEMBER 2022

CALeVIP

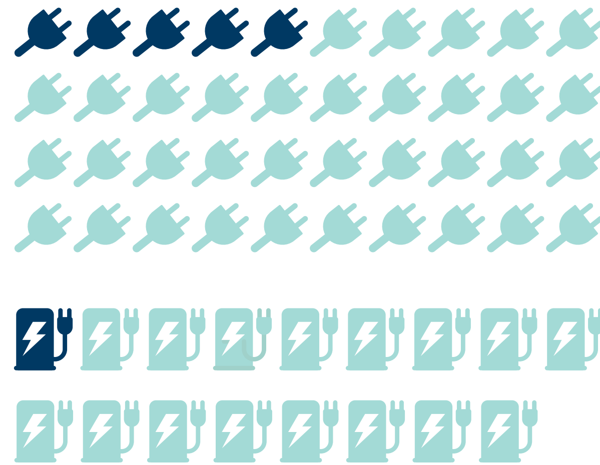
Provide incentives for electric vehicle (EV) chargers as part of a regional program

Funding: $11.58M

Goal: 1K Level 2 + 85 DC Fast Chargers by 2023



Reserved
Funds Issued
Waitlisted (To be released in future years)
Being Processed



= 25 Level 2 Installations

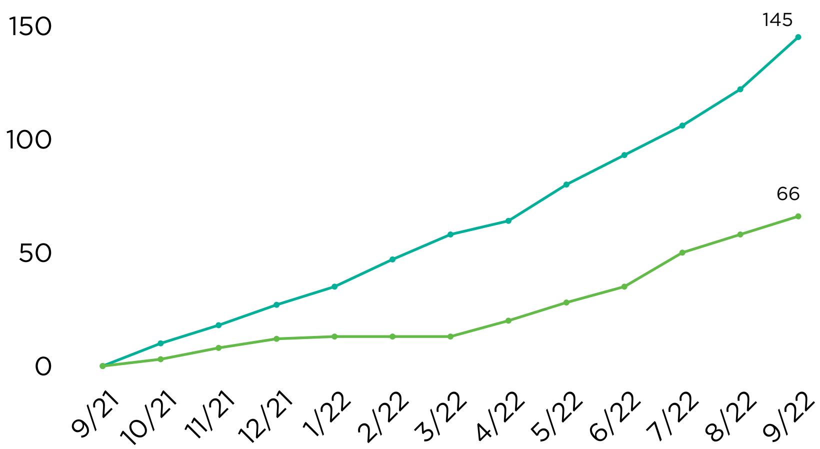
= 5 DCFC Installations

FutureFit Fundamentals

Provide financial relief to contractors by expanding their knowledge of electrification technologies

Funding: $1.5M

Goal: 150 Participants Complete the Course (Phase 1)



Completions
Registrations

= 5 Participants Complete Course

PROGRAMS AT A GLANCE

SEPTEMBER 2022

Click for More Information

Active · In Development · Complete

POWER SUPPLY	C&I Clean Power Offerings
BUILT ENVIRONMENT	FutureFit Fundamentals
	FutureFit Heat Pump Water Heater
	Permit Simplification Effort
	Resilience at Community Facilities
	Medical Baseline Battery Program
	CRCR Bill Relief
	Reach Codes
	All-Electric Showcase Awards
	Building Decarb Joint Action Plan
	Accessible Financing
	Feasibility Assessment - Natural Gas Phase Out By 2045
	FutureFit Homes & Buildings
	Local Policy to Decarbonize Existing Buildings
	Regional Coordination
MOBILITY	CA Electric Vehicle Infrastructure Project (CALeVIP)
	MUD Technical Assistance & Incentives
	Priority Zone DCFC
	SV Transportation Electrification Clearinghouse (SVTEC)
	EV Infrastructure Strategy & Plan
	Regional Recognition
	Fleet Electrification Grants
GRID INTEGRATION	GridShift EV Charging
	Lights On Silicon Valley
	Other Virtual Power Plant
EDUCATION & OUTREACH	Customer Resource Center (eHub)
	Data Hive
	Community Engagement Grants
	Building Decarbonization Demonstration Grants
	Decarbonization Engagement Grants
INNOVATION	Innovation Onramp Pilots
	Innovation Partners







1. Outreach Events & Sponsorships

Silicon Valley Clean Energy will be connecting with customers at upcoming community and industry events and will be supporting communities through event sponsorship.

Date	Time	Description	Location
October 1	5:00 – 9:00 PM	Greentown Los Altos Fundraising Dinner - *sponsorship*	Los Altos History Museum Courtyard
October 8	10:00 AM – 3:00 PM	Day on the Bay (regional event) - *sponsorship & tabling*	Alviso Marina County Park
October 15/16	10:00 AM – 4:00 PM	Oktoberfest– *branding sponsorship*	Downtown Campbell
October 25-27	12:00 – 6:00 PM	Verge Conference (regional event) *(co-sponsor w/SJCE + EBCE) – Tabling*	San Jose Convention Center
October 26	8:00 – 11:00 AM	SVC Chamber: Mayors' Breakfast: *Sponsorship*	Delta Hotels Santa Clara

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2. Customer Participation

	Participation Rate	Overall Participation Rate
Residential	96.42%	96.35%
Commercial	96.59%	

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3. Customer Credit Updates

CARE and FERA Rate Relief Bill

- SVCE began crediting customer bills in April, and as of September 28, 2022, has applied over 170,000 bill credits of $12.50, totaling $2.13M. These credits will continue monthly for income-qualified CARE and FERA customers through November 2022.

4. Member Agency Working Group - September Update

The recent MAWG meeting was held virtually on September 29, 2022 and was attended by 9 different agencies and organizations with a total of 22 participants.

The following agenda items were presented and discussed:

- Member Agency Roundtable Check-In 2.
- Inflation Reduction Act (IRA)
- Carbon Neutrality from Zero Carbon Cities Advisor at ICLEI
- Reach Code Update
- Building Decarbonization Demonstration Grants
- Energy Efficiency and Conservation Block Grants

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5. Press Releases & Media

Press Releases

- Adam Selvin Appointed Director of Energy Services and Community Relations at Silicon Valley Clean Energy, *09-19-2022*
- Silicon Valley Clean Energy Awarded for Online Customer Resource Center, *09-26-2022*

Media

- A better way to do smart EV charging: Talk to the car, *Canary Media, 09-06-22*
- Californians saved the grid again. They should be paid more for it, *Canary Media, 09-15-2022*
- Renter Protections in Equitable Building Decarbonization, *Green Home Builder, 09-27-2022*
- RPE Recognized For Outstanding Achievement in Promoting Renewable Energy, *PerishableNews.com, 09-28-2022*

6. SVCE Awarded Leader in Education for the eHub Customer Resource Center

- **eHub is recognized for its educational impact and reach** within SVCE's member communities - inspiring, engaging and informing our community about the importance of electrification.
- Award was given by the Center of Resource Solutions (CRS) at the Renewable Energy Markets Summit on September 16, 2022, in Minneapolis

The award recognizes the remarkable customer engagement with the eHub tools and resources, the successful educational email campaigns, and the innovative features within eHub that encourage customers to take action.

SVCE Legislative and Regulatory Update

October 12, 2022

SILICON VALLEY CLEAN ENERGY

Policy Updates

Regulatory Update:

1. Resource Adequacy Reform (RA Reform)
2. Integrated Resource Planning (IRP)
3. Voluntary Allocation Market Offer (VAMO)
4. Net Energy Metering (NEM 3.0)

Legislative Update:

1. Bill Position Matrix
2. Legislative Timeline

Regulatory Update

Key Regulatory Updates

Proceeding	Purpose	Status
Integrated Resource Plan (IRP)	Ensure long-term system planning is on track to meet state's climate and reliability goals.	CPUC issued a two part ruling in the IRP proceeding on 9/8: 1) Requesting comments on a CPUC staff white paper on adjustments to the IRP process which includes enforcement of IRP plans as a means to reduce reliance on procurement orders. SVCE will file comments (solo or in coordination with CalCCA) on November 7th. 2) Proposal to update the baseline resource list for past procurement orders to make all resources which come online after 1/1/2020 eligible. This would have the effect of making several SVCE projects not currently eligible for IRP compliance eligible. SVCE filed comments on September 26th supporting the ruling and suggesting additional modifications to the ruling which would help ease the burden of the IRP procurement orders on SVCE and other LSEs .
RA: Central Procurement Entity	CPE (IOU) procures local RA on behalf of service territory to ensure local reliability is maintained.	Following PG&E's second failure to procure sufficient resources to meet Local RA needs, Peninsula Clean Energy and Central Coast Community Energy issued a Petition for Clarification ("PFC") asking the Commission to clarify the obligations of other LSEs for RA procurement in instances where the CPE failed. SVCE sent a letter supporting this PFC on 9/26.

Key Regulatory Proceedings

Proceeding	Purpose	Status
Net Energy Metering ("NEM 3.0")	Update compensation structure for rooftop solar owners.	On May 9, the CPUC reopened the NEM Successor Tariff proceeding ("NEM 3.0"), specifically requesting comments on aspects of the original, December 2021 Proposed Decision (PD). The ruling seeks feedback from parties on the PD's proposed grid access charge, calculation of non-bypassable charges to NEM customers, export compensation and specific rules for low-income customers. The ruling makes no changes to the PD and SVCE's position on the NEM 3.0 PD remains unchanged. In mid-August the CPUC extended the statutory deadline for the proceeding to August 27, 2023. While the CPUC is unlikely to use the full extension, the new PD is unexpected in the imminent future. We will continue to develop ideas for customer program offerings for current and prospective solar customers to promote solar-plus-battery installations in alignment with whole-home electrification.

Legislative Update

SVCE Legislative Positions Matrix

SVCE had successful legislative year – was able to stop bad legislation and make meaningful changes to bills.

Bill	Summary	SVCE Position (Legislative Program Policy)	Status
AB 1814 (Grayson)	Adds CCAs as eligible program administrators for CPUC's Transportation Electrification Program	Support (Climate Mitigation/Clean Energy Funding)	Died
SB 833 (Dodd)	Creates grant program for local government community resiliency plans and to expedite permitting for distributed energy resources.	Support (Climate Mitigation/Clean Energy Funding)	Died
SB 1112 (Becker)	Ensures notification to tenants and property owners for tariff on bill decarbonization charges.	Support (Fuel Switching and Electrification)	Signed by Governor
SB 1100 (Cortese)	Establishes a process for removing individuals who are willfully interrupting meetings	Support (per Board direction)	Signed by Governor

SVCE Legislative Positions Matrix

Bill	Summary	SVCE Position (Legislative Program Policy)	Status
AB 2061 (Ting)	Requires all entities that receive state or ratepayer funding to submit data on EV station uptime, or the amount of time an EV station is operational.	Support (Fuel Switching and Electrification)	Signed by Governor
SB 1158 (Becker)	Requires load serving entities to report hourly electricity purchases. Requires the CPUC to assess whether reporting demonstrates "adequate progress" towards GHG targets.	Support (Climate Mitigation and Clean Energy Technologies)	Signed by Governor
AB 1944 (Lee)	Allows legislative body members to participate in meetings from private locations and without publishing private addresses on meeting notices.	Support (per Board direction)	Died, legislative vehicle became AB 2449 (Rubio)

SVCE Legislative Positions Matrix

Bill	Summary	SVCE Position (Legislative Program Policy)	Status
SB 1393 (Archuleta)	Requires CEC to develop new guidelines for local existing building decarb ordinances.	Neutral	Died
SB 881 (Min)	Integrated Resources Plans compliance	Opposed Unless Amended	Died
SB 1287 (Bradford)	Raises Financial Security Rate that CCAs must carry to cover reentry fees for customers involuntarily returning to a Provider of Last Resort.		Died
SB 1020 (Laird)	Establishes interim SB 100 clean energy targets and requires state agencies to use 100% zero and renewable energy by 2030.		Signed by Governor
AB 2204 (Boerner Horvath)	Establishes a Deputy Secretary for Climate within the Labor and Workforce Development Agency to oversee clean energy workforce training.	Support (Climate Mitigation and Clean Energy Technologies)	Signed by Governor

Key State Legislative Milestones

- ~~1/3: Legislature reconvenes~~
- ~~1/10: Governor submits budget~~
- ~~1/31: Deadline to move 2-year bills out of first house~~
- ~~2/18: Bill introduction deadline~~
- ~~4/29: Deadline for policy committees to move fiscal bills to fiscal committees~~
- ~~5/6: Deadline for nonfiscal bills to move to the floor~~
- ~~5/20: Deadline for fiscal committees to move bills to floor~~
- ~~5/27: Last day for bills to pass out of first house~~
- ~~6/15: Budget deadline~~
- ~~8/12: Fiscal Committees to move bills to floor~~
- ~~8/31: Last day for each house to pass bills~~
- ~~9/30: Governor's deadline to sign bills~~

SVCE Agenda Look Ahead
Oct. 2022 - Feb. 2023

OCTOBER 2022	NOVEMBER 2022	DECEMBER 2022	JANUARY 2023	FEBRUARY 2023
Board of Directors, October 12:	**Board of Directors, November 9:** Consent: Minutes September 2022 Treasurer Report Committee Reports Regular Calendar: Reach Code Update Community Energy Resilience Program presentation Future Public Meetings Planning (AB 2449)	**Board of Directors, December 14:** Consent: Minutes October 2022 Treasurer Report Committee Reports Regular Calendar: Rate Change Reach Code Update FutureFit Fundamentals Presentation Acknowledgement of outgoing members	**Board of Directors, January 11:** Consent: Minutes November 2022 Treasurer Report Committee Reports Regular Calendar: Appointment of Chair and Vice Chair Appointment of Executive Committee Reach Code Update	**Board of Directors, February 8:** Consent: Minutes December 2022 Treasurer Report Committee Reports Regular Calendar: Appointment of SVCE Committees Reach Code Recap Updates to Exhibits C and D of the SVCE JPA
Executive Committee, October 28, 11:30am : Program Snapshots Request for Recommendation to the SVCE Board of Directors for approval of tariffed on bill pilot program Future Public Meetings Planning (AB 2449)	**Executive Committee, Date TBD:** Program Snapshots: FutureFit Homes and Buildings SVCE Committee membership and selection process review	**Executive Committee, Date TBD:** Program Snapshots	**Executive Committee, Date TBD:** Program Snapshots Chair and Vice Chair Appointments	**Executive Committee, Date TBD:** Program Snapshots

Staff Report – Item 3

Item 3:	**Approve SVCE 2022 Integrated Resource Plan**
From:	Girish Balachandran, CEO
Prepared by:	Monica Padilla, Director of Power Resources Maren Wenzel, Senior Manager of Policy and Regulatory Analysis
Date:	10/12/2022

RECOMMENDATION

Staff recommends that the Board approve the attached 2022 Integrated Resource Plan (IRP) in substantial form, delegate to the Chief Executive Officer the authority to make any further changes needed to ensure compliance with California Public Utilities Commission (CPUC) requirements and guidance before submission by November 1, 2022; and submit with the IRP the following three portfolios and necessary templates:

1. 100% Carbon Free / 65% RPS by 2030 (25 MMT target) as SVCE's Preferred Conforming Portfolio;
2. 100% Carbon Free / 75% RPS by 2030 (25 MMT target) as a Conforming Portfolio; and
3. 100% Carbon Free / 100% RPS by 2035 (25 MMT target) as a Conforming Portfolio

The attached IRP is provided in substantive form, however additional changes may be made to finalize the submittal templates, appendices, and IRP narrative including incorporating feedback from SVCE's Board in the sections related to future activities, barriers to implementing SVCE's IRP, and lessons learned.

BACKGROUND

The Integrated Resource Plan (IRP) is a document required of all load serving entities (LSEs) under the jurisdiction of the CPUC. California has approximately 50 LSEs under partial or full CPUC regulation. The purpose of the IRP process is to ensure that the electricity sector is on track to achieve its portion of the required statewide greenhouse gas (GHG) emissions reductions by 2035. Each cycle of the IRP process takes two years (this is the 2022-2023 cycle) and is accomplished in two basic phases; the planning phase and the procurement phase.

In the first phase, the CPUC provides LSEs initial modeling assumptions and criteria to help inform their plans and provide guidelines for compliance. LSEs use these inputs to support development of their individual IRP plans which are filed on November 1st. Following filing, CPUC staff will aggregate the individual IRPs into a statewide forecast of the electricity generation fleet in 2035. The aggregated portfolio is then tested through a series of models to check that it meets the reliability and climate goals set out by the CPUC.

Following the planning phase, there has historically been a procurement phase. In previous IRP cycles, CPUC staff have used the final assessment from phase one to determine if additional procurement is needed. If it is, the CPUC has ordered additional procurement to meet this need. In the past two cycles this resulted in the D.19-11-016 order for 3,300 MW and the D.21-06-035 order for 11,500 MW of capacity (known as MTR Order or Mid-Term Reliability Order). More recently CPUC staff indicated that they would like to alter the procurement track going forward. Instead of issuing additional procurement orders, the CPUC may require that LSEs prove that they are on track to meet their individual IRP targets. Failure to do so may results in penalties for the LSEs. Details of this proposal are still nascent. However the potential for enforcement of the 2022 IRP portfolios presents a new consideration when adopting a 2022 Preferred Conforming Plan for SVCE.

SVCE's preparation process for this IRP began in June 2022, with a Board workshop on the future of the California grid. Over the summer of 2022, staff worked with Ascend Analytics to develop a series of Conforming Portfolios, which meet the compliance requirements of the IRP while exploring the impact of varying RPS targets for SVCE. In August 2022, staff met with the Board's Executive Committee to provide an overview of the IRP process and portfolios under consideration. In September 2022, staff met with the full Board to provide an update on the draft portfolios and initial key topics for the SVCE narrative. Staff utilized feedback from this session in finalizing its portfolios, including the addition of a new case, the 65% RPS Conforming Plan.

The IRP document staff seeks approval of today reflects the results of their analysis, the guidance received from the Board during the 2022 IRP workshops and Board updates, and specific instructions received by the CPUC for submitting IRPs. In future IRP cycles, SVCE staff intends to continue using the IRP as a way to structure internal conversations about planning and procurement in addition to ultimately producing a compliance document for the CPUC.

ANALYSIS & DISCUSSION

This IRP contains three portfolios: a Preferred Conforming Portfolio and two Conforming Portfolios exploring alternate RPS targets. Though the CPUC is considering both 25 and 30 MMT GHG targets for the statewide electricity sector this cycle, LSEs have the option to show results for only the lower emissions case if they chose. Based on feedback from the SVCE Board, SVCE staff took this approach and each of the three portfolios exceeds SVCE's share of the 25 MMT target. SVCE received a GHG benchmark for this scenario that represents SVCE's proportional load-share of the total allowable electricity sector emissions in each scenario.

Core to SVCE's IRP analysis was working to ensure that all portfolios provide a reasonable balance of clean energy, reliable capacity and affordable rates. Each scenario was therefore assessed on these three basic components. In addition to achieving the primary portfolio optimization goals noted above, staff also worked to ensure that the portfolios reasonably balanced risk while ensuring compliance with the requirement of the IRP as set out by the CPUC.

All three Conforming Portfolios include SVCE's existing contracted resources; generic contracts to satisfy the MTR order; assume 10% of its energy needs will be met with Index plus Renewable Portfolio Stantard (RPS) short-term contracts; assume an additional 30 MW firm hydro contract; allow up to 500 MW of short-term Resource Adequacy (RA) for reliability goals; and include SVCE's share of the PG&E hydro and nuclear allocations. For resources not yet under contract, SVCE staff made assumptions of around availability of resources, costs, viable start dates and terms. These resources merely illustrate how SVCE could achieve the goals of the Conforming Portfolios, but don't represent actual market offers and/or resources.

The Preferred Conforming Portfolio illustrates how SVCE can achieve a 65% RPS target while maintaining 100% carbon free electricity supply on an annual basis. This case is intended to reflect the current Board adopted RPS target of 60% plus an additional 5% to meet the needs of our Green Prime and Green Prime Direct customers. This portfolio also includes an additional 420 GWh in 2030 and 520 GWh in 2035, roughly 10% of annual load, to be met by an Index plus GHG-free short-term contracts. Of the three scenarios, this one requires the smallest amount of new resource build. In this scenario, SVCE's portfolio would add 242 MW of new resources by 2035, consisting of geothermal (7 MW), solar for hybrid (70 MW), battery for hybrid (35 MW), and wind (130 MW).

The other two Conforming portfolios, explore options for SVCE to achieve its 100% annual carbon free energy goal, while relying on differing levels of RPS resources. In both cases, the portfolio excludes the additional hydro noted above for the Preferred Case. Additionally, in the 100% RPS by 2035 case, SVCE no longer utilizes its PG&E hydro allocation as it is, by definition, meeting its energy needs with RPS only resources. These cases are largely intended to explore the impact of lowering SVCE's reliance on hydro power in the future.

The table below shows SVCE's benchmarks for the 25 MMT scenario and the forecast 2030 and 2035 emissions of each of the three portfolios included in this IRP.

	2030	2035
SVCE GHG Benchmark (Million Metric Tons MMT)	0.412	0.334
100% Carbon Free / 65% RPS by 2030	0.261	0.330
100% Carbon Free / 75% RPS by 2030	0.380	0.332
100% Carbon Free / 100% RPS by 2035	0.243	0.268

All portfolios put SVCE on a path to achieving a 24x7 clean energy portfolio, should the Board adopt such a target in the future (one of the five Strategic Focus Areas adopted by the Board is to examine moving SVCE's portfolio in the direction of 24x7 clean energy). Of the three conforming portfolios, the 65% RPS case achieves the highest Carbon Free Energy (CFE) score in 2030. The 65% Plan achieves a 95% CFE score compared to 93% and 94% for the 75% RPS and 100% RPS cases, respectively. SVCE staff will continue to explore the affordability and viability of developing a 24x7 clean portfolio, but finds that the 65% RPS case provides the organization reasonable optionality in regard to future clean energy targets.

STRATEGIC PLAN

Delegating the authority to the CEO to submit the 2022 IRP directly supports SVCE's proposed 2022 Strategic Plan Focus Area: "Explore 24x7 clean energy delivery at scale, to improve on the current 100% clean energy goal"; and further supports Goal 4, "Plan for resources to meet SVCE's mission while balancing multiple stakeholder objectives."

ALTERNATIVE

If the Board does not delegate authority to the CEO to approve final changes to this IRP before submission, SVCE staff may have to submit the document as it is. Given that there is ongoing review of the document and additional edits being made, an inability to refine the document will increase the likelihood of it being rejected by the Commission and SVCE being found out of compliance.

Alternatively, the Board may decide to have an additional special session to finalize approval of the IRP before October 28th, 2022.

The Board may decide to submit only SVCE's Conforming Preferred Portfolio or only the Conforming Preferred Portfolio and one other Conforming Portfolio. Should the Board make such a decision, staff will need to work expeditiously to edit the IRP narrative to reflect the removal of one or more portfolios. While not necessary, submitting additional Conforming Portfolios demonstrates to the CPUC that SVCE has endeavored to put forth a Preferred Portfolio that has merit compared to other considered alternatives and helps show our commitment to meeting a carbon-free energy policy and that it understands the challenges of relying on hydroelectric resources.

FISCAL IMPACT

This IRP alone does not have an individual fiscal impact. Relative to previous IRP cycles, the potential for "enforcement" of this IRP is greater, meaning that the Commission may order SVCE to procure either the resources or attributes in its Preferred Conforming Portfolio. SVCE staff intends to advocate to ensure CCAs such as SVCE maintain procurement autonomy on a forward going basis. Though it forecasts procurement of certain resources out to 2035, these resources merely illustrate the types of resources needed. Actual resources needed to meet SVCE's IRP goals will be determined based on future request for offers and actual market offers. Additionally, approval of the IRP does not remove any of the existing Board approval requirements for individual PPAs or annual budgeting. The Board will thus have separate opportunities to review and approve the expenditures to support the procurement goals in this IRP.

ATTACHMENTS

1. Draft SVCE 2022 Integrated Resource Plan

Standard LSE Plan

Silicon Valley Clean Energy

2022 INTEGRATED RESOURCE PLAN

November 1, 2022

Table of Contents

I. Executive Summary

Silicon Valley Clean Energy (SVCE) is pleased to present herein its 2022 Integrated Resource Plan (IRP). SVCE is a community choice aggregation program (CCA) operated by the Silicon Valley Clean Energy Authority (SVCEA), a California joint powers authority (JPA) composed of twelve cities plus the unincorporated areas of Santa Clara County. As a JPA, SVCEA is a local government agency that operates on a not-for-profit basis and is controlled by, and accountable to, the communities it serves.

SVCE is focused on helping its member communities advance their greenhouse gas (GHG) reduction goals by providing a clean source of energy and supporting economy-wide decarbonization through electrification while maintaining cost competitive rates and furthering system reliability. SVCE appreciates this opportunity to highlight its progress so far and to contribute to the statewide IRP planning exercise.

SVCE's accomplishments since its launch in 2017 include achieving an annual carbon-free[1] content which includes an aggressive Renewable Portfolio Standard (RPS) of approximately 50% since its inception; successfully offering a voluntary 100% RPS product to approximately 4% of its load; demonstrable progress towards meeting SB 350 long-term RPS procurement mandates through the successful execution of fourteen long-term power purchase agreements; strong performance in meeting California's Resource Adequacy mandates; and an expansive list of program offerings to promote decarbonization and electrification within SVCE's service territory. All this was achieved while maintaining competitive rates relative to the incumbent investor-owned utility (IOU) and building a financially stable organization. SVCE has been awarded an investment grade credit rating by Moody's of Baa2 and A Stable by S&P. This rating was awarded because of SVCE's ability to meet all procurement mandates, demonstration of strong leadership, and ability to understand and manage risk and build a financially viable organization.

The 2022 IRP is SVCE's third IRP. In the process of creating it, SVCE engaged its community, stakeholders, and Board of Directors to establish high-level goals, objectives and a vision for where SVCE needs to be in and before 2035. SVCE's planning and electricity procurement efforts will help meet California's aggressive and necessary GHG reduction goals while charting a path towards providing SVCE's customers carbon-free electricity to promote electrification in an affordable and reliable manner. To this end, SVCE has identified three key goals: GHG reductions, affordability and reliability. It is not sustainable or responsible to present a portfolio which merely looks at one of these goals without considering the consequences for the others. This is demonstrated through SVCE's prior and ongoing procurement efforts, which balance aggressive deployment of solar photovoltaics (PV) with paired storage facilities, wind and additional long-term purchases of new and existing geothermal and long-duration storage resources.

[1] SVCE tracks its emissions in the CEC's Power Source Disclosure report. In 2020 and 2021 SVCE reported 7 and 18 lbs of CO2e/MWh, respectively.

In this IRP, SVCE presents three Conforming Portfolios all of which exceed the 25 MMT target. The Preferred Portfolio presents the expected least cost, best fit portfolio which allows SVCE to achieve a 65% RPS target by 2030, while maintaining an 100% carbon-free energy portfolio on an annual basis. SVCE includes in this IRP filing two other Conforming Portfolios. The first achieves a 75% RPS portfolio by 2030 which is maintained thereafter and the second explores the required resources to achieve a 100% RPS portfolio by 2035. These cases are intended to explore the viability and affordability of a more aggressive RPS target while simultaneously reducing hydro reliance and meeting the organization's annual GHG-free goals.

In addition to the three Conforming Portfolios, SVCE completed analysis of several sensitivities intended to address specific questions posed in this narrative. This includes a high electrification plan and a policy sensitivity to understand the impact of an offshore wind order, should the Commission issue one. SVCE presents the results of these sensitivities within this document for the purpose of addressing these planning questions but does not include them as formal conforming or alternate portfolios.

The modeling and results for this IRP, as described in Sections II and III below, relied heavily on Ascend Analytics, including both the Automated Resource Selection (ARS) capacity expansion tool and the PowerSIMM production cost model. Combined, these tools developed least cost, best fit portfolios for SVCE which achieves the necessary reliability, RPS and GHG metrics for each portfolio. In Section IV, SVCE discusses its procurement activities to date along with potential barriers, risks and other activities which may impact the viability and likelihood the Preferred Conforming Portfolio presented herein comes to fruition. Finally, in Section V SVCE considers additional changes to the IRP process which may improve California grid planning.

In the coming years SVCE's procurement activity will focus on balancing additional new renewable procurement with existing cost-effective contracts, diversifying its portfolio in order to better match its renewable generation profile to its customers demand curve, and planning for potential changes in the large hydro market as environmental conditions evolve and more retail suppliers are interested in carbon-free power. SVCE is also investing heavily in programs to help its communities decarbonize their building and transportation sectors by facilitating building electrification, access to electric vehicle charging infrastructure, and decarbonization-related workforce development as shown in Figure 1.

Figure 1. SVCE's approach to deep decarbonization is to impact all four elements

II. Study Design

a. Objectives

SVCE's purpose in undertaking this modeling exercise was twofold. First and foremost, SVCE sought to produce an IRP that would represent SVCE's procurement policies as comprehensively as possible while simultaneously meeting the compliance requirements of this IRP process. Second, SVCE sought to undertake analysis that would be internally useful for planning purposes and instructive on how SVCE might wish to modify its procurement strategy in the future should market conditions make the current approach less feasible or more expensive.

In order to achieve these goals, SVCE took a three-phase approach, beginning in June 2022. The first phase involved conversations with SVCE's Board of Directors about emerging trends in the California grid and how they relate to key procurement decisions and aspects of SVCE's procurement strategy. Key considerations included hydro reliance, reliability, demand side innovation and clean energy goals and metrics. Each of these considerations are discussed in further detail in this document. An important output of the discussions was the decision for SVCE to focus solely on portfolios which exceed its share of the 25 MMT targets.

Based on board feedback, SVCE ultimately decided to assess the impact of three Conforming Portfolios, each of which exceed the 25 MMT 2035 benchmark provided by the CPUC. After modeling and analysis, SVCE has settled on a 65% RPS portfolio in 2030 as its Preferred Conforming Plan. This represents the board adopted target of 60% RPS by 2030, with additional RPS to meet the needs of its Green Prime customers and select large customers. While the organization assessed numerous alternatives in the process of developing this IRP, it provides two other Conforming Portfolios. The first achieves a 75% RPS target by 2030 and the second achieves a 100% RPS target by 2035. These portfolios were assessed to better understand the costs, viability and portfolio risks associated with increasing renewables and reducing reliance on hydro and other GHG-free resources in the future while maintaining a 100% clean energy portfolio on an annual basis.

After portfolio assumptions were developed, SVCE began the modeling process as described below. In developing modeling assumptions SVCE utilized the assigned load forecast and built model constraints into its capacity expansion tool to ensure that each portfolio met or exceeded its share of the 25 MMT targets as well as resource adequacy targets.

b. Methodology

i. Modeling Tool(s)

To evaluate the potential future portfolios described in the previous section SVCE employed the PowerSIMM modeling platform developed by Ascend Analytics. The Automated Resource Selection (ARS) module of PowerSIMM was used for resource selection, and the dispatch module was used to investigate hourly operations, risk and cost of potential future portfolios. An overview of the modeling framework employed for development of the 2022 IRP portfolios is shown in Figure 2.

ARS is PowerSIMM's capacity expansion module. ARS selects the least-cost resource procurement or retirements which satisfy the model constraints. The models begin with a dispatch of existing and candidate resources to determine variable costs, energy generation, carbon emissions, and renewable generation over the time horizon of the study. SVCE employed the following model constraints:

1. Reserve Margin – Requires portfolio to meet reserve margin requirements set by the IRP process
2. Energy Generation – Requires portfolio to supply at least 100% of SVCE load with SVCE resources
3. Emissions Target – Requires SVCE procure carbon free energy to meet or exceed the 25 MMT target given the expected system emissions each hour from the CSP
4. RPS Constraint – Requires portfolio supply meet RPS targets

Outputs from ARS provide the timing and quantity of resources to procure through the study horizon which satisfy the above constraints at the lowest cost. The model considers full resource costs including fixed costs and variable costs. Market sales revenue is treated as a negative cost in the model. The next stage of the planning process is to evaluate ARS output portfolios in the CSP tool. Due to discrepancies between the Ascend modeling tools and the IRP compliance tools, cases were then post-processed to ensure a least cost fit which achieved the required RPS, RA and GHG metrics[2]. Finally, the portfolios were evaluated in production cost models to calculate total portfolio costs and gauge portfolio risk.

PowerSIMM captures and quantifies elements of risk through the simulation of meaningful uncertainty with weather as a fundamental driver. PowerSIMM is a "hybrid model," meaning it uses both market data and long-term fundamentals to simulate load, renewables, and CAISO spot market prices against which resources are dispatched and valued. To better capture the uncertainty in future conditions, a stochastic framework enabled simulation over a wide range of different future conditions, where market prices, weather patterns, renewable generation, and load significantly vary. To capture the risk associated with the distribution of portfolio costs (resulting from the stochastic simulation), a "risk premium" metric was used that indicates the cost at risk or the actuarial value of a portfolio's exposure to market price volatility, variation in generation and load, and changes in weather conditions.

[2] SVCE ensured that the RA, RPS and GHG metrics for compliance are achieved in all portfolios. In instances where the annual GHG-free percentage of energy from the CSP tool was less than 100%, SVCE relied on the modeling results of the Ascend tool. Due to the deliverability terms of SVCE's contracts, it expects to achieve 100% GHG-free energy with the portfolios presented, even in instances where the CSP tool does not achieve this target. SVCE monitors its contracted energy against its annual GHG-free target and intends to procure additional short-term GHG-free resources to maintain that target, if needed.

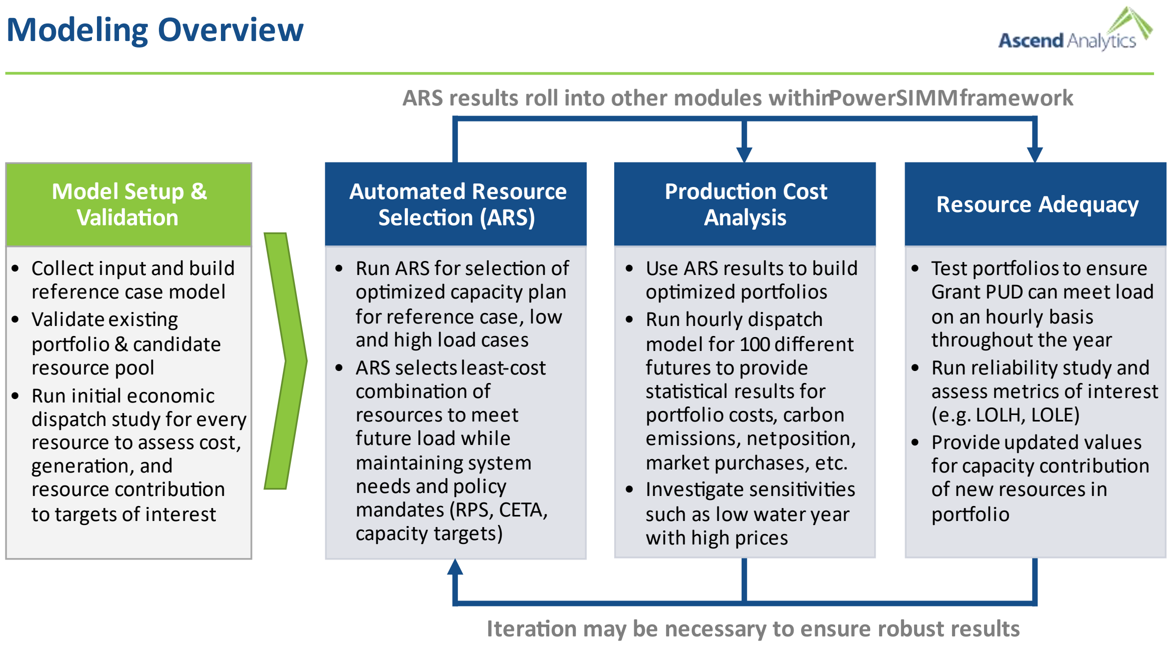


Figure 2. Modeling framework to develop compliant, reliable, and least cost portfolios in PowerSIMM.

Figure 3 shows PowerSIMM's modeling framework. PowerSIMM simulates hourly spot price conditions (i.e. "during delivery simulations") as a function of weather, system load, and renewables. The simulated spot prices are scaled so that the average of all spot prices equals the simulated on-peak/off-peak monthly forward price. Market forward data in the near term (next 5 years) is blended with Ascend's long-term fundamental forecasts of gas and power prices driven by supply fundamentals in the WECC.

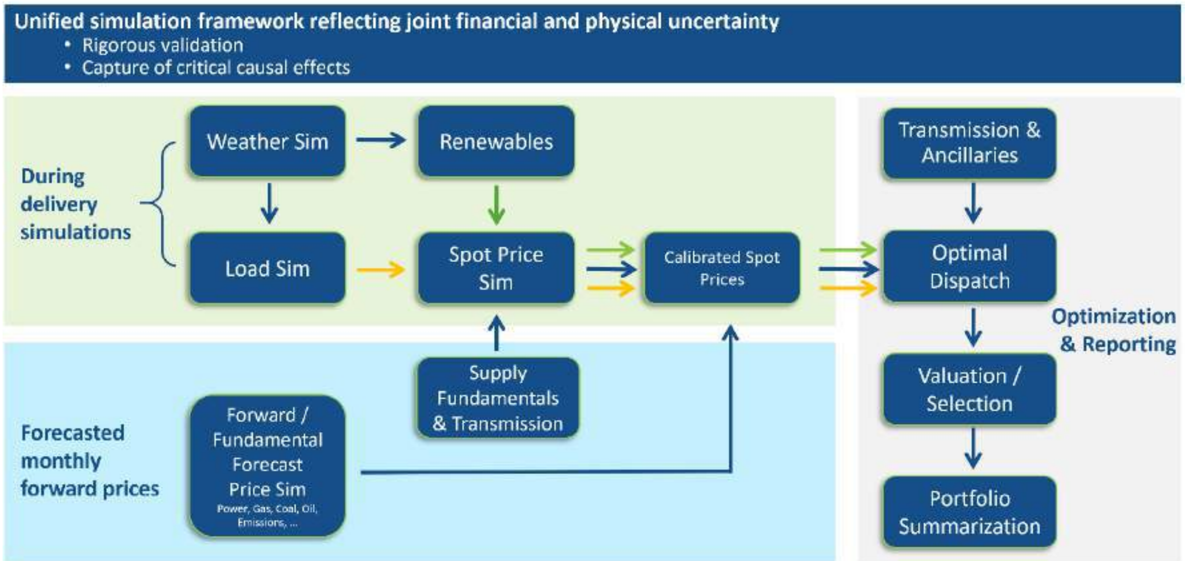


Figure 3. Schematic diagram of PowerSIMM modeling framework.

PowerSIMM captures a meaningful range of uncertainty driven by the factors that create price risk in power markets, including variability in weather, load, renewable output, congestion risk, and forward price volatility. PowerSIMM trains its econometric "sim engine" model with up to 30 years of historical weather to model the relationships between weather, load, and renewables. Ascend parameterizes its weather uncertainty using both time (month, day, hour) and autoregressive terms to create discrete chronological weather simulation. Weather serves as an input to load and renewable simulation for both SVCE load and CAISO system load. For this study each portfolio was put through 50 "sim-reps," which are simulation processes of 8760 hours across the planning time horizon. Results were summarized across the sim-reps to capture the full distribution of outcomes, including summarization of mean, median, P5, and P95 states.

SVCE selected PowerSIMM and the ARS module as the primary capacity expansion, production cost and valuation tool for this IRP because it provides deeper insight and precision in valuation relative to a sector-wide capacity expansion model like RESOLVE.[3] PowerSIMM was used as a simulation model to valuate SVCE's load and resources within the context of both CAISO hubs (NP-15) and specific LMPs (for PPA resources).

ii. Modeling Approach

In developing its models, SVCE first input historical generation data, cost projections, and other relevant input data into the ARS module. SVCE utilized the CSP generation shapes for new generic resources and included all resource types selected in the RESOLVE LSE Filing Requirements results ("RESOLVE Results")

[3] RESOLVE is a high-level capacity expansion optimization model that selects system level (i.e. WECC or California wide) resources to meet a set of load, emissions, and reliability constraints at minimum cost using a 37-day simplification.

as candidate resources. After evaluation of RESOLVE cost assumptions, SVCE staff opted to utilize the cost curves developed by Ascend Analytics which more closely represent prices observed in recent RFOs. This price forecast has similar cost decrease trajectories to RESOLVE over time. In some instances, such as for offshore wind, where staff did not have internal cost projections, the IRP cost assumptions were used.

To ensure that model results met the RA, RPS and GHG targets for each model run, Ascend Analytics built relevant constraints into the model. Though SVCE decided to exceed the 25 MMT ton target for each Conforming Portfolio, the results of the ELCC studies are not directionally consistent. To ensure that SVCE's Conforming Portfolios are compliant with both the 25 MMT and 30 MMT RDTs as required, staff used the lower ELCC for each resource in each year to ensure compliance. In initial model runs these were validated to ensure alignment with both the reliability output of the Resource Data Template ("RDT") and the Clean System Power ("CSP") tool. In some instances, incremental post-processing was required to adjust the ARS portfolio results to the IRP compliance tools.

Once assumptions were input, staff verified that modeled systems behaved as anticipated under alternative weather and pricing conditions. An economic dispatch study for every resource to assess costs, generation, and contribution to targets of interest was then run. These inputs were fed to the ARS module, which selected new resources based on minimizing the cost of procuring and operating new and existing resources while also meeting the constraints built into the model to ensure system requirements for RA, RPS and GHG constraints were met. After portfolios were selected, they were evaluated in PowerSIMM to understand their operational feasibility, cost, portfolio risk and the overall implications of the portfolio.

In addition to the conforming portfolio runs filed as part of this IRP, SVCE also completed several sensitivities intended to help inform this narrative. Namely, SVCE did an ARS run utilizing the "ATE" IEPR inputs included in the LSE Filing Requirements RESOLVE package released June 29, 2022 to assess what additional resources may need to be built under the High Electrification scenario. Additionally, though ARS did not select any offshore wind in any conforming study, SVCE completed a model run which forced in SVCE's load share allocation of the RESOLVE model results to assess how a potential procurement order would impact its overall portfolio build. SVCE did not complete a full production cost model for these sensitivity runs but rather presents the results solely for the purpose of discussion in the relevant narrative sections below.

For the Preferred Conforming Portfolio filed as part of this IRP, SVCE completed analysis in addition to what was required for completion of the RDT and CSP tools. First, SVCE assessed the output of the ARS results in its 24-slice RA framework tool to assess likely portfolio fit under the soon to be implemented RA reforms adopted in D.22-06-050. The intention of this assessment was to ensure that resources selected for the portfolio provided RA value not only based on IRP ELCC calculations but also for likely, albeit still undefined, RA compliance requirements going forward. While no specific metrics were derived for this effort, staff used these results to evaluate the reasonableness of each portfolio.

SVCE is actively considering pathways to develop a portfolio which achieves GHG-free energy on an hourly basis each day of the year. While the SVCE board has not set a specific target to achieve such a "24x7" clean energy portfolio, in which its load is met by clean resources on an hourly basis, it is important to SVCE that procurement decisions made today help enable such a portfolio in the future should the Board provide such direction. Additionally, in 2022 SVCE announced a partnership with Google for a 24x7 Carbon-Free Energy Agreement. Under this agreement SVCE will serve Google's Mountain View and Sunnyvale offices by matching carbon-free electricity to Google's local demand at least 92% of all hours of the year. This is measured using a Carbon-Free Energy ("CFE") score. To estimate the impact of each portfolio on SVCE's ability to achieve a future 24x7 clean portfolio, staff performed a modified version of the CFE calculation to assess hourly carbon-free energy for each Conforming Portfolio[4]. These results are included in Section III below.

III. Study Results

a. Conforming and Alternative Portfolios

SVCE has chosen to submit three Conforming Portfolios for this IRP:

- **65% RPS Preferred Conforming Portfolio:** based on the 25 MMT target, this portfolio explores required resources to meet SVCE's current board adopted target of 60% RPS by 2030, with an additional 5% to meet the needs of its Green Prime customers and select large customers, while maintaining 100% GHG-free power on an annual basis.
- **75% RPS Conforming Portfolio:** based on the 25 MMT target, this portfolio explores which resources would be required to meet a 75% RPS target starting in 2030 while maintaining 100% carbon free energy on an annual basis.
- **100% RPS Conforming Portfolio:** based on the 25 MMT target, this portfolio explores which resources would be required to meet a 100% RPS target by 2035. In this scenario SVCE removes its PG&E hydro allocation starting in that year, but utilizes it in other years to achieve 100% carbon free energy on an annual basis.

SVCE's Board of Directors has selected the 65% RPS Conforming Portfolio as its preferred portfolio and the portfolio that most accurately reflects SVCE's intended procurement strategy going forward. This portfolio is fully consistent with SVCE's mandatory Board-adopted procurement requirements, and provides a diverse and balanced portfolio that achieves results consistent with SB 350's reliability, GHG-reduction, RPS, disadvantaged communities, renewables integration, and other requirements. SVCE discusses its rationale for selecting this as its preferred portfolio in more detail in section III b below.

[4] The CFE calculation Is described In Google's " 24/7 Carbon-Free Energy: Methodologies and Metrics" report, available: https://www.gstatic.com/gumdrop/sustainability/24x7-carbon-free-energy-methodologies-metrics.pdf For purposes of the IRP, staff utilized the 30 MMT CSP results to calculate the grid CFE score in each hour of the year.

i. Contracted Resources Included in All Portfolios

Portfolios developed by SVCE as part of its 2022 IRP modeling exercise included all of the resources SVCE had under contract as of August 1, 2022 as described in the IRP filing requirements document[5]. In addition to the contracted resources, SVCE included its portion of the CAM and CPE allocations per the filing requirement[6].

The following tables summarizes the SVCE resources included in all portfolios:

Table 1: SVCE Contracts (Capacity, MW)

	2024	**2026**	**2030**	**2035**
Hybrid [generator, battery]	*[365.5, 131.125]*	*[365.5, 131.125]*	*[365.5, 131.125]*	*[365.5, 131.125]*
Geothermal	*59*	*59*	*59*	*52*
Wind	*154*	*154*	*154*	*111*
Solar	*80*	*80*	*80*	*80*
Long-Duration Storage	*0*	*29*	*29*	*29*

Table 2: SVCE Contracts (Energy, GWh)

	2024	**2026**	**2030**	**2035**
Hybrid	*1036*	*1148*	*1126*	*1103*
Geothermal	*573*	*697*	*575*	*556*
Wind	*492*	*492*	*492*	*324*
Solar	*102*	*106*	*104*	*83*
Other[7]	*22*	*23*	*22*	*18*

ii. Generic Resources Included in All Portfolios

In addition to known contracted resources, SVCE assumed it would continue to receive its hydro allocations from PG&E through the IRP planning horizon. SVCE also included its allocation of the Diablo Canyon Nuclear Power Plant through the originally planned retirement date of each unit in 2024 and

[5] Aligned with SVCE's 2022 RPS Procurement Plan, SVCE has not Included the Big Beau solar plus storage PPA that was executed following a 2018 RFO. This contract Is currently under dispute with the developer, EDF.

[6] CAM and CPE allocations are not shown In Tables 1 and 2 given confidential nature of SVCE's peak share allocation.

[7] Includes small portions of biomass and biogas included as part of PG&E's Voluntary Offer allocation.

2025[8]. SVCE also included sufficient energy to meet its remaining obligations under the D.21-06-035 procurement order (MTR order).

Each portfolio also assumed a portion of its procurement needs will continue to be met by short-term contracts from existing resources. SVCE assumed that approximately 10% of SVCE load can be met using short-term Index + RPS contracts over the planning horizon. Given SVCE has historically procured 50% of its loads utilizing such transactions, SVCE believes this represents a conservative view of market potential. SVCE also included a generic hydro contract capable of delivering both energy and capacity over the planning horizon based on its experience acquiring import RA from Washington met through hydro as the specified resource.

Finally, SVCE set an internal planning target for approximately 15% of its annual energy needs to be met with geothermal resources. SVCE's geothermal target is intended to ensure sufficient diversity in its RPS resource pool and to help support system reliability. To help meet this goal, SVCE assumed that 10 MWs of existing geothermal can be contracted by 2030. SVCE has seen such existing geothermal resources offered into previous RFOs and believes the capacity can reasonably be contracted. In all portfolios additional geothermal capacity is selected to help meet this goal.

Table 3: Additional Generic Resources (Energy, MWh)

	2024	***2026***	**2030**	***2035[9]***
PG&E Hydro Allocation	*320*	*320*	*320*	*320*
PG&E Nuclear Allocation	*756*	*0*	*0*	*0*
Index + RPS	*368*	*372*	*383*	*404*
Additional Hydro	*110*	*110*	*110*	*140*
Geothermal	*0*	*0*	*78*	*78*

In addition to the resources above, SVCE allowed up to 500 MW of generic RA resources to be procured on a short-term basis each year to meet its RA needs. As a post-processing step, SVCE "right-sized" the total contract amount of these RA resources for each portfolio to ensure that the portfolio was not over-procuring such resources. This value was deemed reasonable by the SVCE modeling group based on experience in the market. Further, this amount represents less than SVCE's load share of the existing fossil fleet.

For the 65% RPS Preferred Conforming Case, SVCE included an additional 430 MWh of imported, energy only, hydro, roughly doubling the hydro in the portfolio.

[8] SVCE calculated its DCPP allocation utilizing the 2021 allocation values, assuming each unit had equal and constant production throughout the year. The 2024 allocation was calculated assuming unit 1 would provide half of the total energy shown by PG&E in 2021 through November and unit 2 would provide the same energy over the entire year. The 2025 allocation assumed unit 2 would provide 75% of its assumed 2021 output.

[9] Hydro is not used in 2035 for the 100% RPS case.

iii. Selected Conforming Portfolio Resources

Table 4 below shows the cumulative build for new resources in 2030 and 2035 for each portfolio. Across all scenarios, SVCE models did not select new resources prior to 2028.

Table 4: Cumulative Selected New Resources by Portfolio

	2030			2035		
	65% RPS	75% RPS	100% RPS by 2035	65% RPS	75% RPS	100% RPS by 2035
Solar for Hybrid	0	70	83	70	105	120
Storage for Hybrid	0	35	41	35	53	60
Wind, Northern CA	0	0	150	100	150	305
Wind, Wyoming	0	0	0	30	110	110
Geothermal	7	7	27	7	7	27

Figure 4, 5 and 6 below show the cumulative incremental capacity needs for each Conforming Portfolio by year.

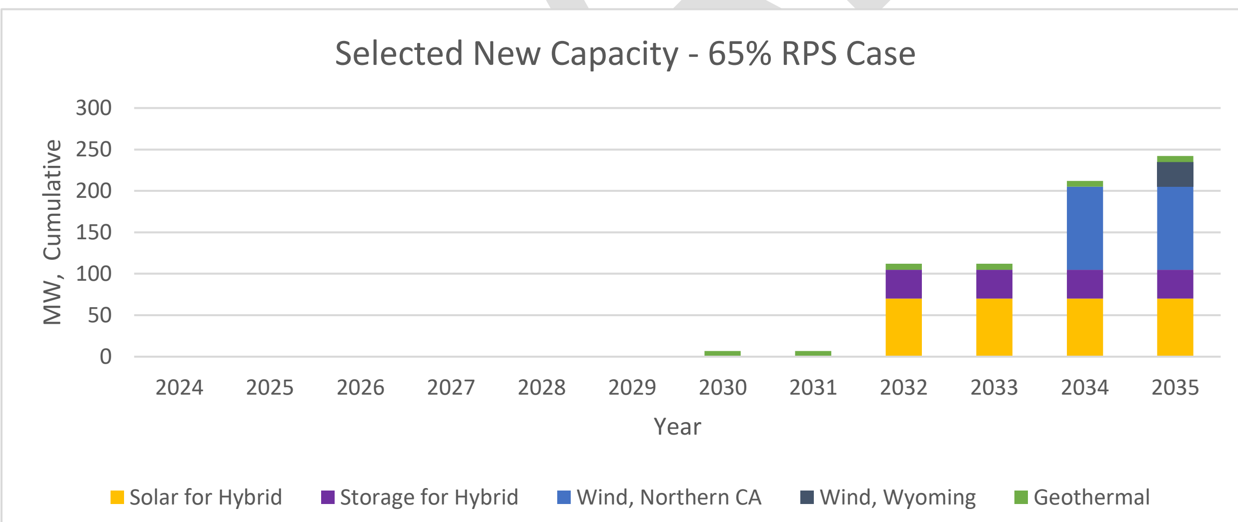


Figure 4. Incremental Capacity for 65% RPS Case.

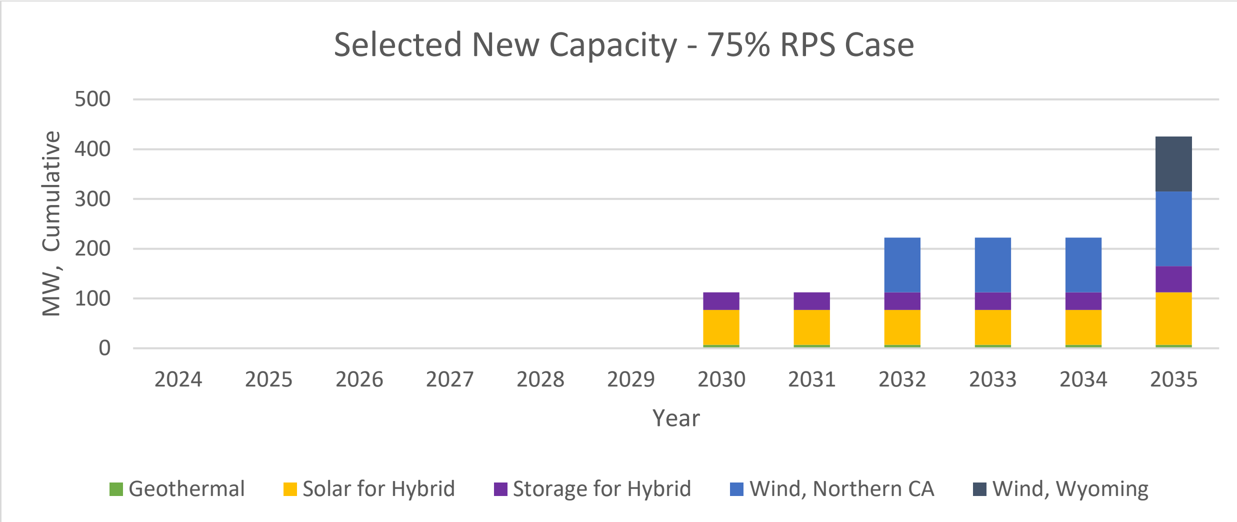


Figure 5. Incremental Capacity for 75% RPS Case.

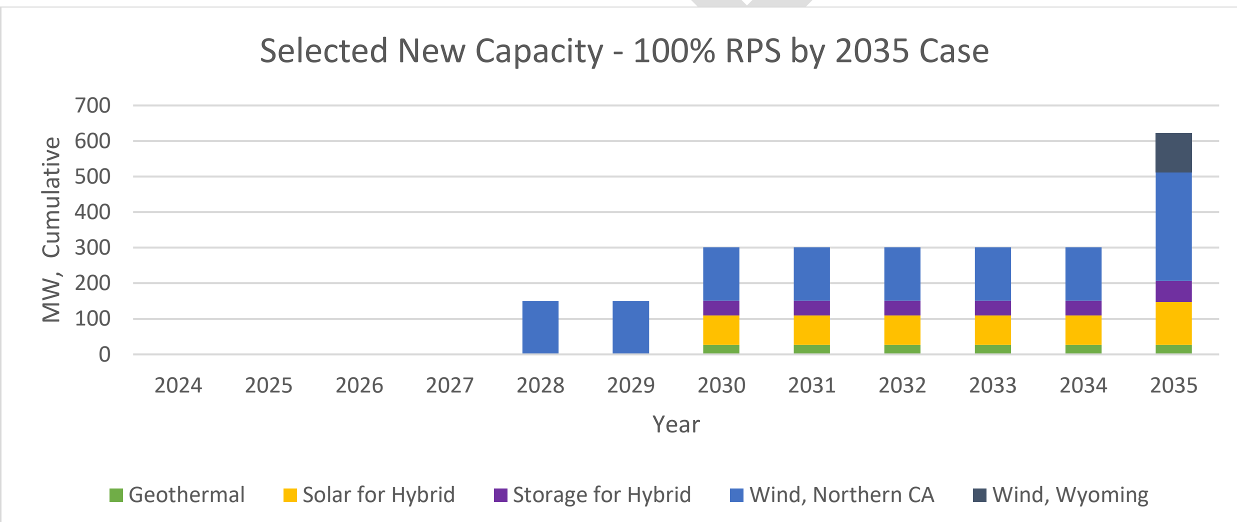


Figure 6. Incremental Capacity for 100% RPS Case.

Across all Portfolios, the model found a mix of wind and hybrid resources to be the most cost-effective way to meet its RPS, GHG emissions and RA targets. The model did not by default select geothermal, however, to meet its 15% annual energy target from geothermal resources, new geothermal was added in all scenarios. Additional geothermal was added as a post-process step to the 100% RPS by 2035 case to ensure wind build did not exceed reasonable levels.

The primary cause of differences between the Preferred Conforming case and the other two submitted Conforming cases was the differing RPS targets in each scenario. As RPS targets increase, SVCE's reliance on hydro power falls as the energy is replaced by new RPS resources.

iv. Comparison to Preferred System Plan Portfolio

Table 5 below summarizes SVCE's Conforming Portfolio capacity selection results against its load share allocation of the 2021 Preferred System Plan (PSP) Portfolio.

Table 5: SVCE Portfolio Results Compared to Load Share Allocation of 2021 Preferred System Plan Portfolio

	2030				2035			
	Load Share of PSP	65% RPS	75% RPS	100% RPS by 2035	Load Share of PSP	65% RPS	75% RPS	100% RPS by 2035
Hybrid	479	0	100	123	815	105	158	180
Wind, Northern CA	63	0	0	150	64	100	150	305
Wind, Wyoming	27	0	0	0	27	30	110	110
Geothermal	21	7	7	27	21	7	7	27

In all scenarios SVCE procures significantly less hybrid resources than its load share allocation of the 2021 PSP. In all but the 100% RPS by 2035 case it procured less than its load share allocation of geothermal. SVCE's existing portfolio has relatively high levels of each resource type. To ensure portfolio diversity, reduce curtailment risk and ensure SVCE's portfolio is achieving high CFE scores across all hours, wind resources add value to the portfolio while hybrids have increasingly diminishing value. Therefore, disproportionately more wind resources are selected to complement the existing hybrid and geothermal resources.

b. Preferred Conforming Portfolios

SVCE's preferred conforming portfolio is the 65% RPS Conforming Portfolio. This portfolio maintains SVCE's 100% goal of being 100% carbon free on an annual basis while balancing the costs and risks associated with long-term PPAs and continued hydro reliance. In addition to the rationale described below, SVCE selected this portfolio for the following reasons:

- It is consistent with the SVCE board approved RPS target
- Reliability, resource adequacy, and grid integration requirements are still in flux and highly uncertain and may impact the value of additional RPS resources
- The expansion of Direct Access could pose significant risk to SVCE if it procures large amounts of long-term resources beyond those necessary to meet existing mandates
- Uncertainty around the IRP procurement track and on-going development risk impacts from the COVID-19 pandemic provide reason to be cautious about adoption of a portfolio which may be challenging to implement.

i. RPS and GHG targets

Each of the portfolios assessed by SVCE met the selected RPS targets, which all meet or exceed the 60% RPS target by 2030, established in the RPS compliance guidelines. SVCE notes that for all cases, the stated RPS target used to identify the case is often exceeded due to the use of RPS resources to achieve the GHG-targets set. In the Preferred Conforming Scenario approximately 90% of the delivered RPS energy each year comes from long-term contracted resources, exceeding the 65% requirement.

All cases also exceeded SVCE's 25 MMT GHG target. While the 75% RPS achieves minimally lower GHG-emissions in 2035 than the Preferred Conforming Plan, system emissions are higher in 2030.[10] The 100% RPS plan achieves the lowest GHG-emissions in 2035, far exceeding SVCE's target, but as discussed later in this section raises concerns for viability and diversity. It also had only marginally lower emissions than the Preferred Conforming Plan did in 2030. The earlier reduction in GHG-emissions found in the Preferred Plan is considered a positive attribute of the Preferred Conforming Plan, especially due to the uncertainty of system emissions later in the planning horizon. SVCE provides detailed results of the GHG emissions for all portfolios in Section III.c.

As noted above, SVCE is exploring the viability of achieving a "24x7" clean portfolio, in which its hourly load is met by clean resources. In reviewing the results of each portfolio, SVCE assessed the hourly Carbon Free Energy ("CFE") score of the portfolio. The methodology for this calculation is noted in Section II above.

Of the three Portfolios, the Preferred Conforming Plan provided the best hourly distribution of carbon free energy due to the reliance on hydro power resources while simultaneously achieving the highest CFE score in 2030. Given virtually all of SVCE's emissions come from use of system power, reducing its CFE score is one of the best ways SVCE can limit impact to DAC communities throughout the state. The Preferred Conforming Plan achieves 95% CFE score compared to 93% and 94% for the 75% RPS Conforming Case and 100% RPS Conforming Case, respectively. Figure 7 below provides a summary of the CFE results for each case and illustrates the benefit of hydro on reducing reliance on system power in the late evening and early morning hours.

[10] In 2030 the 65% case emissions are approximately 40% lower due to assumed hydro power usage to achieve 100% carbon free energy on an annual basis. In 2035 the Preferred Conforming Scenario's emissions are less than 2.5% higher than in the 75% Conforming Scenario.

Hour

Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Preferred Conforming Plan																								
1	91%	92%	92%	89%	88%	90%	92%	96%	98%	98%	98%	98%	99%	99%	98%	97%	94%	88%	88%	87%	88%	89%	90%	91%
2	93%	93%	93%	93%	91%	90%	93%	96%	98%	98%	98%	98%	99%	99%	99%	99%	98%	90%	89%	88%	89%	90%	91%	92%
3	98%	98%	98%	98%	97%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	93%	94%	96%	98%	98%	99%
4	98%	99%	99%	99%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	96%	97%	98%	99%	99%	99%
5	99%	99%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	97%	97%	99%	99%	99%	99%
6	97%	98%	98%	98%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	97%	98%	99%	98%	97%	98%
7	90%	91%	91%	91%	91%	94%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	97%	94%	95%	95%	93%	90%	91%
8	85%	86%	86%	86%	84%	89%	96%	98%	99%	99%	100%	100%	100%	99%	99%	99%	97%	93%	93%	93%	92%	88%	86%	86%
9	82%	83%	83%	82%	80%	84%	93%	97%	100%	100%	100%	100%	100%	100%	99%	98%	95%	92%	92%	91%	90%	86%	85%	85%
10	94%	94%	95%	94%	92%	92%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	94%	90%	90%	90%	91%	91%	92%	93%
11	89%	90%	90%	90%	90%	90%	94%	98%	99%	100%	100%	100%	100%	100%	100%	98%	87%	88%	87%	87%	87%	87%	88%	90%
12	85%	85%	85%	84%	85%	86%	88%	93%	93%	96%	97%	98%	97%	97%	97%	92%	86%	85%	84%	84%	84%	84%	84%	85%
75% RPS Conforming Plan																								
1	87%	87%	86%	83%	82%	84%	87%	94%	97%	98%	98%	99%	99%	99%	98%	97%	91%	84%	84%	83%	83%	85%	85%	86%
2	88%	88%	88%	86%	84%	84%	88%	94%	97%	98%	99%	99%	99%	99%	99%	98%	96%	85%	84%	83%	84%	85%	86%	88%
3	96%	95%	95%	95%	92%	90%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	90%	91%	94%	96%	97%	97%
4	96%	97%	97%	97%	96%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	93%	95%	97%	97%	98%	98%
5	97%	97%	97%	97%	96%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	95%	96%	98%	98%	98%	98%
6	93%	94%	94%	94%	95%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	95%	97%	98%	97%	95%	95%
7	86%	86%	86%	86%	86%	90%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	93%	94%	94%	90%	87%	87%
8	80%	80%	81%	81%	79%	85%	94%	98%	99%	99%	100%	100%	100%	100%	100%	99%	97%	92%	91%	92%	90%	86%	82%	83%
9	77%	77%	77%	75%	74%	80%	91%	98%	100%	100%	100%	100%	100%	100%	100%	99%	95%	90%	91%	90%	88%	83%	81%	82%
10	90%	91%	91%	90%	87%	89%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	88%	87%	87%	88%	88%	89%	91%
11	85%	86%	85%	84%	84%	85%	91%	98%	100%	100%	100%	100%	100%	100%	100%	98%	85%	84%	84%	84%	83%	84%	84%	86%
12	79%	79%	78%	77%	77%	79%	83%	91%	94%	96%	97%	98%	98%	97%	97%	93%	82%	81%	80%	80%	79%	80%	79%	80%
100% RPS by 2035 Conforming Plan																								
1	89%	89%	88%	86%	85%	87%	90%	96%	98%	98%	99%	99%	99%	99%	98%	98%	93%	86%	86%	85%	85%	87%	87%	88%
2	91%	91%	91%	89%	87%	87%	91%	96%	98%	99%	99%	99%	100%	99%	99%	99%	97%	88%	87%	86%	86%	88%	89%	90%
3	97%	97%	97%	96%	94%	92%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	92%	93%	95%	97%	98%	98%
4	98%	98%	98%	98%	97%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	95%	96%	98%	98%	98%	98%
5	98%	98%	98%	98%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	97%	99%	99%	99%	99%
6	95%	95%	96%	95%	96%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	98%	99%	98%	96%	96%
7	88%	88%	88%	87%	87%	92%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	95%	95%	95%	92%	89%	89%
8	83%	83%	83%	83%	81%	88%	96%	98%	99%	100%	100%	100%	100%	100%	100%	99%	98%	94%	94%	94%	93%	88%	84%	85%
9	80%	80%	80%	78%	77%	82%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	97%	93%	93%	92%	90%	85%	84%	84%
10	93%	93%	93%	92%	89%	91%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	90%	89%	89%	90%	90%	91%	92%
11	87%	88%	88%	87%	87%	88%	94%	99%	100%	100%	100%	100%	100%	100%	100%	99%	87%	86%	85%	85%	85%	86%	86%	88%
12	81%	80%	80%	79%	80%	81%	85%	93%	95%	97%	98%	98%	98%	98%	98%	95%	83%	83%	82%	82%	81%	82%	81%	82%

Figure 7. Heat Map of SVCE Preferred and Conforming Portfolios CFE Scores

ii. Ratepayer Impact

As an LSE operating in an environment where customers have choice, SVCE is focused on ensuring affordability for its customers. Each conforming plan was evaluated using the PowerSimm dispatch module, as described in Section II.b. above, to evaluate both portfolio cost and risk metrics. As described in Section III.e. below, SVCE found the Preferred Conforming Portfolio to be the least cost of the three filed Conforming Portfolios.

One key metric in evaluation of the portfolios is the assumed "cost at risk"; a measurement of the probabilistic deviation from the mean which represents a tail probability. While the Preferred Conforming Portfolio didn't have the lowest assessed value of this metric across portfolios, the expected cost at risk of all portfolios was low relative to the overall portfolio cost. SVCE maintains significant reserves to help cover unexpected cost fluctuations to minimize the impact of such events on ratepayer bills.

Additionally, SVCE believes that diversifying procurement with short and long-term contracts allows the LSE to right size the portfolio and better manage risks, whether from the market, load departure or regulatory uncertainty. The higher volume of short-term energy contracts in the Preferred Conforming portfolio, will help manage price and load forecast risks. SVCE expects the Preferred Conforming Portfolio will help ensure the organization can dynamically adjust to changing conditions and minimize impact to ratepayer bills over time.

iii. Reliability, Diversity and Grid Management

In considering the Conforming Portfolios evaluated, SVCE examined the potential risks each portfolio poses to both SVCE and the grid at large, including reliability, development and supply risks. In all

Conforming Portfolios, SVCE meets its reliability obligations through the use of both long-term and short-term contracts. As described in Section III.f below, SVCE relies on less than its load share allocation of the existing fossil fleet to meet its RA requirements in any year. Additionally, the reliance on existing resources to meet RA needs is relatively consistent across Conforming Portfolios. SVCE analyzed the Preferred Conforming Portfolio using both the 30 MMT and 25 MMT ELCC assumptions and found that the 25 MMT ELCC assumptions required slightly less system capacity to meet its reliability needs. SVCE therefore does not expect this portfolio to have meaningfully different reliability regardless of if other LSEs procure in a manner consistent with the 25 or 30 MMT scenarios. Though SVCE uses short-term existing fossil resources as a proxy for meeting its RA requirements for simplicity, in practice these RA only contracts will likely come from a variety of resources.

A key component of the evaluation of the Conforming Portfolios was ensuring a reasonable balance of development risk for new resources and supply risk for existing resources such as hydro power. Relative to its prior IRP, SVCE's Preferred Conforming Portfolio relies on less existing resources to meet its energy needs and as described in Section II of this narrative worked to ensure that all reliance on existing resources was reasonable given both what SVCE has historically contracted and expected future market conditions. The COVID-19 pandemic and resulting supply chain issues has highlighted that over-reliance on new resources brings its own set of risks, including delays. In addition to balancing short and long-term contracts, over-reliance on specific resource types can also provide challenges. As an example, recent increases in lithium-ion prices have triggered requests for repricing of contracts. SVCE chose its Preferred Conforming Plan in large part because it appears to most reasonably balance the portfolio's reliance on new resources while providing energy from a diverse mix of resource types.

As a CCA, SVCE has limited ability to support the resiliency of the bulk transmission system, but through the efforts of its programs has and will continue to work to enhance both grid resiliency and demand-side energy management. SVCE used the same demand side modifiers in all scenarios and while demand response was a candidate resource it was not selected in any portfolio. Therefore, these resources did not factor into selection of SVCE's preferred portfolio selection. SVCE is actively developing internal load forecasts for load modifiers specific to its service territory which it hopes to utilize in the next IRP cycle and may include sensitivities to assess the impact of various load modifier penetrations on the supply side portfolio and distribution grid. Regardless of what resources the supply-side portfolio ultimately adopts, SVCE will remain committed to supporting the resiliency and affordability of the electricity grid as it advocates for electrification. SVCE describes these efforts in more detail in Section IV below.

c. GHG Emissions Results

All of SVCE's conforming portfolios exceed its assigned GHG-benchmarks under the 25 MMT version of the CSP. SVCE did not use a custom hourly load shape or user-specified production profiles in the CSP calculator but did adjust the portion of C&I load to reflect its actual customer class shares. Below SVCE provides the GHG Emissions results for its portfolios using both the 25 MMT and 30 MMT versions of the CSP tool.

Table 6: Preferred Conforming Portfolio GHG Emissions, 25 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.412**	**0.334**
CO_2	*MMt/yr*	0.09	0.23	0.261	0.330
PM2.5	*tonnes/yr*	3	7	10	12
SO_2	*tonnes/yr*	1	2	2	2
NOx	*tonnes/yr*	27	31	33	25

Table 7: 75% RPS Conforming Portfolio GHG Emissions, 25 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.412**	**0.334**
CO_2	*MMt/yr*	0.09	0.23	0.380	0.332
PM2.5	*tonnes/yr*	3	7	13	11
SO_2	*tonnes/yr*	1	2	2	2
NOx	*tonnes/yr*	27	31	37	25

Table 8: 100% RPS by 2035 Conforming Portfolio GHG Emissions, 25 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.412**	**0.334**
CO_2	*MMt/yr*	0.09	0.23	0.243	0.268
PM2.5	*tonnes/yr*	3	7	8	8
SO_2	*tonnes/yr*	1	2	2	1
NOx	*tonnes/yr*	27	31	30	21

Table 9: Preferred Conforming Portfolio GHG Emissions, 30 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.546**	**0.418**
CO_2	*MMt/yr*	0.10	0.23	0.217	0.295
PM2.5	*tonnes/yr*	4	8	9	13
SO_2	*tonnes/yr*	1	2	2	2
NOx	*tonnes/yr*	28	32	32	28

Table 10: 75% RPS Conforming Portfolio GHG Emissions, 30 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.546**	**0.418**
CO_2	*MMt/yr*	0.10	0.23	0.326	0.293
PM2.5	*tonnes/yr*	4	8	13	13
SO_2	*tonnes/yr*	1	2	2	2
NOx	*tonnes/yr*	28	32	37	28

Table 11: 100% RPS by 2035 Conforming Portfolio GHG Emissions, 30 MMT Scenario

	Unit	2024	2026	2030	2035
SVCE Target	***MMt/yr***			**0.546**	**0.418**
CO_2	*MMt/yr*	0.10	0.23	0.184	0.223
PM2.5	*tonnes/yr*	4	8	7	10
SO_2	*tonnes/yr*	1	2	2	1
NOx	*tonnes/yr*	28	32	29	24

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

SVCE provides the results of the air pollutants for each of its Conforming Portfolios as calculated in both the 25 MMT and 30 MMT versions of the CSP in Table 12 and 13 below. The majority of SVCE pollutants come from system power, including the CHP attributable emissions from the LSE share of CAISO wide system emissions in the calculator. SVCE's portfolio also includes small shares of biogas and biomass emissions which come solely from SVCE's Voluntary Allocation, which the organization is using to help meet its RPS goals in a cost-effective manner. As noted in Section III.b above, SVCE selected its Preferred Conforming Portfolio in part because it best fits SVCE's load to its clean energy supply, thereby reducing reliance on system power.

Table 12: Local Air Pollutant Results, 25 MMT Scenario

		Preferred Conforming Case 65% RPS by 2030				Conforming Case 75% RPS by 2030				Conforming Case 100% RPS by 2035			
Pollutant	**Unit**	**2024**	**2026**	**2030**	**2035**	**2024**	**2026**	**2030**	**2035**	**2024**	**2026**	**2030**	**2035**
PM 2.5	**Tonnes/yr**	3	7	10	12	3	7	13	11	3	7	8	8
SO2	**Tonnes/yr**	1	2	2	2	1	2	2	2	1	2	2	1
NOx	**Tonnes/yr**	27	31	33	25	27	31	37	25	27	31	30	21

Table 13: Local Air Pollutant Results, 30 MMT Scenario

		Preferred Conforming Case 65% RPS by 2030				Conforming Case 75% RPS by 2030				Conforming Case 100% RPS by 2035			
Pollutant	Unit	2024	2026	2030	2035	2024	2026	2030	2035	2024	2026	2030	2035
PM 2.5	Tonnes/yr	4	8	9	13	4	8	13	13	4	8	7	10
SO2	Tonnes/yr	1	2	2	2	1	2	2	2	1	2	2	1
NOx	Tonnes/yr	28	32	32	28	28	32	37	28	28	32	29	24

ii. Focus on Disadvantaged Communities

In order to identify state-defined disadvantaged communities (DACs) that are located within its service territory, SVCE used CalEnviroScreen 4.0 to identify the top 25% of impacted census tracts on a statewide basis. This analysis indicates that SVCE serves 4,260 customers residing in 3 census tracts identified as DACs: 6085512604, 6085512603, and 6085512602. The map below shows each of these census tracts in red. The population of these DAC areas is listed as 11,924 per 2019 ACS population estimates, which is estimated to comprise approximately 2% of the population of SVCE service territory.

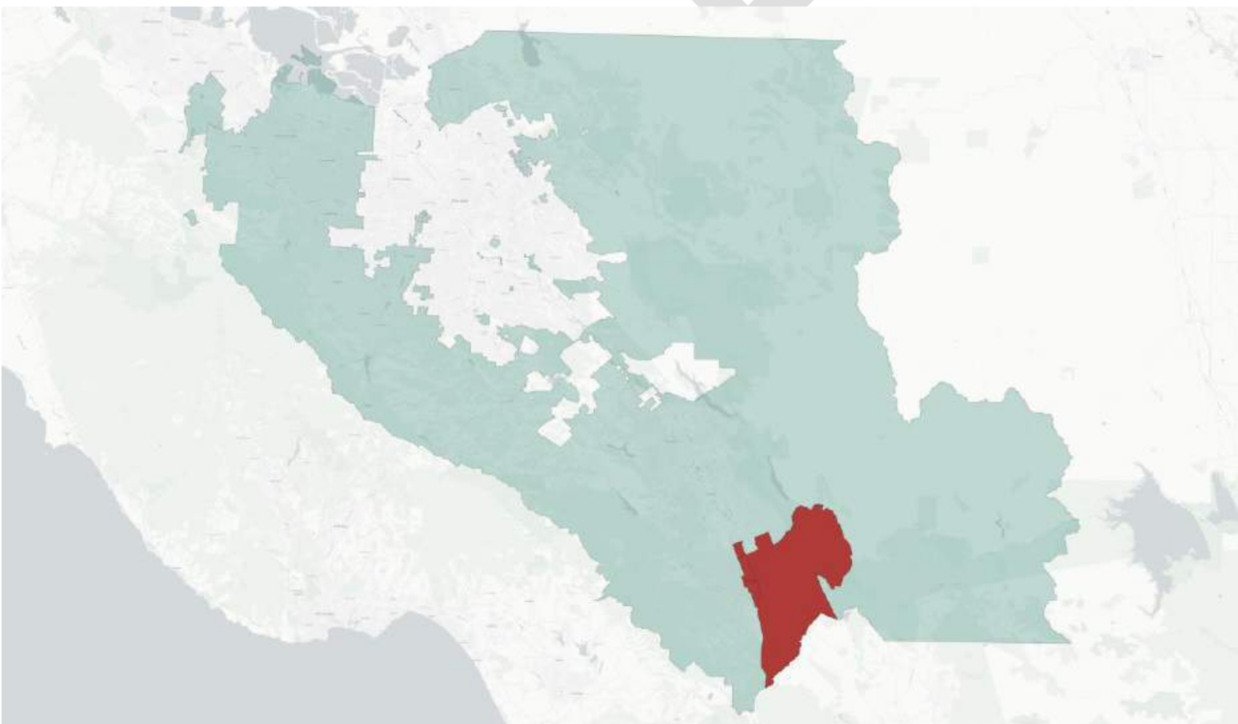


Figure 8. Map of SVCE DAC Census Tracts[11]

SVCE's primary strategy for reducing emissions and contributing to the economic development of DACs in its procurement practices is the aggressive procurement of zero-emissions renewable resources. When selecting green power projects, SVCE considers whether proposed facilities are located within

[11] Cal EnviroScreen 4.0 Mapping Tool, https://oehha.ca.gov/calenviroscreen/maps-data

DACs or otherwise contribute to DAC economic development (for instance, by increasing employment opportunities for DAC residents). Currently, SVCE has signed one PPA for a solar plus storage facility within a DAC census tract: RE Slate in Kings County.

SVCE does not have any energy contracts with gas generators located in or next to DACs. SVCE does not have any energy contracts with renewable generation that may have local emissions impacts (such as biogas or biomass) located within or next to DACs[12]. Portfolios submitted as part of this 2022 IRP filing all ensure that SVCE meets 100% of its annual energy obligation on an annual basis. As discussed in Section II.b above, SVCE has also calculated its Carbon Free Energy score ("CFE") which shows SVCE will rely less on system power over time. SVCE adopted the Preferred System Plan in part due to its favorable CFE scores relative to other Conforming Portfolios, which it believes will help minimize local air pollutants in DACs state-wide.

SVCE's existing and future RA contracts are primarily from natural gas units which may be located in or near a DAC area. To the extent compatible with RA program requirements and cost-effectiveness, SVCE prefers capacity contracts from generators that do not have emissions impacts on DACs such as those from Distributed Energy Resources (DER), renewable and carbon-free resources. To this end, SVCE has been aggressively signing new PPAs which provide both energy and capacity to SVCE to help meet its RA requirements.

As discussed more fully in Section IV.b below, SVCE's board of directors is made up of elected officials representing each of the thirteen member agencies in the SVCE service area. Decisions related to SVCE's procurement and strategic planning are made by these elected officials in the interest of all of their constituents. Throughout the development of this IRP, SVCE staff met with the Board to discuss matters related to long-term planning for both SVCE and the system at large. SVCE staff utilized feedback from the Board in development of this IRP, which was ultimately reviewed and approved by the Board of Directors on October 12, 2022.

e. Cost and Rate Analysis

As a California CCA operating in an in environment where customers have choice, whether it's returning to the incumbent utility, participating in direct access or bypassing SVCE with behind-the-meter solar, SVCE is acutely aware of the need to manage cost and maintain competitive rates. SVCE's value proposition since its inception has been to provide affordable and annually carbon-free product offerings to its customers. GreenStart is SVCE's default product offering, comprised of a mix of RPS and other carbon-free resources, which since inception has been offered at a discount to PG&E's bundled generation rates of three percent on average. GreenPrime is SVCE's opt-up product which is made up of 100% RPS eligible resources and is offered at a slight premium to GreenStart.

[12] In 2022, SVCE opted to take a portion of its Voluntary Allocation per the rules in R.18-07-003. SVCE is not aware of the location of all bio fueled resources in that portfolio.

Starting in 2020, and again in 2022, SVCE has offered bill credits to CARE/FERA (income qualified) customers. 10% of SVCE's residential customers are CARE/FERA, and these bill credit amounts from SVCE represent an additional generation rate discount of approximately 10%. SVCE describes its CARE/FERA program in more detail in section IV. b. below. SVCE will continue to pursue affordability to end users along with building a robust green portfolio aligned with SVCE mission.

Fundamental to achieving SVCE's product and rate objectives is SVCE's ability to procure cost-effective electric supply resources and manage the cost and risk associated with its load and supply portfolio. This starts with the proper evaluation and selection of resources acquired to meet SVCE's long-term renewable needs, which make up a large portion of the supply portfolio. In evaluating the addition of new or existing resources to the SVCE generation portfolio, SVCE utilizes both quantitative and qualitative metrics. SVCE evaluates the resource value as determined by its net energy (including congestion), ancillary service (A/S), resource adequacy (RA) and RPS/REC value and compares it to the contract cost. In addition, SVCE assigns qualitative metrics including a resource's generation profile, location, workforce development and technology type. SVCE then measures the resource's benefits against its costs to determine whether it is cost-effective and to assess an implied REC cost.

After a resource has been analyzed to be cost-effective, it is then incorporated and modeled with SVCE's existing portfolio to determine the overall portfolio's return/risk ratio. The return/risk ratio analysis will account for portfolio dynamics including:

- Resource performance against SVCE's hourly load obligation;
- Basis locational price differential between the resource and SVCE DLAP; and
- Variability in production from resources and forward and spot price uncertainty

Resources that increase the portfolio's gross margin net present value (NPV) while decreasing the gross margin at risk (as measured by the mean gross margin NPV minus the fifth percentile probability [P5] gross margin NPV) are considered resources for further consideration.

Aside from the process describe above, SVCE also assesses the compliance and strategic value a resource may provide. Resources are evaluated on their ability to:

- Meet California mandated procurement requirements;
- Meet SVCE's vision of a true carbon-free portfolio where the resource can provide clean energy on a 24x7 basis or in the hours where carbon emissions are the highest;
- Provide local benefits to its member communities;
- Mitigate portfolio concentration risk (price, technology, counterparty and/or location); and
- Provide for overall grid reliability.

SVCE is subject to significant cost volatility and uncertainty in meeting its energy load obligations within the CAISO. To manage this cost, SVCE's governing board has adopted an Energy Risk Management Policy. Included in the Policy are tolerance bands for minimum and maximum amount of load to be met through forward purchases of fixed-price energy. These transactions are carried out with Board-approved counterparties and for the most part are sourced through generic resources priced at the PG&E EZ-Gen Hub or NP15 delivery point.

Table 13. SVCE Board Approved Energy Risk Management Tolerance Bands (Fixed Price Supply as a % of Load)

Period	Minimum	Maximum
Current Balance of Year	80%	110%
Year 2	70%	90%
Year 3	55%	80%
Year 4	50%	80%
Year 5	50%	80%

Taking a portfolio approach of varying new and existing projects, technology, location, contract tenor, counterparties and contract pricing structures in its pursuit of long-term RPS resources along with having a rigorous energy risk management program to manage load obligations and supply portfolio cost and risk ensures that SVCE can meet its near and long-term cost, rate, and financial objectives. Over time short-term index plus REC and/or carbon-free resources will be replaced with less expensive and more valuable long-term PPAs delivering energy, RECs, carbon-free, and RA attributes.

In development of this 2022 IRP, the SVCE team completed cost analysis for all three Conforming Portfolios. SVCE has chosen to submit the 65% RPS case as the Preferred Conforming portfolio in part because it is the least cost of the three scenarios.

Given the potential differential between model assumptions and actual market conditions, SVCE will continue to evaluate offers as solicitations occur in the future. In signing actual contracts, SVCE will balance both clean energy attributes with affordability measures to ensure cost effectiveness for the portfolio in order to maintain affordability for our customer base.

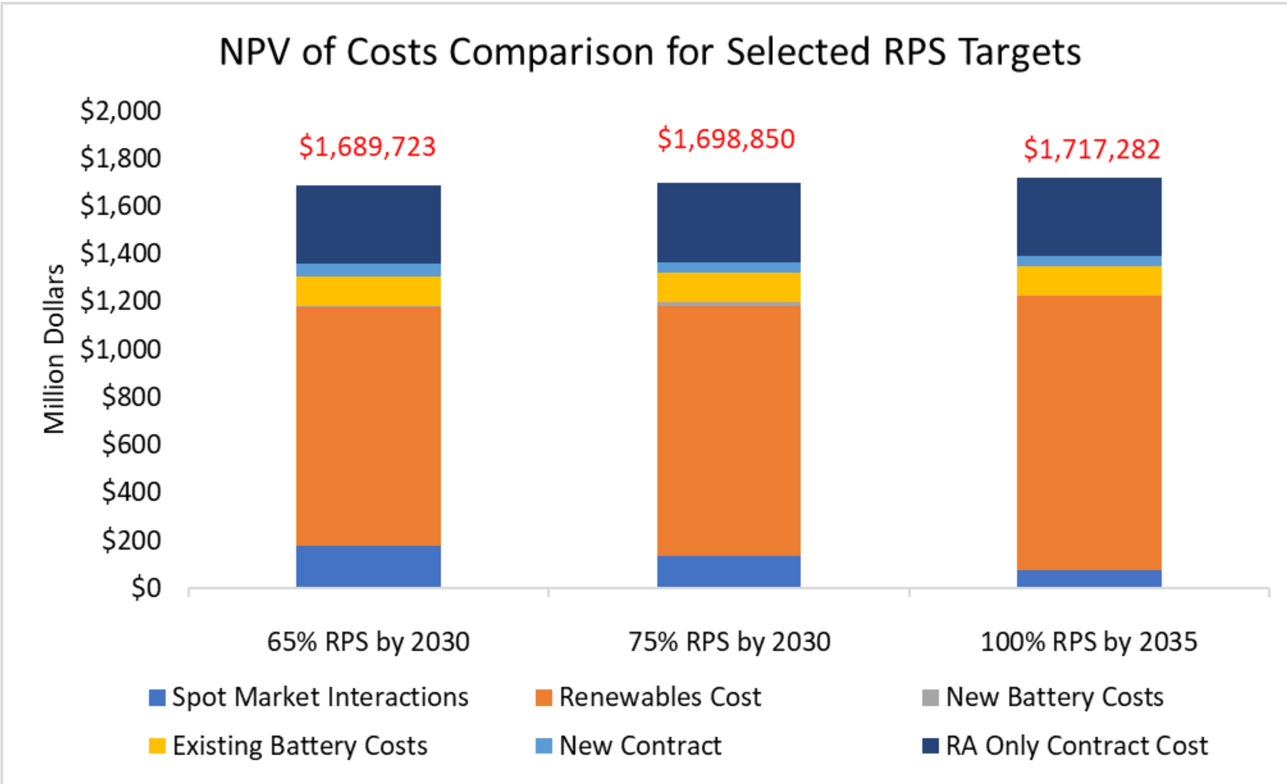


Figure 9. SVCE Expected NPV Cost for Conforming Portfolios

f. System Reliability Analysis

As part of its capacity expansion and modeling exercise, SVCE enforced a resource adequacy constraint aligned with the IRP ELCC assumptions in the RDT to ensure that all portfolios contribute fairly to total system reliability. As noted in Section III.a.ii above, SVCE "right sized" short-term RA contracts to meet the RA needs of the portfolio each year. For this reason, SVCE achieves a net zero position in all Conforming Plans. The results of each Conforming Portfolio's Load and Resource Table by Contract Status are below.

Table 15: 65% RPS Resource Adequacy Results

	2024	2026	2030	2035
SVCE Marginal Reliability Need (MW)				
Online				
Development				
Under Review				

Planned, Existing				
Planned, New				
BTM PV				
Total RA Supply				
Net Position				

Table 16: 75% RPS Resource Adequacy results

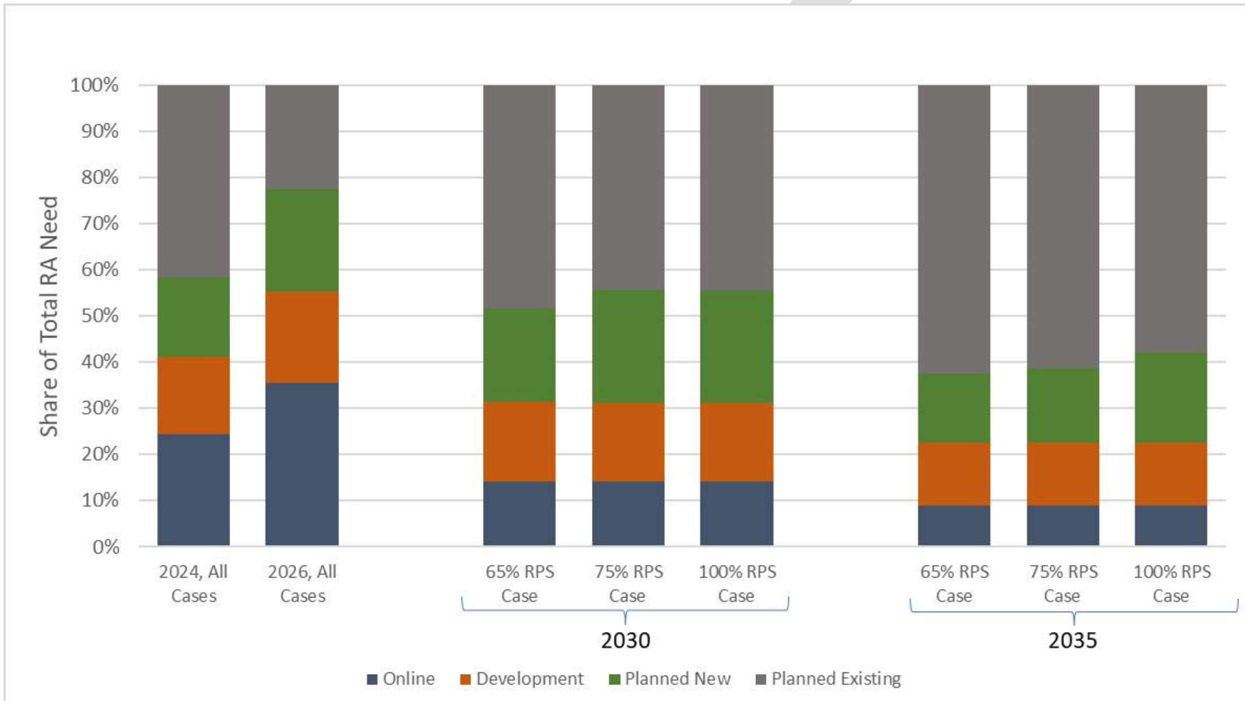
	2024	2026	2030	2035
SVCE Marginal Reliability Need (MW)				
Online				
Development				
Under Review				
Planned, Existing				
Planned, New				
BTM PV				
Total RA Supply				
Net Position				

Table 17: 100% RPS by 2035 Case

	2024	2026	2030	2035
SVCE Marginal Reliability Need (MW)				
Online				
In Development				
Under Review				
Planned, Existing				
Planned, New				
BTM PV				
Total RA Supply				
Net Position				

Figure 10 below, compares what share of SVCE's total RA needs are met by each contract category. Due to the timing of the build, there are no differences between the Portfolios for years 2024 and 2026. While SVCE's RA requirements are met by proportionally more existing resources in later years, SVCE never relies on more than its load share allocation of the existing fossil fleet to meet its RA requirements. Given the recent procurement orders and heightened attention on reliability from both regulators and the legislature, SVCE expects the RA market to have sufficient excess capacity to allow for this level of short-term market purchases.

Figure 10: Comparison of RA Portfolios by Contract Category



As noted in Section II.b.i above, SVCE also assessed each portfolio's contribution to RA under a 24-hour "slice of day" framework, as adopted in D.22-06-050. To do this analysis SVCE input the results of each portfolio into its internal slice of day RA modeling tool. This tool is intended to assess SVCE's portfolio under the slice of day framework. A final decision on the accounting rules for resources and the planning reserve margin in the slice of day framework is not yet finalized in the RA proceeding, so SVCE used estimated exceedance and PRM values based on presentations and discussions in the RA Workshops held between July and October of 2022.

[Staff to add analysis here]

g. High Electrification Planning

To assess the Impact of a higher electrification load, SVCE re-ran its preferred portfolio assumptions utilizing its load share allocation of the 2021 CEC Additional Transportation Electrification forecast as provided In the LSE Filing Requirements RESOLVE package posted on the CPUC's 2022 IRP Events and

Materials page on June 29, 2022. As a proxy to determine SVCE's share of the higher load, staff first determined its load share of the baseline assumptions by calculating the share of its assigned retail sales as part of the RESOLVE total retail sales. This value was then multiplied by the high electrification retail sales to find SVCE's share for this sensitivity. SVCE then calculated its peak obligation by multiplying it's assigned peak load share by the CAISO peak in the RESOLVE Inputs. Effectively, SVCE found that to meet the GHG-target of the high electrification scenario for its Preferred Conforming Plan, it would need the 2035 resource mix utilized in the 75% RPS Conforming plan plus an additional 10 MW of geothermal to hit the 15% annual energy target. The results of the below scenario exceed the 25 MMT target and provide a 2035 RPS portfolio of 76%.

Table 18: SVCE High Electrification Results Build

Resource Type	MWs	Annual GWh	2035 GHG target	Transmission Zone[13]	Substation/Bus	Alternative location	Note
Hybrid [solar, battery]	[105, 53]	302	Both	N/A	N/A	N/A	N/A
Wind, N. CA	150	219	Both	N/A	N/A	N/A	N/A
Wind, Wyoming	110	491	Both	N/A	N/A	N/A	N/A
Geothermal	17	133	Both	N/A	N/A	N/A	N/A

In this scenario SVCE may rely more heavily on existing system resources to meet RA. However, as described in Section IV of this document, SVCE's Programs team actively pursues electrification as a means to achieve economy-wide emissions reductions in its service area. Many of SVCE's programs aim to ensure that the timing of this demand will minimize the impact of infrastructure needs and peak demand increases. While SVCE sees the value in engaging LSEs in development of a high electrification portfolio for TPP needs, it does not necessarily believe this load and peak demand scenario will come to fruition by 2035.

h. Existing Resource Planning

In developing its inputs and assumptions, SVCE worked to create a defendable balance of resources utilizing existing and new resources based on its experience transacting in the market and in procuring new resources. In all portfolios, the majority of SVCE's energy and capacity needs were met by resources already under contract or added into the portfolio as planned new resources. However, it is an important part of SVCE's risk management strategy to balance its portfolio with a mix of new and existing resources as well as short and long-term contracts.

[13] SVCE's did not model resources to explicit transmission zones. See transmission planning Section III.n, for further discussion.

While the majority of each portfolio was comprised of either new planned resources or those already under contract by SVCE, several existing resources were included either as candidate resources or forced into the portfolio as an input assumption. Specifically, SVCE included generic existing RA contracts, Index + contracts assumed to rely on existing RPS and GHG-free resources, and allocations for hydro, nuclear and CAM/CPE resources from its incumbent IOU, PG&E.

Relative to its 2020 IRP, SVCE assumes lower reliance on existing thermal and hydro for RA purposes. In both its 2020 and 2022 IRP plans, SVCE assumes a portion of its energy and capacity needs will be met with hydro imports from the Pacific Northwest (PNW) meeting the CPUC's contracting and scheduling requirements for import RA in addition to seeking in-state existing hydro resources with energy and RA qualifying capacity. In 2022, SVCE decreased the size of this type of resource by 40% relative to its 2020 IRP assumptions. As noted in Section III.a.i above, SVCE does assume short-term RA can be purchased to fill resource adequacy needs. In its 2020 IRP, SVCE expected to need up to 565 MW of generic RA capacity to meet its RA obligations. In this IRP, SVCE never relies on more than 500 MW of generic RA capacity in a given year, which is less than SVCE's load share of the existing fossil fleet. The Preferred Conforming Plan averages a need of approximately 375 MW across the planning horizon.

In this IRP, SVCE meets approximately 10% of its load each year with index + RPS short-term contracts across all portfolios. This strategy of procuring short-term resources is consistent with SVCE's Board directive to diversify procurement tenor to manage the risk of losing load to Direct Access and/or bypass. SVCE believes the resources to meet this procurement objective may be sourced from other LSEs portfolios and/or merchant renewable resources. In the 65% RPS case, SVCE meets an additional 15% of its needs with index + GHG-free hydro resources after 2030. This is consistent with existing contracts SVCE has secured since its inception and will likely be sourced from in-state resources either as firm or non-firm resources. Relative to its 2020 IRP, SVCE's 2022 Preferred Plan relies on roughly 50% lower index + transaction volumes to meet its energy and GHG-free targets in 2030.

To estimate hydro and nuclear allocations SVCE relied heavily on historic allocation data. The nuclear allocation from the Diablo Canyon Power Plant took recent historical allocations and scaled them down based on the originally expected retirement dates for each unit, assuming consistent output over the year.

As described in the RDTv3 User Guide, SVCE determined it CAM allocations using the CAM year ahead list for both DR and non-DR resources. Per guidance, SVCE assumed this volume would stay static over the entire planning horizon.

i. Hydro Generation Risk Management

SVCE currently relies on a significant amount of purchases of GHG-free energy from hydro generators to maintain its Board-approved goal of being carbon-free on an annual basis. SVCE manages its hydrological risk by contracting with both Pacific Northwest and California suppliers. In addition, SVCE attempts to execute firm contracts to provide certainty on hydro deliveries from suppliers who will only sell excess resources versus a unit contingent contract that is subject to the vagaries of hydrological conditions. SVCE is able to mitigate its hydrological delivery risk by diversifying the regions from which it procures large hydro. In addition, SVCE is inserting language in contracts that specify that the supplier provide hydrological statistics (storage levels and acre/ft conversions) at certain times of the year in order for SVCE to better forecast future deliveries. For the portion of hydro supply provided from non-firm resources, SVCE will assess the variability of the resources under various precipitation and hydrological conditions and will rebalance its portfolio with firm carbon-free and/or RPS resources to meet its 100% carbon-free annual goal.

SVCE contracts for hydro resources through a mix of counterparties and for varying terms to manage risk associated with counterparty default on hydro resources. SVCE's goal is to secure a large portion of its large hydro needs under contract of three- to five-year tenures; however, it continues to explore longer-term contracting for small hydro facilities.

Since its 2020 IRP, SVCE has actively worked to reduce its reliance on short-term purchases of GHG-free energy through its growing portfolio of long-term contracts for renewable resources. This portfolio includes both geothermal resources that can deliver baseload generation and long-duration storage which can effectively utilize renewable energy during peak hours. Further, SVCE is exploring long-term contracts for hydro resources. In 2018, SVCE was awarded a small allocation of large hydro from the Central Valley Project (CVP) as provided for under Western Area Power Administration's 2025 Power Marketing Plan. The SVCE Board approved participation in the Western Base Resource (WBR) contract in late 2020. The contract is 30 years in term with deliveries starting in 2025, structured as a run-of-river for which SVCE will be responsible for its share of project cost and receive its share of all energy and capacity benefits. As a WBR contract customer, SVCE will have the ability to increase its participation share through long and short-term lay-offs from other WBR participants. The WBR contract has an option to terminate in July 2024 before taking delivery. SVCE staff will determine at that time its ultimate participation in the contract and therefore did not include the resource in its RDT.

Figure 11 below compares the amount of hydro generation in each Conforming Portfolio against SVCE's load share allocation of the 2021 Preferred System Plan.

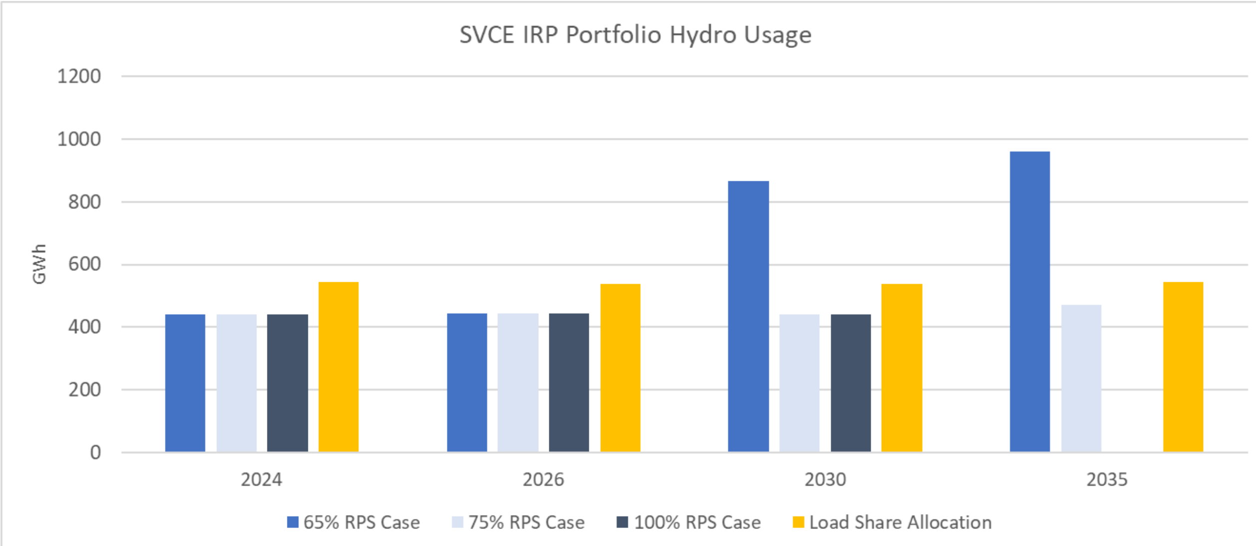


Figure 11. Comparison of hydro generation for each portfolio and SVCE's load share allocation of the 2021 Preferred System Plan

As the figure shows, SVCE would rely on less than its load share allocation in both the 75% RPS and 100% by 2035 RPS Portfolios. In the 65% RPS case SVCE would need roughly 75% more than its load share allocation. Exploring the trade-offs between reliance on hydro and RPS resources was a fundamental driver of why SVCE selected the RPS scenarios it did. As described in Section III.b, SVCE found the 65% RPS case to be the Preferred Conforming Portfolio in part because it provides a reasonable balance of reliance on new resources and existing hydro power to meet its annual carbon-free energy goals.

j. Long-Duration Storage Planning

SVCE included long-duration storage as a candidate resource in the modeling exercise to develop conforming portfolios this cycle. Across all scenarios, long-duration storage was not selected. As noted in Section IV below, SVCE has contracted long-duration storage to meet its requirements under D.21-06-035.

SVCE continues to assess the value of long-duration storage as part of its portfolio planning process and included it as a candidate resource in its capacity expansion modeling. While no LDS resources were selected as part of the planning process, SVCE will nonetheless continue to evaluate LDS resources including non-lithium-ion technologies and emerging technologies in its all-source solicitations.

k. Clean Firm Power Planning

SVCE currently satisfies approximately 12% of its energy needs with geothermal resources. Recognizing the benefits of diversification and the need for clean, firm resources SVCE has set a target of meeting approximately 15% of its energy needs with geothermal over the IRP planning horizon. These geothermal resources will help SVCE meet its decarbonization and electrification goals by providing a 24x7 source of carbon-free energy. SVCE finds geothermal to be a good substitute to capacity from natural gas resources and Diablo Canyon. It is a proven technology and is not susceptible to grid integration issues such as those with intermittent resources.

SVCE first executed geothermal contracts in 2019 which were selected through a competitive solicitation process which evaluated offers to assess an expected levelized net benefit value under various market and regulatory conditions. While the geothermal resources were offered in at significantly higher PPA cost on a per-MWh basis versus the solar plus storage and wind projects, the expected value and therefore net benefit was deemed competitive and cost-effective.

As part of its 2022 IRP planning efforts, SVCE Included both geothermal and biomass as candidate resources. By default, the ARS capacity expansion model did not select either resource. However, due to SVCE's 15% geothermal target, additional geothermal appears in each Conforming plan. Based on market surveys and previous offers, SVCE believes it can sign additional geothermal using a mix of both new and existing geothermal resources.

SVCE continues to view clean firm resources as a necessary component of a clean, reliable electricity system, but cautions the Commission for including similar resource carve-outs in future procurement orders due to the impact on affordability for customers. These concerns are discussed in more detail in Section IV.c below.

l. Out-of-State Wind Planning

As with other resources selected in the 2021 Preferred System Plan, SVCE modeled out-of-state (OOS) wind as a candidate resource for its 2022 IRP portfolios. Across all Conforming plans, out of state wind was selected. To ensure alignment with the IRP modeling assumptions, SVCE created candidate resources for Wyoming, New Mexico and Pacific Northwest Wind. In all instances Wyoming wind was found to be the preferred resource, however, SVCE notes that resources with similar profiles and valuation may be found in other states. This resource is likely found valuable due to its high-capacity factor, relative to in-state wind, and ability to complement SVCE's extensive solar and storage portfolio.

SVCE has had bilateral discussions with developers for OOS wind resources however transmission and cost continue to be a major barrier. Such opportunities are evaluated alongside others and are not penalized for being out-of-state as long as they can deliver to the CAISO. The viability of the project given the development stage of the transmission project and the ability to acquire import capacity rights is factored into the evaluation especially if the project is needed to meet specific procurement targets such as SB 350. Due to the long lead time needed to build out transmission for OOS wind and the uncertainty around transmission development in California, OOS wind is not being considered to meet any of SVCE's MTR procurement requirements. SVCE discusses its evaluation of transmission availability more thoroughly in Section III.n below.

Despite potential barriers, given the potential cost effectiveness and diversity benefit of OOS wind to the CAISO system, SVCE supports the inclusion of OOS wind in the 2022-2023 IRP PSP as a means to help assess the pathway toward building sufficient transmission to allow these resources in the CAISO's Transmission Planning Process ("TPP").

m. Offshore Wind Planning

In its 2022 modeling for the IRP SVCE Included offshore wind as a candidate resource, utilizing the cost and wind profiles provided by the CPUC in the RESOLVE and CSP tools. The ARS capacity expansion tool did not select this resource in any of the scenarios modeled, likely due to its cost relative to out of state wind resources which provide many of the same attributes. In addition to modeling results, SVCE staff also considers offshore wind in California to have significant development risk which makes it an unfavorable resource for the portfolio.

In anticipation of a potential procurement order for offshore wind, in part to meet the planning goals of AB 525, SVCE did a scenario analysis of the Conforming Preferred Portfolio which included SVCE's load share allocation of the IRP offshore wind build starting in 2032. This is equivalent to approximately 81 MW. SVCE does not endorse the use of load share allocation for procurement orders, as discussed in Section IV.c below, but used this as a proxy given LSEs open positions are unknown and it is unclear what basis an offshore wind order would be justified (i.e., GHG or RA compliance) should it be ordered by the Commission.

In this scenario, the energy and capacity from the offshore wind would replace the need for all incremental new capacity, other than geothermal which would be maintained to achieve SVCE's internal target of having 15% of annual energy met by geothermal. Even with the removal of all other new resources, SVCE would expect to be "long" RPS and GHG-free attributes in this scenario.

SVCE did not explicitly test the other Conforming Portfolios with the above offshore wind allocation. However, it is likely that the 2030 RPS build would be at least partially stranded in the event SVCE was forced to procure its load share allocation of such an offshore wind order. This regulatory uncertainty played a role in the decision to not adopt these portfolios as preferred this cycle.

Should the Commission order offshore wind, it would likely have significant impact on LSEs actual procurement activities going forward. Given the risk of delay or failure of emerging technologies such as offshore wind, SVCE encourages the Commission to carefully consider how to ensure LSEs collectively balance ongoing procurement of both proven and emerging technologies to manage both risks and help ensure affordability for California ratepayers.

n. Transmission Planning

SVCE summarizes known transmission upgrades for its resources under contract in Table 19 below.

Table 19. New SVCE Resource Location Information. SVCE has executed contracts with these resources.

Project Name	**Resource Type**	**Location**	**Queue Position**	**Station or Transmission Line**	**Interconnection Agreement?**	**Known Transmission Upgrades**
RE Slate	Solar + Storage	Kings County, CA	1158	Mustang Switching Station 230kV	Yes	Completed
Ormat	Geothermal	Mono County, CA	315	115 kV bus at SCE Control Substation	Yes	
Rabbit-brush	Solar + Storage	Kern County, CA	1215	Whirlwind Substation 230kV	Yes	Completed
Yellow Pine	Solar + Storage	Clark County, NV	1341	GridLiance Trout Canyon 230 kV substation on the Pahrump Sloan Canyon 230 kV line	Yes	Network Upgrades expected to be completed by the end of 2022
Aratina	Solar + Storage	Kern County, CA	1604	Kramer Substation 230 kV	Yes	
Casa Diablo IV	Geothermal	Mono County, CA	WDAT-315	Casa Diablo Substation	Yes	Completed
Angela	Solar + Storage	Tulare County, CA	1443	Olive Switching Station	Yes	Network upgrade expected by Q2, 2023
Atlas	Solar	La Paz County, AZ	1402	Cielo Azul 500 kV Switch Station	Yes	Ten West Link Transmission Project is expected to be in service by Q4 2023
Victory Pass	Solar + Storage	Riverside County, CA	1200	Red Bluff Substation	Yes	Network upgrade expected by 9/30/2023
San Luis West	Solar + Storage	Fresno County, CA	1389	Gates Substation	Yes	Network upgrade and interconnection facilities expectedfacilities expected by 12/31/2023 and 12/31/2024 respectively.
AES Mountain View	Wind	Riverside County, CA		Mount Wind Substation 115 kV	Yes	It is a repower project. No new

						transmission facilities are required
Coso	Geothermal	Inyo County, CA			Yes	Existing generating facilities. No new transmission or interconnection facilities are required
Cameron Crest	Wind	Kern County, CA			Yes	Existing generating facilities. No new transmission or interconnection facilities are required
Fish Lake (OME)	Geothermal	Esmeralda County, NV			Expected 11/1/2022	
Ormat Geothermal Portfolio	Geothermal	NV & CA Counties To be determined		NV Energy Silver Peak Substation	No	

Each Conforming Portfolio includes new solar and storage hybrid, Northern California wind, Wyoming wind, and geothermal resources modeled as planned backfill PPAs but not yet under contract. SVCE's only location requirement for these resources is that they must qualify as PCC1 resources for RPS compliance purposes, meaning they have the first point of interconnection with a California balancing authority. Ultimately, SVCE's procurement activities will be driven by the results of RFOs which may or may not include resources for any specific location SVCE could have modelled in this IRP. As such, SVCE believes it is false precision to provide specific locations for its resources. Nonetheless, SVCE did assess the reasonableness of its Conforming Portfolios. To do this, it followed the Preferred System Plan (PSP) distribution of solar/storage hybrid, Northern California wind, Wyoming wind, and geothermal resources. This spreads the resources in many transmission zones throughout California and CAISO border.

For generic new resources, SVCE used multiple sources of information on transmission upgrades, interconnection, and resource planning to assess their viability. For instance, the Northern California wind is a proxy for generic wind resources in Northern California, Solano, and the Carrizo area. In its 2021-2022 Transmission Plan, the CAISO approved a new 500/230 kV substation (Collinsville) in Solano County creating access to wind resources.[14] The Collinsville project is expected to be highly effective in addressing several deliverability constraints[15] to facilitate full capacity deliverability of the Solano area

[14] CAISO 2021-2022 Transmission Plan, March 17, 2022, p. iv.
[15] Cayetano-North Dublin 230 kV line, Lone Tree-USWP-JRW-Cayetano 230 kV line, and Las Positas-Newark 230 kV line, as included in CAISO 2021-2022 Transmission Plan, March 17, 2022, p.193.

wind generation. The Commission's Modeling Assumptions also confirm this for the CAISO 2022-2023 Transmission Planning Process (TPP).[16] Therefore, the base portfolio provided by the Commission for the CAISO 2022-2023 TPP assume 305 MW, 272 MW, and 287 MW of wind resources in the Northern California, Solano, and Carrizo resource zones, respectively, as they can likely be accommodated on the existing and approved CAISO transmission.[17] The High Electrification Sensitivity Portfolio for the 2022-2023 TPP includes an even higher amount of wind resources in the Northern California and Solano zones. Given this information, SVCE assumes that its procurement of Northern California wind resources in 2030-2035 as outlined in the Preferred Portfolio would not be expected to trigger any transmission delivery network upgrades (DNU).

Wyoming wind is essentially a proxy for out-of-state wind resources that would be delivered to the CAISO border. SVCE has not assumed any additional transmission upgrades within the CAISO grid that would be triggered by the out-of-state resources to deliver them to the load centers.

The base portfolio provided by the Commission for the CAISO 2022-2023 TPP assume 79 MW, 440 MW, and 600 MW of geothermal resources in the Solano, Southern Nevada, and Greater Imperial resource zones, respectively.[18] The High Electrification Sensitivity Portfolio for the 2022-2023 TPP includes the identical amount of geothermal resources in Solano and Southern Nevada, and a higher amount in the Greater Imperial resource zones.[19] Although the full buildout of this geothermal portfolio may trigger additional policy-driven transmission in the 2022-2023 TPP, the CAISO Transmission capability estimates for CPUC's resource planning process indicate that the existing CAISO transmission has adequate buffer to accommodate a significant portion of this geothermal portfolio. For instance, Southern Nevada can accommodate 300 MW of FCDS resources on the existing transmission.[20] Therefore, SVCE has assumed the 7 MW of geothermal procurement by 2030, which is significantly lower than its load ratio of the system-wide geothermal buildout, can be accommodated on the existing and CAISO-approved transmission and would not trigger any additional DNUs or related transmission costs.

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[16] CPUC staff assumed two upgrades identified in the draft report could alleviate the exceedance on the Northern California – Cortina – Vaca-Dixon Line Constraint. These upgrades are the CAISO-approved Delevan-Cortina 230 kV line reconducting costing $18 - $35 million and the proposed new Collinsville 500 kV substation costing $475 -675 million and taking an estimated 6 years to complete.

[17] See Preferred System Plan and Portfolios for 2022-23 Transmission Planning Process (https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2019-20-irp-events-and-materials), Busbar Mapping Dashboard workbook - 38 MMT with 2020 IEPR high EV base case portfolio, Updated Mapped Resources by Substation Summary, 9/20/2022, ResClassification_byArea tab.

[18] *Ibid*.

[19] See Dashboard for the Busbar Mapping of the 30 MMT High Electrification Sensitivity Portfolio for 2035, dated 7-1-2022, located at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2019-2020-irp-events-and-materials/busbarmapping_30_mmt_hesensitivity_dashboard_07_01_22.xlsx

[20] See *Table 3-1: Updated transmission capability estimates* in *Transmission Capability Estimates for use in the CPUC's Resource Planning Process* available here: https://www.caiso.com/Documents/RevisedWhitePaper-2021TransmissionCapabilityEstimates-CPUCResourcePlanningProcess.pdf

Ultimately, SVCE will select resources with the best overall characteristics for cost and reliability, including the cost of any new transmission for interconnection. The risk of interconnection delays due to the need for new transmission construction is also considered in reviewing all offers in SVCE's procurement process.

In summary, SVCE believes that its portfolio in terms of resource type and locations is consistent with the PSP Portfolio and the High Electrification Sensitivity Portfolio for the 2022-2023 TPP.

IV. Action Plan

a. Proposed Procurement Activities and Potential Barriers

As a community-driven LSE, SVCE works with its governing board to set policy, strategies, and directives. At a high level, in 2018 SVCE's board approved a Decarbonization Roadmap[21] which set a path for achieving deep decarbonization goals. SVCE's decarbonization approach consists of four central tenets that are all necessary to achieving deep decarbonization: procure and maintain a sustainable, affordable and carbon-free power supply; electrify the built environment; electrify mobility; and promote energy efficiency and successful grid integration. The following subsections summarize key activities by focus area, but do not include all of SVCE's ongoing or planned activities.

In each of SVCE's Conforming Portfolios, the organization does not require new resources until at least 2028. This is due in large part to SVCE's recent procurement efforts, including eleven contracted projects which the organization is currently working to bring online. Due to current market disruptions stemming from both supply chain issues and interconnection delays and SVCE's current procurement activities, the organization does not expect to procure any additional resources in the near term. SVCE will continue to monitor its procurement needs and the marketplace to assess when to time new solicitations. SVCE discusses financial and viability considerations for specific resource types in the sections below.

In addition to existing market conditions, SVCE must consider regulatory uncertainty as part of its procurement efforts. Regulatory uncertainty in both the IRP and RA proceedings are of particular importance to SVCE's current procurement strategy. The ongoing RA Reform work represents meaningful uncertainty for resource valuation going forward. In addition to awaiting final rules for resource counting and reliability requirements, SVCE also intends to monitor the impact of the reform on the marketplace and valuation of specific resource types. Within the IRP proceeding, uncertainty regarding future procurement directives and orders creates significant stranded asset risk for new projects. SVCE discusses these concerns in more detail in Section IV.c. below.

Additionally, SVCE is closely monitoring R.17-06-026, including the recent Staff Proposal to eliminate GHG-free allocations and replace them with a Market Price Benchmark ("MPB") compensation

[21] Available at https://www.svcleanenergy.org/wp-content/uploads/2019/03/Decarbonization-Strategy-Programs-Roadmap_Dec-2018.pdf.

mechanism in the PCIA charge[22]. Should the Commission adopt staff's proposal, SVCE would need to procure additional GHG-free resources in the marketplace. This may result in SVCE procuring additional short or long-term RPS resources to fill this need, depending on market offers.

As SVCE's efforts to help the local community decarbonize continue to expand and scale, it hopes to drive non-linear increases in DERs, electric vehicles, all-electric buildings, and customer literacy on Time of Use ("TOU") rates. These changes will significantly impact not only the load, but also the load shape over time, resulting in changes to both our RA needs and hourly emissions. SVCE's decarbonization approach prioritizes innovation and experimentation. This approach, and the continuously evolving nature of the regulatory and planning space, necessarily results in some degree of uncertainty of the impact and timing of its efforts. SVCE will continue to monitor and forecast the impacts of its decarbonization approach and its impact on SVCE's supply side needs, but views flexibility in planning going forward as necessary to serve its customers.

i. Resources to meet D.19-11-016 procurement requirements

SVCE has met its obligations under D.19-11-016 and currently has all required capacity online to meet the requirements of that order.

ii. Resources to meet D.21-06-035 procurement requirements, including:

a. 1,000 MW of firm zero-emitting resource requirements

As part of the MTR order, SVCE was required to procure 20.5 MW NQC of Clean, Firm resources[23]. SVCE participated in a CC Power RFO issued in October 2021 to procure clean firm resources. CC Power was formed in February 2021 by ten CCAs, including SVCE, to share resources and risk related to the procurement of difficult to acquire resources.

In October 2021, CC Power began seeking offers for the sale of firm clean resources ("FCR") as defined in more detail in California Public Utilities Commission ("CPUC") Decision 21-06-35, Ordering Paragraph 2(b) (OP 2(b)), as well as existing resources that otherwise meet the requirements of OP 2(b).1. CC Power sought to acquire up to 200 MWs of FCR through one or more Projects, with deliveries beginning no later than June 1, 2026.

The FCR procurement effort from CC Power resulted in two PPAs from Open Mountain Energy – Fish Lake Geothermal ("OME") and Ormat Nevada LLC's geothermal portfolio ("Ormat Geo Portfolio"). The projects were selected from a pool of 16 proposals. The projects are located in California and Nevada.

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[22] R.17-06-026. Administrative Law Judge's Ruling Requesting Comments on GHG-free Resources Staff Proposal and Other Issues. Filed 9/12/2022. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M496/K874/496874129.PDF

[23] The order permitted SVCE to utilize an already contracted resource under development at the time of the order, toward this obligation so long as the LSE could show that other resources were developed to meet the total obligations of both D.19-11-016 and D.21-06-035.

The Ormat Geo Portfolio for CC Power will provide between a minimum of 64 MW and a maximum of 125 MW with an expected COD starting in June 2024 for a term of 20 years. OME's project size will be 13 MW with an expected COD of April 2024 for a term of 20 years. SVCE will receive and entitlement share of each project.

1) SVCE's FCR MTR NQC requirement is 20.5 MW; this requirement will be met by:
    a. CC Power/OME's NQC of ~1.58 MW *(14% entitlement)*
    b. CC Power/Ormat Geo Portfolio NQC of ~13.80 MW *(13.4% entitlement)*
    c. SVCE/Ormat Casa Diablo NQC of ~5.6 MW

OME and Ormat Geo Portfolio are located outside of the CAISO. Projects not in the CAISO need import capability (MIC) into California to count as RA, a requirement for the FCR procurement mandate. Participating CCAs filed jointly a MIC expansion request with the CAISO, which was due on June 1, 2022 in order to take part in the current expansion process. SVCE received adequate MIC for calendar year 2023, but there are no guarantees of sufficient MIC availability throughout the term of the PPAs.

For the Ormat Geo Portfolio, CC Power has the ability to elect to add specific facilities into the PPA depending on availability of MIC and/or the collective CCAs need for the resources to meet other portfolio obligations including RPS. Should SVCE and/or other participating CCAs not acquire sufficient MIC, then it is likely that the CCAs will be unable to meet their respective MTR obligations for FCR through the contracted resources. SVCE will be required to seek out other sources of new geothermal capacity and expects the availability of such resources to be scarce and prices for such resources to be cost prohibitive especially if located within the CAISO.

b. 1,000 MW of long-duration storage resource requirements

In October 2020, seven joint CCAs issued an RFO seeking acquisition of up to 500 MWs of capacity through the Long Duration Energy Storage ("LDS") Capacity Request for Offers ("RFO") to cost effectively enhance the integration of their respective renewable energy portfolios into the CAISO grid and to aid in meeting California's aggressive greenhouse gas reduction targets by 2030 as outlined in the CPUC 2021-2030 Integrated Resource Plan Reference System Plan.

The RFO objectives and requirements included the following:

- Procuring cost-effective LDS to integrate renewables & support grid reliability
- Joint procurement to reduce overall project risk
- Grid-charged with minimum 8-hour discharge duration
- Meet Resource Adequacy ("RA") requirements
- COD no later than 6/1/2026
- Minimum delivery term of 10 years
- 50 MW minimum

Through the Joint LDS RFO a total of 51 entities submitted offers (over 9,000 MW), representing 18 distinct technologies including many emerging technologies. Offers were evaluated, ranked and selected for shortlisting with the objective of meeting the RFO's cost effectiveness goals and requirements under the MTR Order.

Two lithium-ion LDS projects were selected including LS Power's Tumbleweed LLC for 69 MW and Onward Energy's Goal Line BESS 1, LLC for 50 MW. CC Power executed Energy Service Storage Agreements with the two counterparties and Project Participation Share Agreements with the participating CCAs including SVCE.

SVCE's MTR LDS obligation is 20.5 MW NQC, which will be met with:

- CC Power/Tumbleweed 11.47 MW NQC;
- CC Power/ Goal Line 11.54 MW NQC

c. 2,500 MW of zero-emissions generation, generation paired with storage, or demand response resource requirements

SVCE discusses the procurement efforts for both the zero-emissions generation resources and the generic requirements in Section d below. Given the nature of the resources applicable to both the zero-emissions generation and the generic resources categories for the MTR order, SVCE's RFOs have been intended to cover both categories and SVCE has found similar barriers to procurement.

d. All other procurement requirements

SVCE has issued two RFOs Intended to help satisfy the remaining MTR order requirements, both the generic RA requirements as well as the zero-emitting ("DCPP replacement") capacity. The first RFO was issued in January 2022 in partnership with Central Coast Community Energy ("CCCE") and Sonoma Clean Power ("SCP"). Sufficient capacity was offered into the RFO to meet the collective group of CCAs MTR requirements. However, several global events materialized while the CCAs were in the process of evaluating offers including a significant run up in the cost of lithium bicarbonate, a key component in the production of lithium-ion batteries, and the U.S. Department of Commerce investigation into potential tariff circumvention on solar cells from China. These combined events resulted in several proposals to the RFO being repriced and/or withdrawn. Ultimately SVCE successfully negotiated an agreement with AES for 75 MW of RA-only from their Baldy Mesa solar plus storage project[24]. The resource will meet a portion of SVCE's generic MTR requirement. The project has begun construction and has an expected on-line date of June 2023.

Following the Initial RFO for MTR resources, SVCE Issued a second RFO in August 2022 this time in partnership with CCCE, SCP and Peninsula Clean Energy ("PCE") with a focus on standalone storage. Several projects were offered into the RFO; however given the prices, project viability and ability to meet MTR requirements, including on-line date, SVCE passed on all offers.

SVCE plans to issue a new RFO in the coming months to meet its MTR need.

[24] This contract was executed after the August 1st cutoff date used for this IRP. It is not listed in the RDT, but rather should be considered a subset of the generic MTR procurement listed in the RDT.

iii. Offshore wind

As discussed above Section III.m above, SVCE's Preferred Portfolio did not any offshore wind. In addition to the cost of the resource, the development risk associated with bringing on an emerging technology is a significant barrier for adoption.

SVCE recognizes that the State sees potential value for Offshore wind and urges a thorough stakeholder process to vet its value to the system. Should an offshore wind order occur, SVCE believes it is worth exploring opportunities for a central entity to procure such resources to manage the cost, risk and potential economies of scale for development of such resources.

iv. Out-of-state wind

All three of SVCE's conforming portfolios selected some out-of-state wind by 2035. Out of state wind can provide meaningful diversity and benefits to SVCE's portfolio.

v. Other renewable energy not described above

Across all Conforming Portfolios, the SVCE modeling exercise resulted in selection of both hybrid and in-state wind resources. Both of these technologies are ones which SVCE has experience contracting and operating and expects to find cost effective on an on-going basis. SVCE has contracted for seven new solar with battery energy storage systems since its inception in 2016. All of these projects are expected to contribute to both SVCE's RA requirements and RPS goals. The organization also has approximately 150 MW of wind under long-term contract, all of which is comprised of existing or repowered sources.

SVCE expects some additional hybrid resources to provide a cost-effective means to achieve its RPS and RA needs on a forward-looking basis; however has concerns about continued cost pressures facing the development of PV and BESS in the near term and the ability to cost effectively develop the resources in time to meet several portfolio needs and procurement obligations including MTR.

And while SVCE has effectively executed agreements for several new hybrid resources, these projects face continued uncertainty and development challenges.

Despite the value of hybrid resources, SVCE also prioritizes diversification in its portfolio. While the ARS capacity model found wind resources cost effective, SVCE also supported its inclusion in the portfolio for diversification purposes. Based on past solicitations, SVCE does recognize that development of new in-state wind may be a challenge.

In developing its portfolios, SVCE limited its candidate resources to the those selected by the CPUC's RESOLVE model and CSP tools. However, SVCE reiterates that actual procurement decisions are subject to change based on the results of RFOs and actual and forecasted portfolio need at the time of evaluation. SVCE supports the exploration of other renewable energy and renewable integration resources, including emerging technologies such as hydrogen and CCS, as part of the on-going CAISO system planning process and appreciates Energy Division staff's efforts to integrate these resources more fully in future IRP cycles as outlined in the September 22, 2022 Modeling Advisory Group webinar[25]. Consideration of these technologies in future LSE and system plan processes may have meaningful impact on SVCE's projected portfolio needs.

vi. Other energy storage not described above

As noted in the response to Section V. above, SVCE did not allow any candidate resources beyond those in the IRP modeling tools. SVCE's procurement team continues to assess offers and opportunities as they are presented. In particular, SVCE sees potential diversification value from procuring nonlithium-based batteries in the future and will continue to explore the potential of such technologies.

vii. Other demand response not described above

SVCE staff continues to evaluate the value proposition of Virtual Power Plants (VPPs) and explore options for their deployment going forward. The attributes, load shape and technical and economic potential of these resources is still being investigated. As an innovative, new market product, staff determined it was pre-mature to force any VPP capacity in its 2022 IRP portfolios and due to uncertainty of the resources' attributes did not explicitly model it as a candidate resource[26]. As described below SVCE will continue to explore market opportunities for VPP and expects that ultimately VPP capacity may replace some portion of the capacity shown in its 2022 Preferred Conforming Plan.

SVCE has spent significant time and effort over the past several years exploring options for establishing a successful VPP. SVCE defines VPPs to be aggregations of DERs that can permit a shifting of energy demand or injections to the grid (i.e., can be used to increase or decrease load, as desired). Demand response is one use case that falls into SVCE's thinking on VPPs. Enrolling smart DERs into VPPs to provide value to the grid and return that value to customers is a critical part of SVCE's vision for spurring a widespread increase in DER adoption. An initial whitepaper[27] outlining opportunities was created with Gridworks and a group of industry stakeholders, and identified demand response contracts and non-market-integrated load shift as promising concepts for the near term.

In response to the 2019 Public Safety Power Shutoff (PSPS) events, and in keeping with the results of the Gridworks whitepaper, SVCE executed a contract for load modification with Sunrun. This program[28] aggregates customer-sited solar and storage systems that both provide islanding backup to the customer in the case of power outages as well as discharging energy during the 4-9 pm window daily to reduce SVCE load. The systems will begin delivering energy in 2023 for ten years. The RA value of these resources is dependent in part on the outcome of the Resource Adequacy Reform work currently in process at the CPUC. SVCE will observe actual dispatch in 2023 and present additional data to CEC next year to adjust SVCE's peak load based on this contract's actual dispatch. Rules that reduce the countable capacity of BTM solar and storage resources make pursuit of these types of contracts less attractive and the uncertainty in the market has negatively affected the scale of this program. SVCE would like sign more of these kinds of contracts as they provide both customer and grid benefits.

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[25] Recording and presentation slides available: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/long-term-procurement-planning/2022-irp-cycle-events-and-materials

[26] Shed Demand Response, which likely has many similar attributes to VPP, was modeled but ultimately not selected by the capacity expansion tool.

[27] Available at https://gridworks.org/wp-content/uploads/2019/08/GW_Silicon-Valley-Clean-Energy-report.pdf

[28] Program webpage at https://www.svcleanenergy.org/lights-on-sv/

SVCE views the impact of new load from modifiers, such as EVs and BTM resources, to be a significant driver of its future load increase. Managing the timing of this load to ensure system-wide affordability in the future is of particular importance to SVCE. To that end, in 2020 SVCE hired consultants E3 and Ascend Analytics to understand the magnitude of value available from different assets and through different value streams[29]. Figure 12 below shows how EV charging was identified as providing the most value. As customers switch to TOU rates, the value available from resource adequacy decreases, presuming consumers are rationally responding to the TOU rate structure, but the value from energy value streams remains.

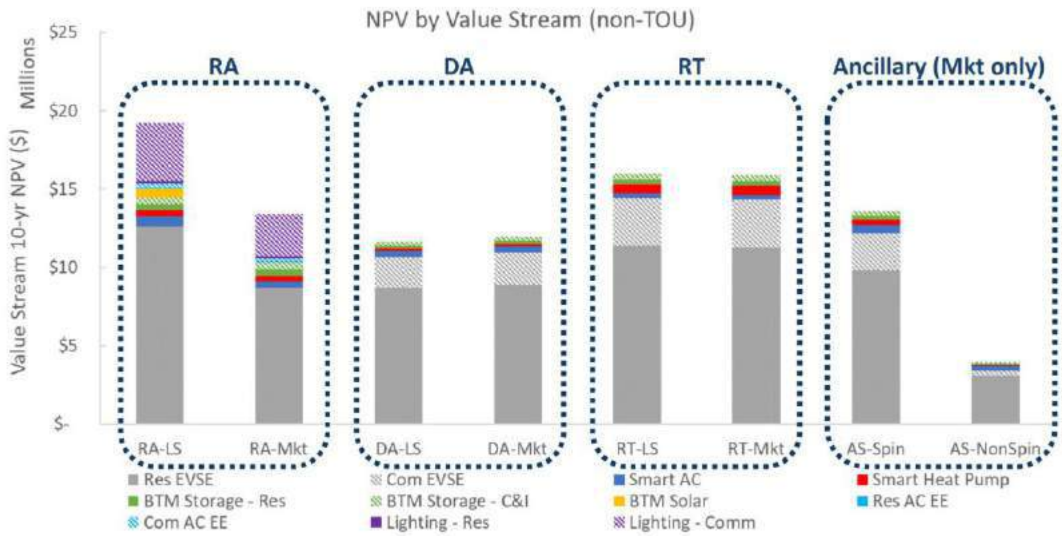

Figure 12: Value streams available by technology

In the interest of capturing these value streams and helping customers reduce their ongoing EV charging costs, SVCE launched its GridShift: EV Charging program[30]. This app is now actively being used by nearly 600 EVs to simplify the charging experience and better follow TOU rates and the carbon intensity of the grid. This app is not integrated into the energy markets, but instead shifts load daily to avoid the worst times of day. SVCE has also layered on demand response events to minimize charging during Flex Alerts and has run "clean charging events" to promote an increase in EV charging during particularly clean hours of the day[31].

In December of 2022, in parallel with PG&E, SVCE is planning to launch a new electrification rate, E-ELEC. To encourage and reward electrification, the rate includes a flat monthly fee, reduced $/kWh time-of-use charges, and higher peak vs. off-peak rate differentials. Customers with an EV, heat pump water heater or HVAC system will be eligible. SVCE is incorporating this new rate into our online customer education platform (SVCE eHub), and exploring the potential for additional rate discounting to further encourage adoption.

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[29] Slide deck summarizing key findings available at https://www.svcleanenergy.org/wp-content/uploads/20201020_AscendAnalysis_digital.pdf

[30] Program webpage at https://www.svcleanenergy.org/gridshift-ev/

[31] An initial report by the app provider, ev.energy, can be found at https://www.svcleanenergy.org/wp-content/uploads/GridShift-pilot-report_2021.pdf, and SVCE will soon be releasing a third-party evaluation report analyzing impacts of the app at https://www.svcleanenergy.org/research-analysis/#1639688703076-c88f0dce-ef3b

In response to the launch of the emergency load reduction program (ELRP) in 2021, SVCE supported outreach to large, tech-savvy commercial and industrial customers in its service territory – including customers with significant back-up generation capacity. SVCE took the lead in creating a webinar with PG&E, Olivine, and other local CCAs to push more of these customers to enroll in the new ELRP. SVCE also chose to allow its eligible residential customers to be automatically enrolled in the A.6 residential ELRP program, leading ~60,000 local accounts to be included in the program. SVCE would like to do more to promote ELRP to residential and non-residential customers, but needs information on which of its customers are already enrolled and the resultant level of impact so SVCE can target its marketing appropriately. To date, PG&E has not shared data on customer participation in ELRP, so more targeted outreach by SVCE has not been possible.

Moving forward, SVCE is looking into next steps that can be taken to use VPPs for near-term procurement and long-term impact. In October 2021, SVCE completed an analysis with Electron to scope out what a local DER market might look like and how to integrate it into SVCE operations[32]. In the coming months, SVCE will be reviewing findings from its efforts so far on VPPs, considering the Electron work, and identifying actions that can be taken to provide a meaningfully sized VPP in the near-term to help better control its load in the coming years. SVCE will also take steps to support its longer-term vision of how to include VPPs in grid operations, but the potential there will depend on support from state agencies as there are significant barriers to overcome[33].

Outside of SVCE, several proceedings at the CPUC may also impact the value proposition and deployment of DERs and VPP. Among these are R.18-12-006, R-21-06-017 and R.22-07-005. SVCE's regulatory team, in coordination with CalCCA, plans to continue to monitor and participate in such proceedings. The outcomes and decisions from these Rulemakings are likely to impact VPP adoption and therefore the actual supply side resource needs of SVCE during the current planning horizon of this IRP cycle.

VPPs have the potential to dramatically reshape SVCE's load in the next decades. Not only will they play a key role in reducing peak loads and costs, they will also help utilize clean resources available to the grid mid-day, reducing system curtailment projected in the 2030s, and shifting load away from hours where the grid is relying on fossil generation. They will also support the deployment of more DERs by passing value back to customers. The key question is how quickly SVCE will be able to scale its approaches and leverage them to make substantial changes to the load forecast.

viii. Other energy efficiency not described above

Energy efficiency is an essential part of SVCE's four tenets to decarbonization. Having customers improve their efficiency before electrifying technology allows for smaller equipment, lower costs, and more bill savings. SVCE considers efficiency during program design and will often include requirements which support greater efficiency. For example, all heat pump water heaters incentivized need to have a Uniform Energy Factor of 2.9 or greater.

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[32] Electron pilot analysis was based on SVCE data and stakeholder interviews, but aren't necessarily representative of SVCE's views. Documents can be found at https://www.svcleanenergy.org/innovation-electron/

[33] For example, see SVCE's comments filed on Rulemaking 21-06-017 (modernizing the grid for a high DER future): https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M400/K593/400593850.PDF

On the SVCE's 'eHub' website for customer education, the Appliances Assistant[34] tool helps customers search for new EV chargers, thermostats, dryers, cooktops and more. This tool is provided by Enervee and includes a score calculated on the products' energy efficiency to help customers find the most efficient options. SVCE customers can also leverage PG&E energy efficiency programs.

SVCE does not expect its standalone energy efficiency efforts to have a major impact on its load beyond what is included in the IEPR forecast but will continue to include efficiency in its electrification and decarbonization program design.

ix. Other distributed generation not described above

In terms of aggregating distributed generation at customer sites, SVCE considers this within the VPP framework and can be combined with comments in the demand response section above.

Relative to solar, approximately 10% of SVCE's residential customers are on a NEM tariff. SVCE's NEM rates currently mirror the IOU, though SVCE offers a more attractive net surplus compensation rate (2X) for customers who generate an annual surplus, and 2.5X for CARE/FERA customers. While solar adoption in SVCE's service area has been strong historically, it's difficult to predict how the new NEM 3.0 tariff will impact solar uptake in the future, and implications for the IEPR forecast. SVCE will continue to actively promote pairing of battery storage with solar, and to the extent possible, solutions that enable alignment of building electrification loads with solar production.

In response to COVID-19 and the corresponding economic impact on customers, the SVCE board approved $10M in funds to provide relief to the community[35]. A portion went to providing bill credits for customers on CARE/FERA rates, and $5M was reserved for SVCE's thirteen member agencies to evaluate and install resiliency infrastructure in their communities. While the projects are varied, the inclusion of on-site generation to support resilience means they may also be able to provide SVCE with value as local, distributed generation. SVCE is working to identify if and how to integrate these forthcoming projects into our portfolio[36].

x. Transportation electrification, including any investments above and beyond what is included in Integrated Energy Policy Report (IEPR)

Emissions from transportation comprise the largest source of GHG emissions in SVCE's territory, and SVCE has created programs to tackle some of the hardest challenges in this sector. SVCE's electrification focus has historically been on electric vehicle (EV) charging infrastructure as a way to support rapid and widespread adoption of EVs. Silicon Valley already has some of the highest EV penetration in the state, and SVCE expects to see this trend to continue and even increase as more of its programs start to create an impact. SVCE's future forecasts should take into account these localized trends. While SVCE did not submit an alternate forecast this IRP cycle, due to timing issues with its internal forecast, it does expect that its customers are further along on the EV adoption curve than the state at large, and therefore the

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[34] Appliances Assistant tool available at https://appliances.svcleanenergy.org/

[35] More details on SVCE COVID-19 response at https://www.svcleanenergy.org/covid-19/

[36] Press release for one of the completed resilience projects in Milpitas at https://www.svcleanenergy.org/news/milpitas-community-center-powers-up-with-resiliency-grant-from-silicon-valley-clean-energy/

load share allocation of EV load in the CSP is likely inappropriate. SVCE does not have sufficient insight to what extent the IEPR forecast accounts for its electrification programs or how the CEC views the impact of such programs on load growth.

Some key efforts to scale up EV charging include the California Electric Vehicle Infrastructure Project (CALeVIP)[37], which is a regional deployment of a statewide program funded by the CEC. SVCE partnered with four other LSEs across San Mateo and Santa Clara Counties to attract CALeVIP to the region, and the CEC and SVCE combined to put in $12M to incentivize new EV charging to be installed in SVCE territory in the 2020-2024 timeframe.

SVCE has also launched several of its own incentive programs to target adoption by multifamily property tenants, who locally own EVs at much lower rates than single-family property tenants. One program provides free concierge support to multifamily property managers to learn about EV charging options, have a site visit from an expert, and generate engineering estimates to make getting bids from contractors easy[38]. They are also eligible for incentives from SVCE when installing the equipment. Another program is exploring the potential for nearby DC fast chargers to meet the needs of these tenants (as some multifamily properties do not have electrical capacity for on-site charging without costly upgrades) by providing incentives for installations near clusters of older multifamily housing[39].

In early 2019, SVCE and its member agencies embarked on an ambitious project to adopt local building codes that would exceed the state code in promoting decarbonization benefits. These Reach Codes can include requirements for installing EV chargers or laying EV-ready wiring to parking spaces in new construction. Of SVCE's thirteen communities, nine adopted some form of EV Reach Code that was more supportive of EV charger deployment than CalGREEN[40]. SVCE is working with its member agencies once again in 2022, as part of the triennial cycle, to adopt new Reach Codes and ensure that new construction in SVCE territory continues to promote EV charging.

The forthcoming investments from the Inflation Reduction Act and state funding will further support and increased rate of EV charger deployment and EV adoption. However, SVCE has noted in its programs so far that interconnection timelines, permitting processes, and supply chain issues are dramatically pushing out EV charger installations and are limiting the ability of the state to meet its GHG goals. SVCE is working on reducing the friction in the permitting processes with its member agencies, but will look to CEC and CPUC action to accelerate the interconnection process with PG&E and ameliorate supply chain delays.

xi. Building electrification, including any investments above and beyond what is included in Integrated Energy Policy Report (IEPR)

The Decarbonization Roadmap promotes electrification in the built environment and transportation sectors, grid integration, and a carbon-free electricity grid. This was followed by the Electric Vehicle

[37] CALeVIP homepage for the local region at https://calevip.org/incentive-project/peninsula-silicon-valley

[38] Multifamily technical assistance and rebate webpage at https://www.svcleanenergy.org/ev-charging-assist/

[39] DC Fast Charger incentive program webpage at https://www.svcleanenergy.org/dcfastchargers/

[40] SVCE webpage for Reach Codes, including a table tracking EV charger codes adopted for the 2020 code cycle at https://www.svcleanenergy.org/reach-codes/

Infrastructure Joint Action Plan[41] in 2019 and the Building Decarbonization Joint Action Plan[42] in 2020 to further scope key SVCE initiatives in those sectors. As of September 2022, SVCE's board had set aside approximately $52M to be used for decarbonization programs.

As mentioned above, SVCE and its member agencies worked in 2019 to help reduce GHG emissions from new buildings by developing and adopting local Reach Codes that surpassed the state code in promoting decarbonization[43]. Of SVCE's thirteen communities, twelve approved some form of building Reach Code. As such, SVCE suspects its share of state building electrification exceeds its load share allocation, as given in the assigned IRP forecasts. As with transportation electrification, SVCE is not aware of the extent to which the IEPR forecast accounts for its building electrification efforts and programs.

The exact Reach Codes implemented varied by jurisdiction, and included banning methane gas altogether or encouraging all-electric construction. SVCE served as a facilitator and technical advisor, while also bringing in an expert consultant to run the analysis and draft language. In 2022, SVCE is helping its member agencies once again consider Reach Codes to maintain the standards set, improve language and scope, and generally ensure that new construction in SVCE territory prefers to be electric. After 2022, SVCE will turn towards existing buildings and begin working with interested member agencies to explore how best to adopt policies targeting this critical sector. These existing building policies have the potential to accelerate electrification at a scale and speed otherwise impossible, and would greatly affect SVCE load in the future if adopted.

In addition to supporting Reach Codes, SVCE has several specific programs targeted at building electrification. SVCE has been offering incentives for heat pump water heaters and panel upgrades to its customers for several years to increase local adoption[44]. In Q4 2022, SVCE will be expanding its incentives to include heat pump space conditioning, pre-wiring, and promoting all-electric retrofits. These incentives will continue to support the growth of the local all-electric market and contractor network, in addition to the equipment directly incentivized by SVCE. There is large uncertainty in what uptake will look like for this new offer from SVCE, although the initial funding should impact hundreds of homes. SVCE's Board may increase funding if the program is successful in reaching a broad audience.

To help reduce the upfront costs associated with retrofit building electrification and allow more customers to be able to participate in the benefits of decarbonization, SVCE has been exploring financing options to augment its other programs. A key effort is the Tariffed On-Bill Financing pilot that SVCE is pursuing with TECH and submitted to the Clean Energy Finance proceeding[45]. The draft scope includes heat pump water and space heating, along with efficiency improvements, and may ultimately include electrification of all devices in the home. If this pilot advances, SVCE will be able to test out the attractiveness of this offer and the impact on customers, along with the necessary programmatic elements to make it work. If successful, SVCE and PG&E will likely continue to scale financing offerings

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[41] Available at https://www.svcleanenergy.org/decarbonization/#evi-joint-action-plan_sept-2019/1/

[42] Available at https://www.svcleanenergy.org/decarbonization/#building-decarbonization-joint-action-plan_011821-web/1/

[43] SVCE webpage for Reach Codes, including a table tracking building codes adopted for the 2020 code cycle at https://www.svcleanenergy.org/reach-codes/

[44] Webpage for SVCE's heat pump water heater program at https://www.svcleanenergy.org/water-heating/

[45] Presentation available from the May 12, 2022 workshop link found at https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/clean-energy-financing

through this mechanism, drive customer upfront costs down, and allow for immense scaling of electrification. The ability of SVCE to test this depends on approval of the pilot by the CPUC and the direction given to PG&E on how and when to make adjustments to their billing system to accommodate the necessary features for Tariffed On-Bill Financing. This pilot will also require that the equipment be controlled to best follow TOU rates and maximize bill savings, so this approach will inherently optimize these new loads to the benefit of SVCE's load shape.

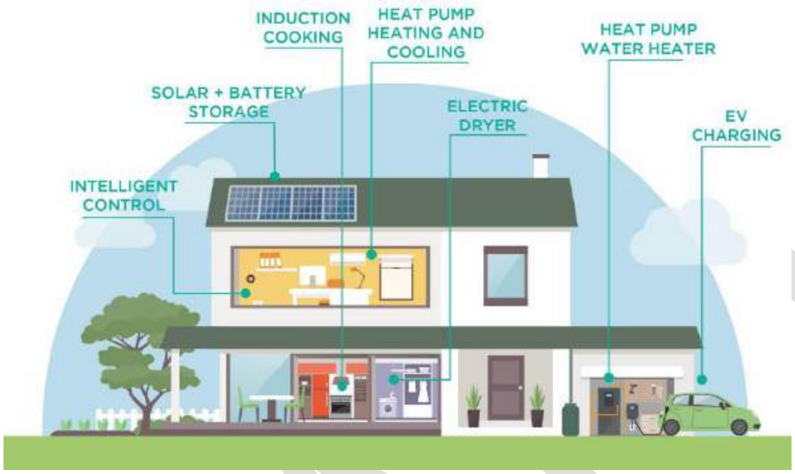

Figure 13: SVCE's presentation of a "FutureFit" home that embraces intelligent decarbonization

Multiple SVCE initiatives have been developed with the intention of catalyzing impacts across the other subsections and create stepwise increases in electrification. While modeling the future impacts of some of these efforts is challenging, they may lead to some of the largest changes in SVCE's load over the current IRP planning horizon.

One initiative which will impact deployment of a variety of electrification technologies across resource categories is the FutureFit Fundamentals program for workforce development[46]. Eligible contractors get $500 for completing the course and may also be able to get up to $5,000 to install an electric technology in their home or business. The approximately five hours of training cover a variety of electric technologies, and SVCE hopes this will increase the size of the local contractor pool that is available, educating customers, and providing awareness of the benefits of this equipment. The online training and stipend is available to contractors throughout Santa Clara County, and is offered in both English and Spanish language.

As referenced in the transportation electrification section, SVCE is also working with its member agencies to modernize and simplify permitting processes to pave the way for the immense number of permits that will be required for electrification retrofits. Removing any bottlenecks here will be critical to widespread and rapid adoption of all types of DERs. SVCE has initially committed $3.2M to provide tools and resources to its member agencies to support this needed work.

[46] Webpage for SVCE's FutureFit Fundamentals workforce development program: https://www.svcleanenergy.org/futurefit-fundamentals/

xii. Other

SVCE's location in the Silicon Valley gives it a unique opportunity to engage with top innovators and startups. As deep decarbonization will require overcoming major hurdles in cost-effective ways, SVCE created its Innovation Onramp program to attract novel pilots that demonstrate scalable solutions[47]. SVCE has selected four cohorts to fund over the last few years and worked on 12 pilots in that span[48]. While not all end up achieving their goals, these pilots can unlock paradigm-shifting approaches to intractable problems. This innovation lens also extends to technologies that can reduce need for grid infrastructure upgrades and help manage SVCE's load. Some of SVCE's pilots are turned into long-term SVCE programs (like the Data Hive[49] for access to customer energy data to enable improved DER adoption or the GridShift: EV Charging app) and some go on to attract significant outside funding (like the CEC grants for both the EVmatch[50] and Ecology Action[51] approaches to multifamily EV charging). SVCE will continue to fund innovation pilots to try to unearth these major advances in thinking that will accelerate the transition to deep decarbonization and help SVCE best manage its load in a future with accelerating DER adoption.

b. Disadvantaged Communities

As a community-based LSE, SVCE's Board of Directors is made up of thirteen elected officials representing each of the thirteen member agencies that comprise SVCE's service territory. Decisions on procurement, programs and investments are made by these elected officials in the interest of all their constituents, including specific underserved communities that they and their agency staff are closest to. When SVCE's board approved an additional $17M to be spent on decarbonization programs in March 2022, they directed staff to include program designs that would support equitable outcomes in reaching certain underserved groups and provided feedback on the ideas offered by staff[52]. In addition, they directed staff to implement SVCE credits equivalent to a 10% discount for CARE/FERA customers through the remainder of 2022, and similar credits are now planned for 2023.

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[47] Impact report summarizing some Innovation Onramp goals and impacts at https://www.svcleanenergy.org/innovation/#innovation-impact-report_web/1/

[48] List of SVCE's Innovation Onramp pilot by cohort at https://www.svcleanenergy.org/innovation-pilots/

[49] Main webpage for the Data Hive, with a link to see the directory of companies registered to use the Data Hive to receive instant, authorized, and secure access to customer usage data at https://data.svcleanenergy.org/

[50] Final report from EVmatch on their multifamily EV charging pilot at https://www.svcleanenergy.org/wp-content/uploads/SVCE-Innovation-Onramp-Summary_EVMatch.pdf

[51] Final report from Ecology Action on their multifamily EV charging pilot at https://www.svcleanenergy.org/wp-content/uploads/IN-Ecology-Action-Innovation-Onramp-Final-Report_11.5.21_digital.pdf

[52] See presentation staring slide 50 in the agendize presentation at https://www.svcleanenergy.org/wp-content/uploads/2022-0309-Presentations-Combined-and-scrubbed.pdf

SVCE's decarbonization programs and community outreach focus on its customers within its territory and are designed to be especially sensitive to the needs of what SVCE terms "underserved communities." SVCE completed an internal Programs Equity Framework to guide a systematic process for learning and considering needs of underserved communities, defining these groups, understanding their current state of DER adoption and barriers, and tracking ongoing impacts of SVCE programs in how they reach these groups.

An underserved community to SVCE is one that is underrepresented in decision-making and whose access to key information and resources is limited when it comes to energy issues and receiving the benefits of decarbonization. Underserved communities can face barriers associated with lower socioeconomic status (affordable housing tenants, CARE/FERA customers), type and ownership of housing (renters, tenants of older multifamily properties), geographic isolation, language barriers or cultural isolation, limited access to digital platforms, or lack of knowledge or information on a subject. SVCE uses this broader definition to ensure it considers all customers who are disadvantaged or underserved in some way in its territory.

The primary indicator used by SVCE to track efforts on program impact and outreach is the Socioeconomic Vulnerability Index (SEVI), originally developed as part of the CPUC's Affordability Report. SVCE has taken the statewide SEVI data by census tract and grouped the tracts that are in SVCE territory into four quartiles, as shown in Figure 14 below. All DACs within SVCE's service territory are in the SEVI 4 quartile.

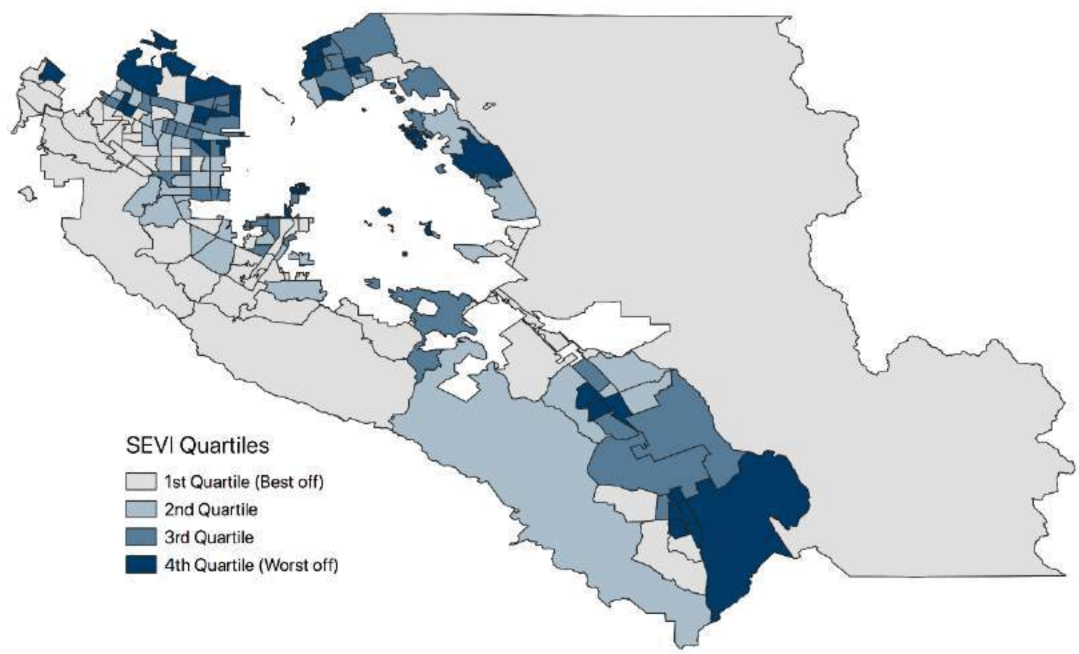


Figure 14: Map of SVCE census tracts by SEVI quartile

SVCE has performed analysis to understand the different demographics in these SEVI quartiles using utility and tax assessor data. See Table 20 below for a high-level overview of some example statistics by SEVI quartile that SVCE uses to inform program design.

	SEVI 1	SEVI 2	SEVI 3	SEVI 4
Residential Accounts	53k (23%)	62k (27%)	64k (28%)	44k (19%)
Population	177k (19%)	251k (27%)	245k (26%)	242k (26%)
CARE/FERA Accounts	2.8k (10%)	4.6k (17%)	8.2k (30%)	10.5k (39%)
Median Income	$166,000	$145,000	$117,000	$79,000

Table 20: SEVI quartiles and key demographic information

The goal of using SEVI as a primary indicator is to provide a first pass at identifying communities and customers in need of decarbonization support and track impacts, but there are secondary indicators that SVCE also uses to dig further into the data to consider specific barriers (e.g., CARE/FERA, medical baseline customers). SEVI quartiles help SVCE staff think about program design and outreach.

As an example, in Figure 15 there is a housing comparison performed by SVCE between SEVI 1 (best-off) and SEVI 4 (worst-off). Considering that the population in SEVI 4 tends to have lower electrification rates overall is important, but understanding the differences in housing composition is critical to decide how best to formulate a program for this underserved community. This analysis, in part, led to SVCE's decision to offer both a building electrification incentive program (simpler for single-family homeowners) and a direct installation program (designed for multifamily). SVCE is still considering how best to reach single-family renters, another underserved subgroup, and has been pursuing the Tariffed On-Bill Financing pilot as a possible path.

Figure 15: housing comparison of SEVI 4 (worst-off) and SEVI 1 (best-off) quartiles

As an example of using SEVI to understand outreach to customers, Figure 18 below shows a breakdown by accounts, CARE/FERA, and outreach done in support of a customer survey and an incentive program. The outreach was performed several years ago and later analyzed via SEVI to see who was reached. The participation rates in the heat pump water heater (HPWH) incentive program are also being tracked and compared to the HPWH outreach to understand how successful SVCE is in engaging all types of customers with that approach.

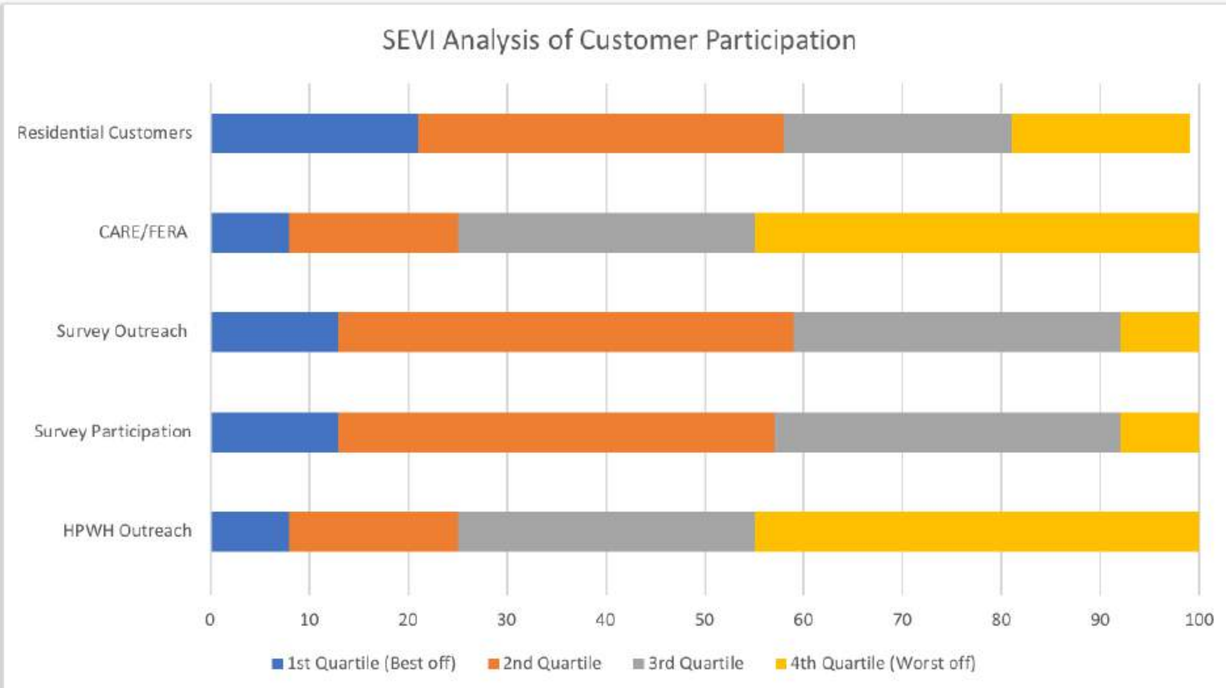


Figure 16: analysis of SEVI outreach for an SVCE survey and incentive program

SVCE is still in the process of integrating its Programs Equity Framework into day-to-day program and marketing operations. Figure 17 below shows steps that SVCE currently plans to follow in every program design to promote equity and reach underserved communities. By adding these steps into its program design checklist, SVCE will institutionalize the consideration of the needs of underserved communities.

A fundamental component identified to support the implementation of the Programs Equity Framework was strengthening ties with local community-based organizations representing the underserved communities that SVCE is trying to reach. These organizations will be best suited to helping SVCE act on the steps from the Programs Equity Framework to receive useful input on program design and market effectively to their communities.

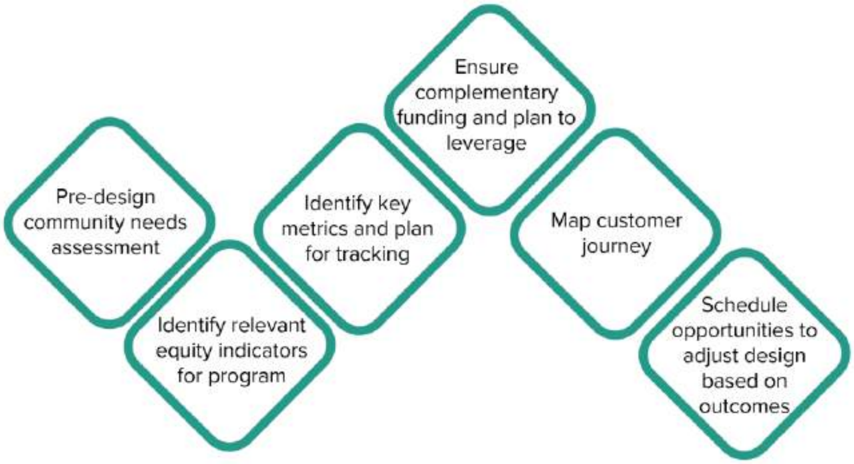


Figure 17: key steps to considering underserved communities in program design and implementation

In 2018, SVCE awarded $75,000 in grant funds to six local nonprofits to collaborate on outreach to traditionally hard-to-reach and underserved residential customers. The purpose of this small grant pilot program was to provide accurate information to SVCE customers about SVCE's mission and benefits, as well as build relationships in underserved communities for future program development and deployment. The grants were offered to trusted, local nonprofits that serve underrepresented communities and harder-to-reach audiences in the SVCE service territory. These communities and audiences include low-income residents; seniors; customers eligible for Medical Baseline discounts; customers with low English language proficiency; and customers living in the south county, unincorporated Santa Clara County, and Milpitas. In total, the grants facilitated outreach to over 310,000 residents.[53]

This collaboration has helped SVCE promote social equity by ensuring that customers in target communities are aware of how they can benefit from SVCE programs and rates, which is a shared priority among state regulators. In 2022, SVCE will continue to strengthen ties with the community through a focused outreach plan including in-person outreach at community facilities, schools, retail and neighborhood associations ($30K) as well as launching a native language awareness campaign ($45K) to support the implementation of the Programs Equity Framework.

Finally, SVCE is considering what additional resources will be needed to make the Programs Equity Framework an effective tool. SVCE may create a staff role that is partially dedicated to this, hire a consultant to assist with the outreach and connections with community-based organization, and/or create staff-wide training to promote internal awareness of issues affecting these communities. The

[53] Over 3,000 total engagement and over 308,000 total reach

specifics will be adjusted in the coming months and years as SVCE tries different approaches and observes which deliver the best outcomes for underserved customers.

There are also programs SVCE has already launched which particularly support underserved customers through their design. In the Innovation Onramp program, SVCE provided grant funding to launch two innovative pilots to provide reliable and affordable charging access to multifamily residents. The pilot with EVmatch tested their reservation-based software platform for shared charging for multi-unit dwelling tenants[54]. The pilot with Ecology Action demonstrated lower power charging technology and a business model designed for affordable housing communities[55]. SVCE further supported successful applications for CEC grant funds by both companies to greatly expand their efforts locally.

Per SVCE's Electric Vehicle Infrastructure Joint Action Plan, and described in the Action Plan section, SVCE is currently offering two programs focused on deployment of EV charging to serve multi-family properties. The "Priority Zone DC Fast Charging" program offers financial incentives for new fast charging stations located near concentrations of older and therefore typically lower-income multifamily properties. The map below shows a few "Priority Zones." SVCE's FutureFit Assist: EV Charging program offers a full suite of free technical assistance to multifamily properties for design and deployment of onsite charging, in addition to incentives, to help multifamily property managers who typically struggle to participate in incentive programs.

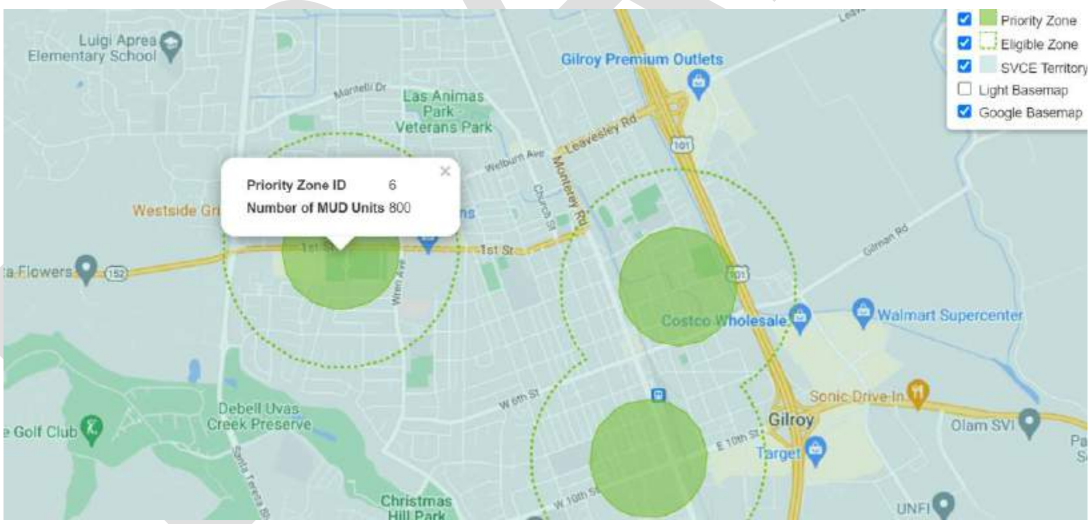


Figure 18: map of some SVCE "Priority Zones" around clusters of multifamily properties (MUDs) in Gilroy

To help serve our most vulnerable customers, SVCE is working with a local non-profit agency to provide free portable batteries for medical baseline customers located in fire-prone areas, and those most likely to be impacted by public safety power shutoff (PSPS) events. And as previously noted, SVCE is currently

[54] https://www.svcleanenergy.org/innovation-evmatch/

[55] https://www.svcleanenergy.org/innovation-ecologyaction/

providing rate relief to CARE/FERA customers, equal to an average 10% discount on SVCE's generation rates.

SVCE is engaging actively with our 270,000+ customers, through both direct and electronic channels. Quarterly, SVCE hosts a meeting with our community partners to gain feedback on SVCE's energy services, program results and upcoming plans. Community partners include local advocacy groups, citizens serving on local governmental commissions, and community non-profit organizations. And as a public community choice energy agency, SVCE Board and Committee meetings are publicly noticed and open to the public for input and comment.

SVCE's website includes the 'eHub' customer resource center, designed to inspire, educate, and enable action related to clean energy and electrification. eHub provides educational content, tools and third-party services for a broad range of topics, including solar + battery storage, electric vehicle costs, savings, and available incentives; and heat pump water heater models and ratings. SVCE conducts several major outbound email campaigns each year focused on education related to electrification, and resources available to customers.

SVCE's website and compliance notifications are available in four languages – English, Spanish, Standard Chinese, and Vietnamese.

c. Commission Direction of Actions

While SVCE has attempted to put forward reasonable and actionable portfolios as part of this IRP, there is significant uncertainty in regulatory and market conditions which were considered in selecting a preferred portfolio. Part of SVCE's qualitative evaluation of the Conforming Portfolios included assessing regulatory risk. Generally, such risks provide incentive for an LSE to maintain optionality on a forward-looking basis to adapt to changing conditions. More specifically, the suggestion of "resource specific" enforcement of the 2022 IRPs in Energy Division's recent Staff Options paper was a barrier to pursuing a more aggressive IRP Preferred Portfolio this cycle. Combined with current market conditions for development and interconnections of new projects, SVCE opted to select a more conservative portfolio as its preferred case in the event the Commission penalizes LSEs who do not or cannot implement the Preferred Portfolios presented in the 2022 LSE IRP filings.

Previous IRP procurement orders have penalized SVCE for proactively procuring resources to meet its long-term obligations to its customers and the state by not allowing these contracted resources to count toward procurement orders. These orders also unfairly shift costs to LSEs who may be made "long" by a load share based allocation. SVCE has also witnessed the impact of such orders, especially resource specific carve outs, on the market and believes it contributes toward market power issues. SVCE appreciates the Commission's acknowledgement of such issues in D.22-02-004 and the recent ALJ ruling on Near-term Actions to Encourage Additional Procurement[56]. While SVCE recognizes the Commission is considering alternate IRP program designs, there remains risk to LSEs for pro-actively contracting new resources.

[56] See Administrative Law Judge's Ruling Seeking Comments on Staff Paper on Procurement Program and Potential Near-term Action to Encourage Additional Procurement. R-20-05-003. September 8, 2022. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M496/K688/496688637.PDF

While SVCE was cautious this cycle in its Preferred Conforming Plan election, it does appreciate the Commission's efforts to design an improved structure for procurement which balances the needs of LSE autonomy and assurances for regulatory bodies that the system can meet its objectives. SVCE is still evaluating options and appropriate design for the programmatic approach. It generally supports the notion that procurement should not be driven by procurement orders. SVCE believes that requiring LSEs to contribute fairly to the system needs is, in principle, a commendable goal. Details for how to assess and enforce portfolios require careful evaluation. Core to any future procurement methodology is ensuring reasonable consistency in regulatory and especially IRP planning assumptions as discussed in Section V below. SVCE looks forward to engaging in stakeholder processes to further elaborate on a programmatic approach to the IRP. SVCE encourages the Commission to act expeditiously to design and implement such a program prior to the 2024 IRP cycle to provide LSEs with more regulatory certainty as they develop their next IRP portfolios.

V. Lessons Learned

SVCE applauds the Commission for the continued evolution of the Integrated Resource Planning process, which has had meaningful improvements over the past three cycles. Many of the suggested changes proposed by SVCE in its 2020 IRP have been adopted. In particular, the changes to the RDT and CSP tools and requirements this cycle represented meaningful improvement over prior cycles by both increasing usability and allowing a greater degree of flexibility for LSEs. Additionally, SVCE appreciates the Commission and staff for allowing LSEs to exceed the minimum GHG-targets and provide the opportunity to submit their own load forecasts for consideration. These changes enable LSEs to provide portfolios more representative of their intended actions.

As the IRP process continues to evolve, SVCE provides the following suggestions for further improvements to the proceeding going forward.

First, SVCE notes that the current timing of the planning process creates challenges for LSEs trying to develop actionable portfolios. Staff did not release several key documents until mid-July. Given SVCE utilized many of the inputs from the CSP and RDT tools in its modeling effort to ensure alignment between its portfolio optimization and the compliance tools, the majority of the work on this IRP could not begin until after materials were released. Further, staff continued to change requirements as late as September 30, 2022. Any changes or clarifications to requirements near the filing deadline can be challenging to implement and take time that could otherwise be used to refine the narrative or add additional analytical insights which would provide value to the larger stakeholder process. CCAs such as SVCE are governed by a board of directors who must review and approve the IRP filing during regularly scheduled board meetings which do not align with regulatory filing dates. This means that CCAs must have largely complete IRPs weeks in advance of the filing deadline. In practice, SVCE had less than three months to review compliance tools, calibrate models, develop portfolios and complete the required deliverables.

Should the Commission adopt a compliance-based approach to the IRP in which LSEs are held to their IRP portfolios as described in the September 2022 Staff Options Paper providing additional time to LSEs to ensure that they are able to more fully explore pathways to hitting their targets will be necessary to ensure the success of the program[57]. It is not reasonable to ask LSEs be held to a ten or more-year plan which they had less than one quarter to develop.

Second, the IRP process as it stands today lacks cohesion due to radical shifts in planning assumptions between cycles. This is made worse by procurement orders which effectively negate the plans LSEs file. These dramatic shifts in expected resources and requirements, planning reserve margins and resource counting methodologies, result in IRP results which are disconnected from previous cycles, making implementation of plans difficult or impossible. If a sustainable IRP implementation track is to be developed planning assumptions must be stabilized to ensure that LSEs can iterate on and develop a reasonable path toward meeting their long-term planning goals.

Finally, SVCE once again encourages the CPUC to undertake further integration and complementarity between the IRP and RPS Procurement Plan processes and timelines. Many of the same fundamental questions addressed in the RPS Procurement Plan are of interest in the IRP exercise, including future resource selection and impacts of resource selection on grid reliability. Developing internal CPUC infrastructure that would allow LSEs to avoid duplicating this information would reduce administrative burden and allow for more focus on substantive consideration of key policy issues.

[57] "Reliable and Clean Power Procurement Program Staff Options Paper". CPUC Energy Division. September 2022.

Glossary of Terms

Alternative Portfolio: *LSEs are permitted to submit "Alternative Portfolios" developed from scenarios using different assumptions from those used in the Preferred System Plan with updates. Any deviations from the "Conforming Portfolio" must be explained and justified.*

Approve (Plan)*: the CPUC's obligation to approve an LSE's integrated resource plan derives from Public Utilities Code Section 454.52(b)(2) and the procurement planning process described in Public Utilities Code Section 454.5, in addition to the CPUC obligation to ensure safe and reliable service at just and reasonable rates under Public Utilities Code Section 451.*

Balancing Authority Area (CAISO): *the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.*

Baseline resources: *Those resources assumed to be fixed as a capacity expansion model input, as opposed to Candidate resources, which are selected by the model and are incremental to the Baseline. Baseline resources are existing (already online) or owned or contracted to come online within the planning horizon. Existing resources with announced retirements are excluded from the Baseline for the applicable years. Being "contracted" refers to a resource holding signed contract/s with an LSE/s for much of its energy and capacity, as applicable, for a significant portion of its useful life. The contracts refer to those approved by the CPUC and/or the LSE's governing board, as applicable. These criteria indicate the resource is relatively certain to come online. Baseline resources that are not online at the time of modeling may have a failure rate applied to their nameplate capacity to allow for the risk of them failing to come online.*

Candidate resource: *those resources, such as renewables, energy storage, natural gas generation, and demand response, available for selection in IRP capacity expansion modeling, incremental to the Baseline resources.*

Capacity Expansion Model: *a capacity expansion model is a computer model that simulates generation and transmission investment to meet forecast electric load over many years, usually with the objective of minimizing the total cost of owning and operating the electrical system. Capacity expansion models can also be configured to only allow solutions that meet specific requirements, such as providing a minimum amount of capacity to ensure the reliability of the system or maintaining greenhouse gas emissions below an established level.*

Certify (a Community Choice Aggregator Plan)*: Public Utilities Code 454.52(b)(3) requires the CPUC to certify the integrated resource plans of CCAs. "Certify" requires a formal act of the Commission to determine that the CCA's Plan complies with the requirements of the statute and the process established via Public Utilities Code 454.51(a). In addition, the Commission must review the CCA Plans to determine any potential impacts on public utility bundled customers under Public Utilities Code Sections 451 and 454, among others.*

Clean System Power (CSP) methodology*: the methodology used to estimate GHG and criteria pollutant emissions associated with an LSE's Portfolio based on how the LSE will expect to rely on system power on an hourly basis.*

***Community Choice Aggregator**: a governmental entity formed by a city or county to procure electricity for its residents, businesses, and municipal facilities.*

***Conforming Portfolio**: the LSE portfolio that conforms to IRP Planning Standards, the 2030 LSE-specific GHG Emissions Benchmark, use of the LSE's assigned load forecast, use of inputs and assumptions matching those used in developing the Reference System Portfolio, as well as other IRP requirements including the filing of a complete Narrative Template, a Resource Data Template and Clean System Power Calculator*.

***Effective Load Carrying Capacity**: a percentage that expresses how well a resource is able avoid loss-of-load events (considering availability and use limitations). The percentage is relative to a reference resource, for example a resource that is always available with no use limitations. It is calculated via probabilistic reliability modeling, and yields a single percentage value for a given resource or grouping of resources.*

***Effective Megawatts (MW):** perfect capacity equivalent MW, such as the MW calculated by applying an ELCC % multiplier to nameplate MW.*

***Electric Service Provider**: an entity that offers electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under Public Utilities Code Section 218.*

***Filing Entity**: an entity required by statute to file an integrated resource plan with CPUC.*

***Future**: a set of assumptions about future conditions, such as load or gas prices.*

***GHG Benchmark (or LSE-specific 2030 GHG Benchmark)**: the mass-based GHG emission planning targets calculated by staff for each LSE based on the methodology established by the California Air Resources Board and required for use in LSE Portfolio development in IRP.*

***GHG Planning Price:** the systemwide marginal GHG abatement cost associated with achieving a specific electric sector 2030 GHG planning target.*

***Integrated Resources Planning Standards (Planning Standards)**: the set of CPUC IRP rules, guidelines, formulas and metrics that LSEs must include in their LSE Plans.*

***Integrated Resource Planning (IRP) process**: integrated resource planning process; the repeating cycle through which integrated resource plans are prepared, submitted, and reviewed by the CPUC*

***Long term**: more than 5 years unless otherwise specified.*

***Load Serving Entity**: an electrical corporation, electric service provider, community choice aggregator, or electric cooperative.*

***Load Serving Entity (LSE) Plan**: an LSE's integrated resource plan; the full set of documents and information submitted by an LSE to the CPUC as part of the IRP process.*

***Load Serving Entity (LSE) Portfolio**: a set of supply- and/or demand-side resources with certain attributes that together serve the LSE's assigned load over the IRP planning horizon.*

***Loss of Load Expectation (LOLE):** a metric that quantifies the expected frequency of loss-of-load events per year. Loss-of-load is any instance where available generating capacity is insufficient to serve electric demand. If one or more instances of loss-of-load occurring within the same day regardless of duration* *are counted as one loss-of-load event, then the LOLE metric can be compared to a reference point such as the industry probabilistic reliability standard of "one expected day in 10 years," i.e., a LOLE of 0.1.*

Maximum Import Capability: a California ISO metric that represents a quantity in MWs of imports determined by the CAISO to be simultaneously deliverable to the aggregate of load in the ISO's Balancing Authority (BAA) Area and thus eligible for use in the Resource Adequacy process. The California ISO assess a MIC MW value for each intertie into the ISO's BAA and allocated yearly to the LSEs. A LSE's RA import showings are limited to its share of the MIC at each intertie.

Net Qualifying Capacity (NQC): *Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the California ISO pursuant to the provisions of this California ISO Tariff and the applicable Business Practice Manual.*

Non-modeled costs*: embedded fixed costs in today's energy system (e.g., existing distribution revenue requirement, existing transmission revenue requirement, and energy efficiency program cost).*

Nonstandard LSE Plan*: type of integrated resource plan that an LSE may be eligible to file if it serves load outside the CAISO balancing authority area.*

Optimization*: an exercise undertaken in the CPUC's Integrated Resource Planning (IRP) process using a capacity expansion model to identify a least-cost portfolio of electricity resources for meeting specific policy constraints, such as GHG reduction or RPS targets, while maintaining reliability given a set of assumptions about the future. Optimization in IRP considers resources assumed to be online over the planning horizon (baseline resources), some of which the model may choose not to retain, and additional resources (candidate resources) that the model is able to select to meet future grid needs.*

Planned resource: *any resource included in an LSE portfolio, whether already online or not, that is yet to be procured. Relating this to capacity expansion modeling terms, planned resources can be baseline resources (needing contract renewal, or currently owned/contracted by another LSE), candidate resources, or possibly resources that were not considered by the modeling, e.g., due to the passage of time between the modeling taking place and LSEs developing their plans. Planned resources can be specific (e.g., with a CAISO ID) or generic, with only the type, size and some geographic information identified.*

Qualifying capacity*: the maximum amount of Resource Adequacy Benefits a generating facility could provide before an assessment of its net qualifying capacity.*

Preferred Conforming Portfolio*: the conforming portfolio preferred by an LSE as the most suitable to its own needs; submitted to CPUC for review as one element of the LSE's overall IRP plan.*

Preferred System Plan: *The Commission's integrated resource plan composed of both the aggregation of LSE portfolios (i.e., Preferred System Portfolio) and the set of actions necessary to implement that portfolio (i.e., Preferred System Action Plan).*

Preferred System Portfolio: *the combined portfolios of individual LSEs within the CAISO, aggregated, reviewed and possibly modified by Commission staff as a proposal to the Commission, and adopted by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Preferred System Plan.*

Short term*: 1 to 3 years (unless otherwise specified).*

Staff: *CPUC Energy Division staff (unless otherwise specified).*

Standard LSE Plan: *type of integrated resource plan that an LSE is required to file if it serves load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process).*

Transmission Planning Process (TPP): *annual process conducted by the California Independent System Operator (CAISO) to identify potential transmission system limitations and areas that need reinforcements over a 10-year horizon.*

Staff Report – Item 4

Item 4:	**Authorize the Chief Executive Officer to Approve or Execute Agreements with Firms Providing Services to Initiate SVCE to Execute its Second Prepay**
From:	Girish Balachandran, CEO
Prepared by:	Amrit Singh, CFO, and Director of Administrative Services
Date:	10/12/2022

RECOMMENDATION

Staff requests the Board of Directors adopt Resolution 2022-23 authorizing the CEO to negotiate and approve[1] or execute agreements with the firms listed below for the services they will provide to enable SVCE to complete its second energy prepayment transaction. While the total expected cost for all these agreements is $905,000, staff proposes to seek Board authorization to execute up to a total amount of $1,000,000, about 10 percent contingency that might be required for completing negotiations and the potential need for additional ancillary services.

1. PFM Financial Advisors LLC & PFM Swap Advisors - $175,000
2. Chapman & Cutler (Disclosure/Issuer's Counsel) - $200,000
3. Ballard Spahr (Bond and Tax Counsel) - $300,000
4. Moody's Investor Service Inc (Credit Rating) - $230,000

Except for Moody's Credit Rating fee, all other payments will be contingent on executing the Prepay per the terms that the Board will later adopt, including designating a minimum savings threshold. The Chapman & Cutler agreement also has an exception that if the Prepay Transaction does not materialize, fees will be assessed at an hourly rate of $750/hour up to a maximum out-of-pocket of $30,000. To avoid the risk of stranding Moody's fees, SVCE will initiate Moody's service later when there is more certainty on successfully executing the transaction. Like the first Prepay transaction, Morgan Stanley, the Prepay Seller, is willing to split Moody's rating agency fee if the Prepay transaction is not executed by no fault of Morgan Stanley or SVCE.

Staff also requests the Board of Directors to approve the engagement with Morgan Stanley as the Prepay Supplier with the following fee structure[2]:

- Bond underwriting fee of $5/bond. The dollar amount of this fee will depend on the total dollar value of the bonds. For example, if the Board later were to authorize the issuance of $1 billion in bonds, with a face value of $1,000 a bond, the underwriting fee would be $5 million.
- Energy Service Revenue of $1.10 per MWh.
- If any floating rate bonds are issued, Morgan Stanley will charge four basis points on the interest rate swap spread to mid-market for the corresponding interest rate swap.

[1] The California Community Choice Financing Authority (CCCFA) is developing its business processes and practices and instead of the CEO may execute these agreements after the approval of SVCE's Board.
[2] CCCFA will execute a Bond Purchase Agreement with Morgan Stanley at the time of the sale of bonds, which will document these fees and bond pricing results. The other charges (Energy Service Revenue and swap fee) will be implemented later along with other Prepay transactional documents.

All these transaction costs will be paid from the bond proceeds, and the Board-designated savings target will be net of these costs.

FINANCE AND ADMINISTRATION (F&A) COMMITTEE REVIEW

At its meeting on October 5, 2022, the F&A Committee reviewed the proposed recommendations. The F&A Committee asked about the impact of rising interest rates on Prepay economics and other clarifying questions. The Committee unanimously recommended that the Board approve the staff's request.

BACKGROUND

SVCE and EBCE spent over two years executing our first Prepay with Morgan Stanley as the Prepay Bank Supplier (see timeline in Attachment 1). SVCE's portion was for 50 MW accounting for about 11% of SVCE's load. This transaction saves SVCE about 10% of the energy cost of the initial transaction assigned into the Prepay, about $1.9 million per year during the initial bond pricing period of ten years. Power delivery under the Prepay began 1/1/2022, and SVCE is successfully settling each month and realizing the savings (see summary in Attachment 2). Staff would like to leverage the two years of work put into this structure by replicating it for another Prepay with the same counterparties as the first Prepay transaction, with one exception discussed later in the report. The commercial terms of this second Prepay are still being worked out, but it could be another 10% of SVCE's load.

Since our first transaction was executed, MCE successfully executed its Prepay transaction. Earlier this year, EBCE executed its second Prepay using the same approach staff recommends for SVCE's second transaction. Several other CCAs are currently pursuing a prepay transaction.

The goal of the prepayment transaction is to reduce the cost of power purchases on quantities delivered under the prepay structure with minimal risk to SVCE. The Prepay structure enables publicly owned utilities, including CCAs, to reduce their energy costs by financing the acquisition of long-term energy supplies with tax-exempt bonds. Attachment 3 provides an overview of the Prepay structure; this was shared with the Board last year before executing the first Prepay transaction.

STRATEGIC PLAN

Entering a Prepayment transaction will further Goals #5, #6, and #13 of the SVCE Strategic Plan.

Goal #5: Acquire clean and reliable electricity in a cost-effective, equitable, and sustainable manner.

Goal #6: Manage and optimize power supply resources to meet affordability, GHG reduction, and reliability objectives.

Goal #13: Commit to maintaining a strong financial position.

ANALYSIS & DISCUSSION

Except for Ballard Spahr, SVCE has worked with these parties for the first Prepay Transaction for the role defined in the table below. For the first Prepay Transaction, SVCE and EBCE conducted competitive solicitations that resulted in the selection of PFM Financial Advisors LLC, Chapman and Cutler, and Morgan Stanley. Moody's Investor Service Inc was selected because they have the most experience in rating Prepay Bonds of all the rating agencies. For the second Prepay, as shown in the table below, these parties are discounting the fees by about 30 percent in aggregate.

Firms	Role	First Prepay Cost	Proposed Cost for the Second Prepay
PFM Financial Advisors LLC (PFM)	Municipal Advisor: Advises prepay buyer in negotiations; required by Municipal Securities Rulemaking Board (MSRB)	$250,000	$175,000

Chapman & Cutler	Disclosure and Issuer's Counsel: Provides legal counsel and prepares official statement and prospectus	$310,000	$200,000
Ballard Spahr	Bond and Tax Counsel: Represents bondholders and provides tax opinion on the transaction	N/A	$300,000
Moody's Investor Service Inc	Rating Agency: Provides the credit rating for the bonds	$315,000	$230,000

For the first Prepay, SVCE worked with Orrick, Herrington & Sutcliffe as the bond and tax counsel at the cost of $425,000. Because of a potential conflict of interest, SVCE will not work with this firm for this transaction. Working with our financial advisor, PFM, staff selected Ballard Spahr, a firm with significant experience in Prepay transactions. PFM reached out to the few niche firms that provide Prepay Bond and Tax Counsel services. After a discussion with PFM, staff agreed with PFM's recommendation of Ballard Spahr based on the competitiveness of their offer and their ability to leverage the work from SVCE's first Prepay transaction.

For this second Prepay transaction, the Prepay Supplier, Morgan Stanley, has proposed charging the same fee as the first transaction.

When the Board later approves the Prepay transaction, the transaction will include a commodity swap agreement with the Royal Bank of Canada (RBC). RBC has agreed to charge the same fee as per the first transaction, $0.40 MWh.

The transaction will entail other nominal costs within the CEO's execution authority. These include:

- Trustee (Bank of New York) ~$32,000
- Trustee Counsel (Bank of New York Counsel) ~$35,000
- Investment Advisor ~$42,000
- Green Bond Second Party Opinion (Kestrel Verifiers) ~$25,000

When the Board later approves the Prepay transaction and the terms for execution, the designated savings will be net of all these transaction costs.

FISCAL IMPACT

Like the first Prepay transaction, this second transaction can also bring significant savings to SVCE's power procurement portfolio at minimal risks to SVCE. The actual savings will depend on market conditions. A savings of eight to ten percent, achieved for the initial bond term of the first transaction, could amount to ~$3 per year for a 50 MW around-the-clock transaction, given the current high commodity prices.

The request at this time is to seek Board authorization to execute agreements with the financial advisor, issuer's counsel, and the bond and tax counsel and to engage with Morgan Stanley as the Prepay Supplier; the fees, as noted before, for the most part, are contingent upon the execution of the deal and carry minimal financial risk to SVCE. The credit rating agency fee is not contingent, but SVCE will only engage with the rating agency when there's more certainty in executing the transaction. Morgan Stanley will also split this cost if the transaction through no party's fault fails. The payment for all the fees will be made from the bond proceeds, and the savings target established later by the Board will be net of these fees.

ATTACHMENTS

1. Timeline of SVCE's First Prepay Transaction
2. Summary of the Details of the First Prepay Transaction and Transaction Cost Breakdown
3. Overview of the Prepay structure

4. Resolution 2022-23, authorizing the CEO to negotiate and approve[3] or execute agreements
5. Agreements/Engagement Letter for Consulting and Counsel Services

[3] The California Community Choice Financing Authority (CCCFA) is developing its business processes and practices and instead of the CEO may execute these agreements after the approval of SVCE's Board.

Attachment 1.

First Prepay Timeline

June-2019	SVCE presents Prepay Structure Overview Presentation (developed by Goldman Sachs) to Finance and Admin Committee
Aug-2019	SVCE presents a brief verbal update on prepay process to Finance and Admin Committee
Sept-2019	SVCE and PFM Financial Advisors provide an update on the upcoming RFP process to Finance and Admin Committee
Nov-2019	SVCE provides Prepay RFP Overview to Executive Committee - PFM issues RFP to select Prepay Bank Supplier on behalf of EBCE and SVCE on Nov 12th - RFP Proposals were due December 5th
Jan-2020	SVCE presents Prepay Structure Overview to Finance and Admin Committee
Spring-2020	SVCE and EBCE conduct RFP evaluations to select Prepay Bank Supplier
July-2020	SVCE and EBCE select Morgan Stanley as Prepay Bank Supplier
Aug-2020	SVCE provides Prepay Status Report to Finance and Admin Committee
Sept-2020	SVCE provides Board with Prepay Overview on preparing for a Prepay Transaction SVCE provides Prepay Status Report to Finance and Admin Committee
Oct-2020	SVCE Board Authorizes CEO to enter legal service agreements to finalize Prepayment Transaction (Orrick, Herrington & Sutcliffe and Chapman & Cutler LLP)
Nov-2020	SVCE provides Prepay Status Report to Finance and Admin Committee
Mar-2021	SVCE provides Prepay Status Report to Finance and Admin Committee SVCE provides Prepay Status Report to Executive Committee
April-2021	SVCE Board Approves Participation in the California Community Choice Financing Authority Joint Powers Authority
Aug-2021	The Finance and Admin Committee reviews the Prepay Transaction and votes to recommend Board approval. Board authorizes execution of the first Prepay Transaction subject to parameters including that bonds are not obligations of SVCE, size of the bonds, and minimum savings target.
Sept-2021	Sept 9, 2021 bonds priced
Jan-2022	Power delivery under Prepay begins

Attachment 2.

Summary of the Details of the First Prepay Transaction

Aggregate Principal Bond Amount	$1,234,720,000 (SVCE and EBCE combined)
Total Bond Proceeds	$1,475,895,642.5 (SVCE and EBCE combined)
Municipal Bond Rating	A1
Green Certification	Designated Green Bonds by Kestrel Verifiers
Initial Bond Pricing Period	• 10 years. • After the initial period, bonds will be repriced per the negotiated repricing agreement, and a new discount will be established based on the then prevailing market conditions.[4]
Final Bond Maturity Date	• February 1, 2052.
Discount Achieved	• $4.38 per MWh, about 10% of the energy cost of SVCE's 3-year transaction initially assigned into the Prepay. • ~$1.9 million per year for SVCE during the initial bond pricing period of ten years.
Energy Volume Supported by Bond Proceeds	109 MW, of which SVCE's share is 50 MW (about 11% of load) and EBCE's share is 59 MW for approximately the first ten years of the transaction; after that, the same proportional volume split will be maintained between SVCE and EBCE.

Summary of the Transaction Cost Breakdown ($000)

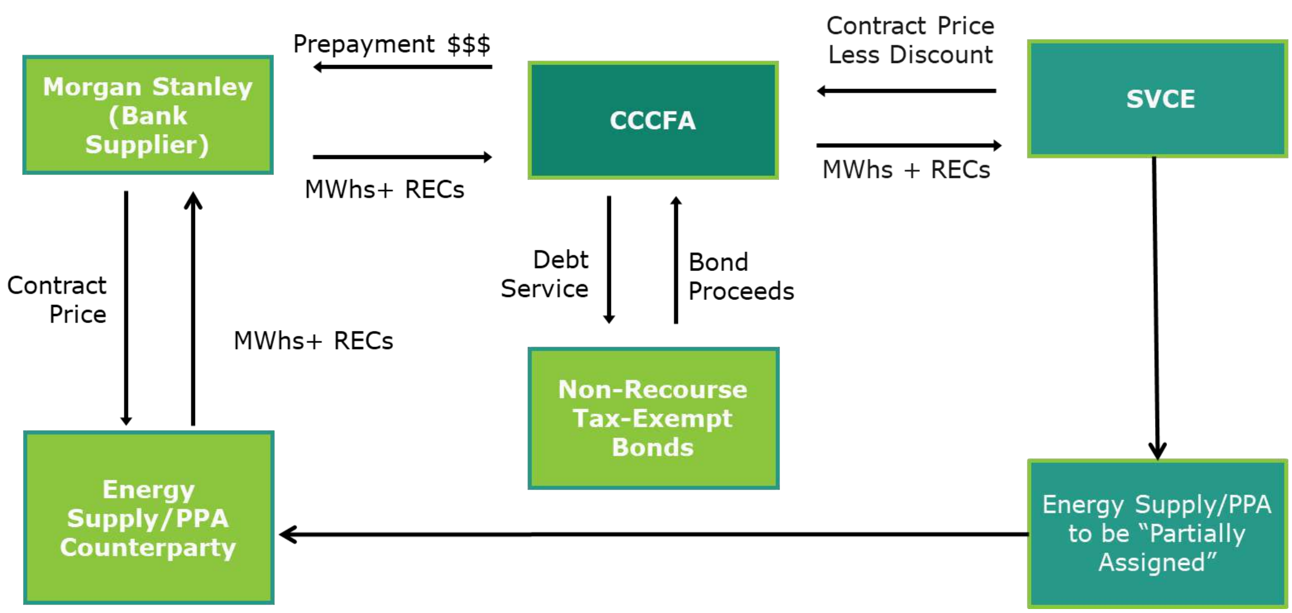
Bond and Tax Counsel: Orrick, Herrington & Sutcliffe	425
Credit Rating: Moody's	315
Issuer's Counsel and Disclosure Counsel: Chapman & Cutler LLP	310
Municipal Advisor: Public Financial Management	250
Investment Advisor: Public Financial Management Asset Mgmt	42
Trustee: Bank of New York (BNY)	32
Trustee Counsel: BNY Counsel	35
Printing Cost	3
Contingency/Other	10
Total COI	1,422
Morgan Stanley Underwriting	6,341
Total	**7,763**

[4] The repricing agreement has a minimum savings requirement of $2 per MWh.

Attachment 3.

Overview of the Prepay structure

Structural Overview of Power Prepay



Under the existing, non-Prepay, structure, SVCE has Power Purchase Agreements (PPA) and other carbon-free energy transactions with a counterparty (Energy Supplier). The Energy Supplier provides energy and any associated renewable/carbon-free credits (environmental credits) to SVCE, and SVCE pays the Energy Supplier the contract price. Under the prepayment structure:

1. SVCE assigns its rights to energy under the energy contract equivalent to the prepaid quantity to Morgan Stanley at the contract price. Now, the Energy Supplier will provide the assigned quantity of energy with any associated environmental credits to Morgan Stanley. Morgan Stanley will pay the contract price to the Energy Supplier.
2. SVCE, along with the other initial founding member CCAs[5], created the California Community Choice Financing Authority (CCCFA), a separate legal entity that can issue tax-exempt municipal bonds.
3. CCCFA issues non-recourse tax-exempt bonds secured by the contractual rights and transaction cashflows under a trust indenture. The bonds are not secured or guaranteed by SVCE or CCCFA. Based on the contractual agreements securing the bonds, the bonds will carry the credit ratings of Morgan Stanley.
4. CCCFA uses the proceeds from the bonds, net of all prepay transaction fees, and pays Morgan Stanley the present value of energy cost and any environmental credits that Morgan Stanley will deliver to CCCFA over the 30-year term of the transaction under a prepaid power agreement.
5. SVCE and CCCFA execute a power supply agreement. Under this agreement, SVCE pays CCCFA the initial contract price less a discount as CCCFA delivers to SVCE the energy and environmental credits it receives from Morgan Stanley.
6. CCCFA uses payments received from SVCE to pay interest and principal payments to the Bondholders.

[5]SVCE along with Central Coast Community Energy (3CE), East Bay Community Energy (EBCE), and Marin Clean Energy (MCE), as the first set of founding members, established CCCFA.

Under the prepayment structure, SVCE receives the same energy and environmental credits from the Energy Supplier (indirectly via Morgan Stanley and then CCCFA) but for a lower price. The savings or lower price source is primarily the difference between taxable and tax-exempt debt interest rates. Morgan Stanley's capital needs are funded by a variety of means in taxable corporate markets, which have higher interest rates than tax-exempt debt. As a public agency, CCCFA can issue tax-exempt debt. When CCCFA provides the prepayment to Morgan Stanley for energy that Morgan Stanley will deliver over the term of the transaction, Morgan Stanley is effectively raising capital at a lower cost. On a negotiated basis, Morgan Stanley flows the savings to SVCE by lowering the price SVCE pays for the energy and any environmental credits. By using this prepayment structure, SVCE can reduce the cost of energy purchases that are delivered under this structure.

The bonds can have an initial term of about 5-10 years, and SVCE will not execute the transactions unless the Board-authorized savings can be realized. At the end of the initial term, the bonds will be refinanced, and the terms of the discount will be set per a Repricing Agreement, which will also specify a minimum discount threshold.

The risks to SVCE are minimal as the debt will not be recourse to SVCE. If for any reason, the structure falls apart, the original energy contract will revert to SVCE, and the loss to SVCE will be the staff time invested in the project and the future savings expected to be generated by the prepayment transaction. The initial consultant and attorney fees are all contingent upon the execution of the transaction and will be financed from the bond proceeds.

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2022-23

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO NEGOTIATE AND EXECUTE OR RECOMMEND APPROVAL FOR CALIFORNIA COMMUNITY CHOICE FINANCING AUTHORITY TO EXECUTE AGREEMENTS WITH BALLARD SPAHR LLP, CHAPMAN & CUTLER LLP, PFM FINANCIAL ADVISORS LLC & PFM SWAP ADVISORS LLC, AND MOODY'S INVESTOR SERVICE INC. FOR THE PROPOSED ENERGY PREPAYMENT TRANSACTION

WHEREAS, The Silicon Valley Clean Energy Authority ("SVCE") was formed as a community choice aggregation agency ("CCA") on March 31, 2016, under the Joint Exercise of Power Act, California Government Code sections 6500 *et seq.* (the "Act"), among the City of Campbell, City of Cupertino, City of Gilroy, City of Los Altos, Town of Los Altos Hills, Town of Los Gatos, City of Monte Sereno, City of Morgan Hill, City of Mountain View, County of Santa Clara (Unincorporated Area), City of Saratoga and City of Sunnyvale, to study, promote, develop, conduct, operate, and manage energy-related climate change programs in all of the member jurisdictions. The city of Milpitas, located in Santa Clara County, was added as a member of SVCE and a party to the JPA in June 2018; AND

WHEREAS, in order to achieve a significant reduction in power procurement costs, the Authority is considering entering into a second energy prepayment transaction involving the issuance of tax-exempt bonds by a third-party conduit agency for which there would be no recourse against SVCE; and

WHEREAS, Chapman & Cutler LLP was selected as proposed legal counsel for the previous prepay transaction through a solicitation issued in June 2020; and

WHEREAS, Orrick, Herrington & Sutcliffe proved unavailable to repeat as legal counsel due to a conflict of interest, so Ballard Spahr LLP was selected due to its unique experience with previous prepay transactions; and

WHEREAS PFM Financial Advisors LLC & PFM Swap Advisors LLC were selected for the financial advisor roles through a solicitation issued in September 2020,

WHEREAS Moody's Investor Service Inc. was selected for the Bond credit rating service due to its unique experience evaluating similar prepayment transactions, and

WHEREAS The agreements, once negotiated, may be executed by the California Choice Financing Authority ("CCCFA"), pending further deliberation between parties; and.

WHEREAS The combined fees for services provided by the firms identified above shall not exceed $1,000,000, inclusive of contingencies.

NOW THEREFORE, the Board of Directors of the Silicon Valley Clean Energy Authority does hereby resolve, determine, and order as follows:

Section 1. The Chief Executive Officer is hereby authorized to negotiate Agreements with the following firms for legal representation on Authority's energy prepayment transaction: Ballard Spahr LLP – roles of Bond Counsel and Tax Counsel, and Chapman & Cutler LLP – roles of Disclosure Counsel, Issuer's Counsel, and to prepare the Official Statement; PFM Financial Advisors LLC & PFM Swap Advisors LLC – role of Financial Advisor; Moody's Investor Service Inc – role of bond transaction credit rating agency. The Chief Executive Officer is also authorized to execute these Agreements or recommend approval to the California Community Choice Financing Authority to execute the Agreements in support of the prepay transaction. The total combined costs to SVCE for the four Agreements shall not exceed $1,000,000 and the Agreements shall be approved as to form by the General Counsel. Moody's contract to be executed closer to the transaction date to increase certainty of its need.

PASSED AND ADOPTED this 12th day of October 2022, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Willey				
City of Gilroy	Director Hilton				
City of Los Altos	Director Fligor				
Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Ellahie				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

Chair

ATTEST:

Andrea Pizano, Board Secretary

Ballard Spahr LLP

1735 Market Street, 51st Floor
Philadelphia, PA 19103-7599
TEL 215.665.8500
FAX 215.864.8999
www.ballardspahr.com

Kimberly D. Magrini
Tel: 215.864.8365
Fax: 215.864.8999
magrinik@ballardspahr.com

September 23, 2022

Nick Chaset and Garth Salisbury
California Community Choice Financing Authority
San Rafael, California

Re: Agreement for Legal Services

Dear Nick and Garth:

We are pleased that you have asked the firm to serve as your counsel, as described herein. This letter will confirm our discussion with you regarding your engagement of this firm and will describe the basis on which our firm will provide legal services to you.

Accordingly, we submit for your approval the following provisions governing our engagement. If you are in agreement, please sign the enclosed copy of this letter in the space provided below. If you have any questions about these provisions, or if you would like to discuss possible modifications, do not hesitate to call.

1. *Client; Scope Representation*. Our client in this matter will be California Community Choice Financing Authority (the "Issuer"). We will be engaged as bond counsel and special tax counsel to advise the Issuer solely in connection with an energy prepay financing (the "Prepay Financing"), including preparing, negotiating and revising certain documentation required to consummate such Prepay Financing. It is our understanding that the Issuer will be represented by Michael Callahan, its General Counsel, who will render an approving opinion on its behalf regarding its legal authority and approvals, and enforceability of documents to which it is a party. You may limit or expand the scope of our representation from time to time, subject to our explicit agreement of any substantial expansion of services.

2. *Term of Engagement.* Either of us may terminate the engagement at any time for any reason by written notice, subject on our part to applicable rules of professional conduct.

3. *Conclusion of Representation; Retention and Disposition of Documents.* Unless previously terminated, our representation of the Issuer will terminate upon closing of the issuance of bonds in connection with the Prepay Financing. Following such termination, any otherwise nonpublic information you have supplied to us which is retained by us will be kept confidential in accordance with applicable rules of professional conduct. At your request,

your papers and property will be returned to you promptly upon receipt of payment for outstanding fees and costs. Our own files pertaining to the matter will be retained by the firm. These firm files include, for example, firm administrative records, time and expense reports, personnel and staffing materials, and credit and accounting records; and internal lawyers' work product such as drafts, notes, internal memoranda, and legal and factual research, including investigative reports, prepared by or for the internal use of lawyers. All such documents retained by the firm will be transferred to the person responsible for administering our records retention program. We may destroy or otherwise dispose of any such documents or other materials retained by us within a reasonable time after the termination of the engagement.

4. *Post-Engagement Matters*. You are engaging the firm to provide legal services in connection with the matter referred to in this letter. After completion of the matter, changes may occur in the applicable laws or regulations that could have an impact upon your future rights and liabilities. Unless you engage us after completion of the matter to provide additional advice on issues arising from the matter, the firm has no continuing obligation to advise you with respect to future legal developments.

5. *Fees and Expenses; Staffing*. The fee for this matter will be a fixed fee of $300,000, payable at closing, which is expected to occur no later than March 31, 2023. We expect to staff this matter with Charlie Henck, Marybeth Orsini and Andrew Wang for tax matters; and Joyce Gorman Kim Magrini, Mike Charlebois, Ben Vernon, and Katie Leesman for other bond counsel matters; as well as Willow Vickers, a paralegal. We may engage other firm attorneys when and as needed.

6. *Client Responsibilities*. You agree to cooperate fully with us and to provide promptly all information known or available to you relevant to our representation. You also agree to pay our statements for services and expenses in accordance with paragraph 5 above.

7. *Conflicts of Interest*. Ballard Spahr represents many other companies and individuals. We are concurrently providing a separate conflict acknowledgement and waiver letter with respect to certain client relationships and another role win which we have been asked to serve in the Prepay Financing.

If you are in agreement with the terms of this letter and the Terms of Engagement please sign the enclosed copy of this letter in the space provided below.

We look forward to working with you. If you have any questions regarding our engagement either now or during the course of our work together, please do not hesitate to call me.

Very truly yours,

Kimberly D. Magrini

KDM/jw
Attachment

Agreed and accepted:

California Community Choice Financing Authority

By: ______________________________________
Name:
Title:

Ballard Spahr LLP

Terms of Engagement

The following terms together with the accompanying letter of engagement constitute the terms of your engagement of Ballard Spahr LLP ("Ballard Spahr") as your lawyers. Unless modified in writing by mutual agreement, these terms will be an integral part of Ballard Spahr's agreement with you. Therefore, we ask that you review these terms carefully and contact us promptly if you have any questions. We suggest that you retain these terms in your file.

1. **CLIENT.** It is understood that Ballard Spahr's Client for purposes of this representation is limited to the individual or entity specifically identified in the engagement letter and does not include others.

2. **SCOPE OF REPRESENTATION.** Our representation is limited to performance of the services expressly described in the engagement letter and does not include representation of you or your interests in any other matter. It is important that you have a clear understanding of the legal services we will provide and that you contact us promptly to discuss any questions that you may have about them. You may limit or expand the scope of the representation from time to time, provided that any substantial change is agreed to by us and made in writing. We will provide legal counsel to you in reliance upon information and guidance provided by you, keep you reasonably informed of the status of the matter, and respond to your inquiries. Any expressions on our part concerning the outcome of your legal matters are expressions of our professional judgment, but are not guarantees. Such opinions are necessarily limited by our knowledge of the facts and are based on the state of the law at the time they are expressed.

3. **REGARDING FEDERAL TAX ADVICE.** In the course of our representation, we may render tax advice to you on various legal matters. You understand that you may not use such tax advice to avoid any penalties that may be imposed by the Internal Revenue Service unless, in accordance with the Internal Revenue Service rules of practice, we are specifically engaged to provide a formal, written tax opinion for that purpose. Accordingly, you acknowledge that we may legend any written tax advice that we provide in the course of this engagement to indicate that it may not be relied on for purposes of penalty protection. You further understand that our representation does not include the provision of any tax advice concerning transactions in which you may participate that would be "reportable transactions"

within the meaning of Section 6707A of the Internal Revenue Code of 1986, as amended, and that our provision of tax advice concerning such transactions would require a separate engagement for that purpose. In particular, we shall not advise as to any transaction in which you may participate in which your or our disclosure of its tax treatment or tax structure is limited by any person other than you, our client, unless we are separately engaged by you for that purpose.

4. **STAFFING.** Customarily, each client of Ballard Spahr is served by a Relationship Partner (a principal lawyer contact) and one or more Matter Billing Lawyers (a lawyer designated to oversee an individual matter that Ballard Spahr handles on your behalf). Your work or parts of it may be performed by other lawyers and legal assistants at Ballard Spahr. Such delegation may be for the purpose of involving lawyers or legal assistants with special expertise in a given area or for the purpose of providing services on the most efficient and timely basis.

5. **TERMINATION OF ENGAGEMENT.** Either of us may terminate the engagement at any time for any reason by written notice, subject on our part to applicable rules of professional conduct. Your termination of our services will not affect your responsibility for payment of legal services rendered and additional charges incurred before termination and in connection with an orderly transition of the matter. If permission for withdrawal is required by a court, we will apply for such permission and you agree to engage successor counsel to represent you.

We are subject to the rules of professional responsibility for the jurisdictions in which we practice, which list several types of conduct or circumstances that require or allow us to withdraw from representing a client, including for example: nonpayment of fees or costs, misrepresentation or failure to disclose material facts, action contrary to our advice, and conflict of interest with another client. We try to identify in advance and discuss with our client any situation which may lead to our withdrawal, and if withdrawal ever becomes necessary, we give the client written notice of our withdrawal.

6. **CONCLUSION OF REPRESENTATION.** Unless previously terminated, our representation will conclude upon our sending you our final invoice for services rendered in this matter.

7. **RETENTION AND DISPOSITION OF DOCUMENTS.** Following the termination of our representation or the conclusion of the matter, any otherwise nonpublic information you have supplied to us which is retained by us will be kept confidential in accordance with applicable rules of professional conduct. At your request, your papers and

property will be returned to you promptly upon receipt of payment for outstanding fees and costs. Our own files pertaining to the matter will be retained by Ballard Spahr. These firm files include, for example, firm administrative records, time and expense reports, personnel and staffing materials, and credit and accounting records; and internal lawyers' work product such as drafts, notes, internal memoranda, and legal and factual research, including investigative reports, prepared by or for the internal use of lawyers. We reserve the right to destroy or otherwise dispose of any such documents or other materials retained by us within a reasonable time after the termination of the engagement.

8. **POST-ENGAGEMENT ISSUES.** You are engaging Ballard Spahr to provide legal services in connection with the matter referred to in the accompanying engagement letter. After completion of the matter, changes may occur in the applicable laws or regulations that could have an impact upon your future rights and liabilities. Unless you engage us after completion of the matter to provide additional advice on issues arising from the matter, Ballard Spahr has no continuing obligation to advise you with respect to future legal developments.

9. **CLIENT RESPONSIBILITIES.** You agree to pay our invoices for services and expenses in a timely manner. In addition, you will be candid and cooperative with us and will keep us informed with complete and accurate factual information, documents and other communications relevant to the subject matter of our representation or otherwise reasonably requested by us. Because it is important that we are able to contact you at all times in order to consult with you regarding your representation, you will inform us, in writing, of any changes in the name, address, telephone number, contact person, email address, state of incorporation or other relevant changes regarding you or your business. Whenever we need your instructions or authorization in order to proceed with legal work on your behalf, we will contact you at the latest business address we have received from you.

You have agreed that our representation of you in the matter described in the engagement letter does not create an attorney client relationship between Ballard Spahr and other entities related to you, such as member entities. Accordingly, our representation of you in the matter identified in the engagement letter will not give rise to any conflict of interest in the event other clients of Ballard Spahr are adverse to other related entities.

Consulting Services Agreement for Services By And Between Silicon Valley Clean Energy Authority, and Chapman and Cutler LLP

This Consulting Services Agreement ("Agreement") is made this [__] day of [________], 2022 ("Effective Date") by and between Silicon Valley Clean Energy Authority ("SVCE"), a joint powers authority formed under the laws of the State of California, and Chapman and Cutler LLP, an Illinois limited liability partnership ("Consultant") for the purpose of providing legal services to SVCE as more specifically set forth on Exhibit A.

<u>Section 1</u>. Recitals

1.1 SVCE is an independent joint powers authority duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) ("Act") with the power to conduct its business and enter into agreements.

1.2 Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

NOW THEREFORE, for good and valuable consideration, the amount and sufficiency of which is hereby acknowledged, the Parties to this Agreement, agree as follows:

<u>Section 2</u>. Term

The term of this Agreement is from the Effective Date of this Agreement through June 30, 2022 (the "Term"), unless extended or terminated earlier pursuant to Section 8.

<u>Section 3</u>. Scope of Work/Compliance with Laws and Regulations

3.1 Consultant agrees to perform the scope of work (the "Work") in <u>Exhibit A</u> in accordance with the compliance schedule in <u>Exhibit B.</u>

3.2 Consultant represents and warrants that it has the skill and expertise to perform the Work. Consultant agrees to obtain any and all necessary licenses, approvals or permits necessary to perform the Work.

3.3 Consultant and its Subconsultants must comply with all federal, state and local laws and regulations in performing the Work under this Agreement.

Section 4. Consultant Staffing

Exhibit C contains a list of Consultant's project manager and all team members. Consultant will not change or substitute the project manager or any team members or add additional team members without consultation with SVCE.

Section 5. Subconsultants

5.1 Consultant agrees to use only those Subconsultants listed on Exhibit D. Consultant shall notify SVCE within a reasonable period of time of any changes, additions, or removals of a Subconsultant.

5.2 Consultant agrees to require all Subconsultants to comply with the terms of this Agreement, including without limitation, maintaining insurance in compliance with the insurance obligations under Section 9, the Confidentiality requirements under Section 11 and indemnifying SVCE under Section 12.

Section 6. Compensation and Payment

6.1 The maximum compensation under this Agreement is $200,000.

6.2 Work under this Agreement is to be performed on a task or project basis. Consultant will submit an invoice for full payment in accordance with Exhibit E within thirty (30) days following a successful closing of the Transaction described in Exhibit A.

6.3 SVCE will not agree to pay any markups on Subconsultant Services or supplies unless such markups are included in Exhibit E, Compensation/Budget and such markups were included in Consultant's bid, if applicable.

6.4 Consultant is a U.S. based person or entity, has a permanent place of business in California and is registered with the California Secretary of State to do business in California, and will provide to SVCE a properly completed Internal Revenue Service Form W-9 before SVCE will process payment.

6.5 SVCE agrees to pay invoices within forty-five (45) days of receipt. Invoices may be sent to SVCE by U.S. mail or electronic mail. Invoices will be deemed received on the next business day following the date of transmission via electronic mail or three days after placement in the U.S. mail.

6.6 SVCE, as a Joint Powers Authority, is a separate public entity from its constituent members and will be solely responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant acknowledges that it will have no rights and agrees not to make any claims, take any actions or assert any remedies against any of SVCE's constituent members in connection with this Agreement.

Section 7. Records Retention and Ownership of Work Product

7.1 The Consultant must retain all ledgers, books of accounts, invoices, vouchers, cancelled checks, background materials, or other records relating to its performance under this Agreement for a period of three years following termination of this Agreement.

7.2 SVCE owns all rights, including without limitation, all licenses, copyrights, service marks and patents, in and to all Work Product(s), whether written or electronic, without restriction or limitation upon their use and immediately when and as created by the Consultant, any Subconsultants, or any other person engaged directly or indirectly by the Consultant to perform under this Agreement. "Work Product(s)" means all writings, reports, drawings, plans, data, video, media, photographs, renderings, plans, software, models, and other similar documents and materials developed or created by Consultant or its Subconsultants on behalf of or for use by SVCE under this Agreement. All Work Product(s) will be considered "works made for hire," and together with any and all intellectual property rights arising from their creation will be and remain the property of SVCE without restriction or limitation upon their use, duplication or dissemination by SVCE. Consultant agrees not to obtain or attempt to obtain copyright protection in its own name for any Work Product.

Section 8. Termination

8.1 SVCE may terminate this Agreement for any reason by giving Consultant written notice. The termination notice may set the date of termination, but if no such date is given, termination is effective seven (7) days following the date of the written notice.

8.2 Upon termination for any reason, SVCE has the option of requiring the Consultant to complete work up to the date of termination or to cease work immediately. SVCE has the further option to require Consultant to provide SVCE any finished or unfinished Work or Work Product prepared by the Consultant up to the date of termination.

8.3 SVCE agrees to pay Consultant the reasonable value of services satisfactorily rendered by the Consultant to SVCE up to the date of written Notice of Termination. If SVCE authorizes Consultant to continue performing the Work through the date of termination, SVCE agrees to pay Consultant the reasonable value of services satisfactorily rendered up through the date of termination, provided such services are in compliance with the Compensation/Budget in Exhibit E.

8.4 Upon termination of this Agreement, and at no cost to SVCE, Consultant, its Subconsultants and anyone working for SVCE under control of Consultant must return all Work Product to SVCE. Consultant may only retain copies of the Work Product by express written permission of SVCE.

Section 9. Insurance

9.1 Consultant must procure, maintain and comply with the insurance requirements in Exhibit F throughout the full Term of this Agreement. Consultant must provide proof of insurance either in the form of a certificate of insurance or, if requested by SVCE, a copy of the insurance policy, prior to performing any work under this Agreement.

9.2 Consultant agrees not to terminate any of the required insurance coverage during the term of this Agreement. Consultant must give SVCE ten (10) days written notice and obtain SVCE's written approval prior to making any modifications in the insurance coverage.

9.3 Consultant must either include Subconsultants under its insurance policies or require each Subconsultant to comply with the insurance obligations in Exhibit F.

Section 10. No Discrimination or Conflict of Interest

10.1 Consultant represents and warrants, on behalf of itself and its Subconsultants, that it has not and will not discriminate against anyone based on his/her age, color religion, sex, sexual orientation, disability, race or national origin.

10.2 Consultant represents and warrants, on behalf of itself and its Subconsultants, that it is familiar with local, state and federal conflict of interest laws, that in entering into this Agreement it is not violating any of the conflict of interest laws, that it will avoid any conflicts of interest during the term of this Agreement, and that it will notify SVCE immediately if it identifies any conflicts of interest Consultant understands that violations of this Section 10 could result in immediate termination of this Agreement and disgorgement of compensation.

10.3 In accordance with the California Political Reform Act (Cal. Gov't Code section 81000 *et seq.*), Consultant will cause each person listed on Exhibit C and any other person performing services under this Agreement to file a Form 700 within 30 days after the person begins performing services under this Agreement and subsequently on an annual basis in conformance with the requirements of the Political Reform Act by filing a copy by electronic mail and an original with SVCE at their respective email and physical delivery addresses set forth in Section 14.7. Each of the identified positions must disclose interests in accordance with SVCE Resolution No. 2020-28, Conflict of Interest Code, which may be amended from time to time. For the work currently outlined in Exhibit A, this Agreement does not require the Filing of Form 700 at this time.

Section 11. Confidentiality

11.1 Except as authorized by SVCE or as otherwise required by law, Consultant shall not disclose to any third party/ies any draft or final Work Product, discussions or written correspondence between Consultant and its Subconsultants or discussions or written correspondence between Consultant and SVCE staff. In the event Consultant receives a request from any third-party requesting disclosure of any Work Product, discussions, communications or any other information Consultant is prohibited from disclosing, Consultant will immediately notify SVCE and wait for direction from SVCE before disclosing the information.

11.2 For the purposes of this Section 11, "third parties" refers to any person or group other than SVCE staff and Board members. For example, "third parties" include community groups, Board advisory groups, other governmental agencies, other consultants or members of the community.

11.3 This Section 11 will survive the expiration or termination of this Agreement.

<u>Section 12</u>. Indemnity

12.1 Consultant shall indemnify and hold harmless SVCE from any and all costs, demands, expenses, losses, claims, damages, liabilities, settlements and judgments, including in-house and contracted attorneys' fees and expenses ("Claims"), arising out of any actual or alleged death or injury to any human person, or damage to any tangible real or personal property (e.g., buildings, equipment, furniture and fixtures) as a result of Consultant's negligence; provided, however, that this Subsection 12.1 shall not be construed to apply to any Claims arising out of the professional negligence or malpractice of Consultant as counsel providing the services described herein.

12.2 Consultant's obligations in Subsection 12.1 do not apply to the extent any Claim results from the sole negligence or willful misconduct of the SVCE Indemnitees, as the case may be.

12.3 Except as limited by Subsection 12.1, Consultant's obligation to defend SVCE applies to the maximum extent allowed by law and includes defending Indemnitees as set forth in California Civil Code sections 2778 and 2782.8.

12.4 The Consultant's obligations under Section 12 apply regardless of the existence or amount of insurance the Consultant carries or has made available to SVCE.

12.5 The Parties agree that this Section 12 survives the expiration or earlier termination of the Agreement.

Section 13. Consultant is an Independent Contractor

13.1 Consultant and its Subconsultant(s) are and at all times will be independent contractors. Consultant has complete control over its operations and employees and is not an agent or employee of SVCE and must not represent or act as SVCE's agent or employee. Consultant agrees, on behalf of itself and its employees and Subconsultants, that it does not have any rights to retirement benefits or other benefits accruing to SVCE employees, and expressly waives any claim it may have to any such rights.

13.2 As an independent contractor, Consultant has complete control over its Subconsultants, Subsuppliers, affiliates agents and any other person or entity with whom the Consultant contracts in furtherance of this Agreement (collectively "Subconsultants"). Subject to the requirements of Section 5 of this Agreement, Consultant is solely responsible for selecting, managing and compensating its Subconsultants, and for ensuring they comply with this Agreement.

Section 14. Miscellaneous Terms and Conditions

14.1 SVCE Authority.
The respective Chief Executive Officer of SVCE and/or his or her designee is authorized to take all actions for SVCE under this Agreement, including without limitation, amendments that fall within the Chief Executive Officer's signing authority, termination or modification of terms.

14.2 Waiver.
Waiver by either party of any one or more conditions, Sections, provisions or performance of this Agreement will not be a waiver of any other provision; nor will failure to enforce a provision or Section in one instance waive the right to enforce such provision or Section in the future. In no event will payment by SVCE to Consultant constitute or be construed as a waiver by SVCE of any breach or default of this Agreement, nor will such payment prejudice any of SVCE's other rights or remedies.

14.3 Governing Law.
Consultant and SVCE agree that this Agreement will be interpreted under the laws of the State of California.

14.4 Venue.
Any litigation resulting from this Agreement will be filed and resolved by a state court in Alameda County, California, or if appropriate, the federal courts in the Northern District of California located in San Francisco.

14.5 Audit Rights.
All records or documents required to be kept pursuant to this Agreement must be made available for audit at no cost to SVCE, at any time during regular business hours, upon written request by SVCE. Copies of such records or documents shall be provided to SVCE at their respective addresses set forth in Section 14.7 unless an alternative location is mutually agreed upon.

14.6 Recitals and Exhibits.
The Recitals in Section 1 above are intentionally made a part of this Agreement. All Exhibits and any other documents incorporated by reference are a part of this Agreement.

14.7 Notices.
Any notices required to be given under this Agreement must be made in writing and may be delivered a) personally, in which case they are effective upon receipt; b) by U.S. Mail, in which case they are effective three (3) days following deposit in the U.S. Mail, unless accompanied by a return receipt in which case, they are effective upon the date on the receipt; or c) by electronic mail, in which case they are effective upon confirmation of receipt, and if no confirmation of receipt, they are effective one day after transmission, providing that a hard copy is also sent via U.S. mail. All notices must be sent to the addresses below:

SVCE	Attn Girish Balachandran Silicon Valley Clean Energy Authority 333 W. El Camino Real, #330 Sunnyvale, CA 94087 Email: girish@svcleanenergy.org Phone: (408) 721-5301 x1001
Consultant	Attn: Douglas Bird Chapman and Cutler LLP 1270 Avenue of the Americas New York, New York 10020 Email: doug.bird@chapman.com Phone: (212) 655-2519

14.8 Assignment**.**
Except to the extent this Agreement authorizes Consultant to use Subconsultants, Consultant will not assign any part of this Agreement without SVCE's prior written consent. SVCE, at its sole discretion, may void this Agreement if a violation of this provision occurs.

14.9 Integrated Agreement.
The Recitals, this Agreement and the Exhibits attached to this Agreement contain the complete understanding between SVCE and Consultant and supersedes any prior or contemporaneous negotiations, representations, agreements, understandings and statements, written or oral respecting the Work up through the Effective Date of this Agreement.

14.10 Amendments.
Any and all amendments or modifications to this Agreement must be made in writing and signed by each Party before such amendment will be effective.

14.11 Government Claims Act.
Nothing in this Agreement waives the requirements to comply with the Governmental Claims Act, where applicable.

14.12 Severability.
If a court of competent jurisdiction holds any Section or part of this Agreement to be invalid or unenforceable for any reason and the Work can still be performed, the Parties agree to sever the invalid or unenforceable Section from this Agreement and that all remaining Sections or parts of this Agreement will continue to be enforceable.

14.13 Counterparts
This Agreement may be executed in one or more counterparts, all of which taken together will constitute one and the same instrument and each of which will be deemed an original.

14.14 No Party Deemed Drafter
This Agreement will be considered for all purposes as prepared through the joint efforts of the Parties and will not be construed against one Party or the other as a result of the preparation, substitution, submission, or other event of negotiation, drafting or execution hereof.

Section 15. Authorized Signatories

Consultant is a limited liability partnership organized and established under the laws of the State of Illinois, and the individual executing this Agreement is a Managing Partner of Consultant with full power and authority to bind Consultant to the terms of this Agreement.

[*signatures on following page*]

IN WITNESS WHEREOF, the parties have caused the Agreement to be executed as of the date set forth above.

CHAPMAN AND CUTLER LLP,
a Illinois limited liability partnership

By Douglas A. Bird

____

Title Partner

Date ____________________

SILICON VALLEY CLEAN ENERGY AUTHORITY

A Joint Powers Authority

By ____________________

____

Title ____________________

Date ____________________

APPROVED AS TO FORM:

____

SVCE General Counsel

LIST OF EXHIBITS

Exhibit A

SCOPE OF WORK

Scope of Services:

Consultant will perform legal services on behalf of SVCE relating to a renewable energy prepayment transaction (the "Transaction"), including, as applicable, reviewing and commenting on documents and filings relating to the issuer, reviewing and commenting on board presentations and approvals, drafting, reviewing and negotiating applicable agreements, certificates and legal opinions, and disclosure counsel services to SVCE in connection with the marketing of the bonds to be issued to finance the Transaction.

Additional Services:

Consultant will not provide additional services outside of the services identified in Exhibit A, unless it obtains advance written authorization from the project manager or lead SVCE representatives prior to commencement of any additional services.

Exhibit B

SCHEDULE

As directed by SVCE

Exhibit C

CONSULTANT STAFFING

- Doug Bird, Partner (Project Manager)
- Jacquelyn Cerasuolo, Partner

Exhibit D

SUBCONSULTANTS

Subconsultants are not authorized under this Agreement

Exhibit E

COMPENSATION/BUDGET

Consultant will perform the legal services referred to in Exhibit A for a fixed fee of $200,000 (the "Fixed Fee"). The Fixed Fee will be payable solely from proceeds of the bonds at closing of the Transaction described in Exhibit A.

Consultant will record the time of its team members for work relating to the Transaction at a blended rate of $750 per hour. In the event SVCE determines not to proceed with the Transaction or terminates this Agreement prior to closing of the Transaction, SVCE will be obligated to pay Consultant the lesser of (i) its actual time charges (at the foregoing blended rate) as of the date of such determination or termination, as applicable, or (ii) $30,000.

The maximum compensation under this Agreement is $200,000.

Exhibit F

INSURANCE REQUIREMENTS

A. Minimum Scope and Limits of Insurance. Consultant must procure, and at all times during the term of this Agreement carry, maintain, and keep in full force and effect, insurance as follows:

1) Commercial General Liability Insurance with a minimum limit of One Million Dollars ($1,000,000.00) per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of Two Million Dollars ($2,000,000.00) per project or location. If Consultant is a limited liability company, the commercial general liability coverage must be amended so that Consultant and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

2) Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of this Agreement with a combined single limit of One Million Dollars ($1,000,000.00) per accident for bodily injury and property damage.

3) Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of One Million Dollars ($1,000,000.00) per accident for bodily injury or disease. If Consultant has no employees while performing Services under this Agreement, workers' compensation policy is not required, but Consultant must execute a declaration that it has no employees.

4) Professional Liability/Errors & Omissions Insurance with minimum limits of Two Million Dollars ($2,000,000.00) per claim and in aggregate.

B. Acceptability of Insurers. The insurance policies required under this Exhibit F must be issued by an insurer admitted to write insurance in the State of California and, except as provided in the next sentence, with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Consultant represents that it presently carries professional liability insurance in a minimum amount of $50 million per claim and an aggregate amount greater than $100 million, issued under an annual claims-made policy from Attorneys Liability Assurance Society, Inc. (*"ALAS"*). ALAS is rated "A" by Fitch. In the event Consultant no longer maintains professional liability insurance from ALAS during the term of this Agreement, Consultant will secure professional liability insurance from a company or companies with a rating not less than that maintained by ALAS or otherwise with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide.

C. Additional Insured/Additional Named Insured. The automobile liability policies must contain an endorsement naming SVCE, its officers, employees, agents and volunteers as additional insureds. The commercial general liability policy must contain an endorsement naming SVCE, its officers, employees, agents and volunteers as additional named insureds.

D. Primary and Non-Contributing. The insurance policies required under this Agreement must apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to SVCE. Any insurance or self- insurance maintained by SVCE, its officers, employees, agents or volunteers, will be in excess of Consultant's insurance and will not contribute with it.

E. Consultant's Waiver of Subrogation. The insurance policies required under this Agreement will not prohibit Consultant and Consultant's employees, agents or Subconsultants from waiving the right of subrogation prior to a loss. Consultant hereby waives all rights of subrogation against SVCE. Notwithstanding the foregoing, this Paragraph E shall not apply to any Professional Liability Insurance policy maintained by Consultant as required by clause 4 of Paragraph A, nor does Consultant waive any rights of subrogation against SVCE under any such policy.

F. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by SVCE. At SVCE's option, Consultant must either reduce or eliminate the deductibles or self- insured retentions with respect to SVCE, or Consultant must procure a bond guaranteeing payment of losses and expenses.

G. Cancellations or Modifications to Coverage. Consultant agrees not to cancel any insurance coverage during the Term. Consultant further agrees not to reduce or otherwise modify the insurance policies required by this Agreement during the term of this Agreement, without the prior written approval of SVCE. The commercial general and automobile liability policies required under this Agreement must be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to SVCE. If any insurance policy required under Agreement is canceled or reduced in coverage or limits, Consultant must, within two business days of notice from the insurer, phone and notify SVCE via electronic mail and certified mail, return receipt requested, of the cancellation of or reductions to any policy.

H. SVCE Remedy for Noncompliance. If Consultant does not maintain the policies of insurance required under this Agreement in full force and effect during the term of this Agreement, or in the event any of Consultant's policies do not comply with the requirements of this Exhibit F, SVCE may either immediately terminate this Agreement or, if insurance is available at a reasonable cost, SVCE may, but has no duty to, take out the necessary insurance and pay, at Consultant's expense, the premium thereon. Consultant must promptly reimburse SVCE for any premium paid by SVCE, and SVCE, in its sole discretion, may withhold amounts sufficient to pay the premiums from payments due to Consultant.

I. Evidence of Insurance. Prior to the performance of Services under this Agreement, Consultant must furnish SVCE with a certificate or certificates of insurance and all original endorsements evidencing and effecting the coverages required under this Agreement. The endorsements are subject to SVCE's approval. SVCE may request, and Consultant must provide complete, certified copies of all required insurance policies to SVCE. Consultant must maintain current endorsements on file with SVCE. Consultant must provide proof to SVCE that insurance policies expiring during the term of this Agreement have been renewed or replaced with other policies providing at least the same coverage. Consultant must furnish such proof at least two weeks prior to the expiration of the coverages.

J. Indemnity Requirements not Limiting. Procurement of insurance by Consultant will not be construed as a limitation of Consultant's liability or as full performance of Consultant's duty to indemnify SVCE under Section 12 of this Agreement.

K. Subconsultant Insurance Requirements. Consultant's insurance coverage must include its Subconsultants or Consultant must require each of its Subconsultants that perform Work under this Agreement to maintain insurance coverage that meets all the requirements of this Exhibit F.

AGREEMENT BY AND AMONG SILICON VALLEY CLEAN ENERGY AUTHORITY AND PFM FINANCIAL ADVISORS LLC PFM SWAP ADVISORS LLC

THIS AGREEMENT ("Agreement"), is entered into this [ ], by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, a joint powers authority ("SVCE") and PFM FINANCIAL ADVISORS LLC, a Delaware Limited Liability Company whose address is 555 W. 5th Street, Suite 3500, Los Angeles, CA 90013 ("PFMFA"), together with its affiliate, PFM Swap Advisors LLC whose address is 1735 Market Street, 42nd Floor, Philadelphia PA 19103 ("PFM Affiliate" or "PFMSA"). The parties shall be collectively referred to as the "Parties" and each individually as a "Party").

PFMFA and PFM Affiliate shall both be bound to the terms and conditions of this Agreement; provided, however, that each will provide its services pursuant to a separate scope of work ("Scope of Work"), included in Exhibit "A" to this Agreement. Collectively, PFMFA and PFM Affiliate shall be referred to throughout this Agreement as "Consultant".

RECITALS:

A. SVCE is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. SVCE and Consultant desire to enter into an agreement for Municipal Advisor and Swap Advisor services with Consultant upon the terms and conditions herein in connection with the proposed issuance of bonds by California Community Choice Financing Authority, a conduit joint powers authority ("Issuer") selected by SVCE to issue bonds (the "Bonds") as part of a prepayment transaction for the purchase of electricity.

NOW, THEREFORE, the Parties mutually agree as follows:

1. TERM

The term of this Agreement shall commence on [ ] and shall terminate on the earlier of (a) the third anniversary date of this Agreement, or (b) the date of issuance of the Bonds unless terminated earlier as set forth herein.

2. SERVICES TO BE PERFORMED

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference. Upon request of SVCE, Consultant or an affiliate of Consultant may agree to additional services to be provided by Consultant or an affiliate of Consultant, by a separate writing, including separate scope and compensation, between SVCE and Consultant or its respective affiliate. For the sake of clarity, any separate agreement between SVCE and an affiliate of Consultant shall not in any way be deemed an amendment or modification of this Agreement.

3. COMPENSATION TO CONSULTANT

Consultant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed One Hundred and Seventy Five Thousand and 00/100 dollars ($175,000.00) based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. TIME IS OF THE ESSENCE

Consultant and SVCE agree that time is of the essence regarding the performance of this Agreement.

5. STANDARD OF CARE

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to SVCE and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to SVCE for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to SVCE by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by SVCE, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, SVCE may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. INDEPENDENT PARTIES

SVCE and Consultant intend that the relationship between them created by this Agreement is that of independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by SVCE to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from SVCE to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless SVCE and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of SVCE officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. SVCE shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to SVCE from Consultant as a result of Consultant's failure to promptly pay to SVCE any reimbursement or indemnification arising under this section.

7. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF EBCE

SVCE is organized as Joint Powers Authorities in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to Joint Powers Agreement dated December 1, 2016, and is a public entity separate from its constituent members. SVCE shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of SVCE's constituent members in connection with this Agreement.

8. NON-DISCRIMINATION

In the performance of this Agreement, Consultant shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation or other basis prohibited by law.

9. HOLD HARMLESS AND INDEMNIFICATION

General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify SVCE and their elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and agents serving as independent contractors in the role of SVCE officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the negligence or willful misconduct of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, but only to the extent of Consultant's liability, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

Consultant's indemnifications and obligations under this section shall survive the expiration or termination of this Agreement.

10. INSURANCE

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish SVCE with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, the CGL shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or ~~coverage reduced~~ non-renewed before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to SVCE by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to SVCE and licensed to do insurance business in the State of California. Endorsements naming SVCE as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to its insurance for recovery. Consultant hereby grants to SVCE, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or SVCE with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against SVCE by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, SVCE shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. SVCE, and its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any workers compensation, professional liability and cyber liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by SVCE are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

11. CONFLICT OF INTEREST

Consultant warrants that it, and to its best knowledge, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff position, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. PROHIBITION AGAINST TRANSFERS

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of SVCE. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from SVCE under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to SVCE by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. SUBCONTRACTOR APPROVAL

Unless prior written consent from SVCE is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and SVCE in the same manner and to the same extent as Consultant is bound to SVCE under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to SVCE.

14. REPORTS

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of SVCE. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to SVCE the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of SVCE, and all publication rights are reserved to SVCE. Consultant may retain a copy of any Report furnished to SVCE pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by SVCE in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other SVCE projects as SVCE deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as SVCE may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by SVCE.

F. SVCE shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. <u>RECORDS</u>

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by SVCE that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of SVCE or its designees at all proper times, and gives SVCE the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from SVCE for all services required under this Agreement.

16. <u>PARTY REPRESENTATIVES</u>

The Chief Executive Officer of SVCE (“SVCE Representative”) shall represent SVCE in all matters pertaining to the services to be performed under this Agreement. Michael Berwanger, Managing Director, PFM Financial Advisors LLC and George Hu, Director, PFM Swap Advisors LLC (“Consultant Representatives”) shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. <u>INFORMATION AND DOCUMENTS</u>

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively “Data”) developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by SVCE, unless disclosure is required by law or judicial or regulatory process. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from SVCE Representative or unless requested in writing by SVCE Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within SVCE. Response to a subpoena or court order shall not be considered “voluntary,” provided, to the extent not legally prohibited, Consultant gives SVCE notice of such court order or subpoena.

B. To the extent not legally prohibited, Consultant shall promptly notify SVCE should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within SVCE. SVCE may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to reasonably cooperate with SVCE and to provide SVCE with the opportunity to review any response to discovery requests provided by Consultant. However, SVCE's right to review any such response does not imply or mean the right by SVCE to control, direct or rewrite the response.

C. In the event SVCE gives Consultant written notice of a "litigation hold", then as to all data identified in such notice, Consultant shall, at no additional cost to SVCE, isolate and preserve all such data pending receipt of further direction from SVCE.

D. Consultant agrees to comply with the confidentiality provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

E. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. <u>NOTICES</u>

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and SVCE's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
PFM Financial Advisors LLC
555 W. 5th Street
Suite 3500
Los Angeles, CA 90013
Attn: Managing Director

With a copy to:
PFM Swap Advisors LLC
1735 Market Street, 42nd Floor
Philadelphia, PA 19103
Attn: George Hu

19. TERMINATION

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be not less than 10 days) and according to the requirements set forth in SVCE's written notice of default, and in addition to any other remedy available to SVCE by law, SVCE Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. SVCE Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of SVCE's termination of this Agreement due to no fault or failure of performance by Consultant, and subject to the ultimate issuance of the Bonds, Consultant shall be paid for services satisfactorily performed up to the effective date of termination solely from the Bond proceeds. Upon termination, Consultant shall immediately deliver to SVCE any and all copies of studies, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of SVCE. Consultant shall have no other claim against SVCE by reason of such termination, including any claim for compensation.

20. COMPLIANCE WITH LAWS

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations. SVCE, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to SVCE that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. CONFLICT OF LAW

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. ADVERTISEMENT

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from SVCE to do otherwise.

23. WAIVER

A waiver by SVCE of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. INTEGRATED CONTRACT

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both SVCE and Consultant.

25. AUTHORITY

The individual(s) executing this Agreement represent and warrant that they have the legal authority to do so on behalf of their respective legal entities.

26. INSERTED PROVISIONS

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. CAPTIONS AND TERMS

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. SVCE'S RIGHTS TO EMPLOY OTHER CONSULTANTS

SVCE reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. EXHIBITS

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. FORCE MAJEURE

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in SVCE's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of SVCE from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. However, approval or payment by SVCE shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by SVCE for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. SEVERABILITY

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

33. SUCCESSORS AND ASSIGNS

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

34. NO THIRD PARTY BENEFICIARIES INTENDED

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

35. COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

36. DRAFTING PARTY

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

37. INFORMATION TO BE FURNISHED TO CONSULTANT

All information, data, reports, and records in the possession of SVCE or any third party necessary for carrying out any services to be performed under this Agreement ("Data") shall be furnished to Consultant. Consultant may rely on the Data in connection with its provision of the services under this Agreement and the provider thereof shall remain solely responsible for the adequacy, accuracy and completeness of such Data.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

PFM FINANCIAL ADVISORS LLC
A Limited Liability Company

By:______________________________
Name: Michael Berwanger
Title: Managing Director
Date:

PFM SWAP ADVISORS LLC
A Limited Liability Company

By:______________________________
Name: George Hu
Title: Director

Date:

SILLICON VALLEY CLEAN
ENERGY AUTHORITY
A Joint Powers Authority

By:____________________________

Name: Girish Balachandran
Title: Chief Executive Officer
Date:

Exhibit A
Consultant Work Orders
(See Following Pages)

WORK ORDER #1

PFM FINANCIAL ADVISORS LLC

The terms and conditions of the Agreement between SVCE, PFMFA and PFMSA are incorporated into this Scope of Services by reference.

Working with PFMSA, PFMFA will provide the following portion of the Scope of Services:

PFM Financial Advisors LLC (as Municipal Advisor)

Scope of Services Transaction Services

- **PFM will take the lead role acting as Project Manager throughout the prepay bond financing process.**
- **Documentation and Planning**
    - Develop a financing plan in concert with SVCE staff which would include recommendations as to the timing and number of series of bonds to be issued.
    - Review transaction legal documentation provide suggestions, modifications and enhancements where appropriate and assist with the negotiation of terms with associated counterparties.
    - Coordinate with SVCE staff and other advisors as respects the furnishing of data for offering documents, it being specifically understood that PFM is not responsible for the inclusion or omission of any material in published offering documents
    - In coordination with the deal team, develop credit rating presentation and coordinate with SVCE the overall presentation to rating agencies.
    - Assistance with putting together the necessary disclosure related to SVCE (separately and together, if and where relevant) in the disclosure documents.
    - Arrange for the closing of the transaction including, but not limited, to bond printing, signing and final delivery of the bonds.
- **Financial Planning and Modelling**
    - Advise as to the various financing alternatives available to SVCE staff.
    - Develop alternatives related to debt transaction including evaluation of maturity schedule and cash flow requirements.
    - Assist SVCE in the procurement of ancillary services relating to debt issuance such as printing, trustee, paying agent, registrar, etc.
    - Analyze financial and economic factors to determine if the issuance of prepayment bonds is appropriate.

- Provide financial modeling services and comparables on deal pricing and deal economics.
- As applicable, advise SVCE on the condition of the bond market at the time of sale, including volume, timing considerations, competing offerings, and general economic considerations.
- Assist and advise SVCE in negotiations with investment banking groups regarding fees, pricing of the bonds and final terms of any security offering, and make recommendations regarding a proposed offering to obtain the most favorable financial terms based on existing market conditions.

FINANCIAL ADVISORY REQUIRED DISCLOSURES:

PFMFA is a registered municipal advisor with the Securities and Exchange Commission (the "SEC") and the Municipal Securities Rulemaking Board (the "MSRB"), pursuant to the Securities Exchange Act of 1934 Rule 15Ba1-2. If SVCE has designated PFMFA as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption"), then services provided pursuant to such designation shall be the services described in this Work Order #1, subject to any agreed upon limitations. Verification of independence (as is required under the IRMA exemption) shall be the responsibility of such third party seeking to rely on such IRMA exemption. PFMFA shall have the right to review and approve in advance any representation of its's role as IRMA to SVCE.

MSRB Rules require that municipal advisors make written disclosures to their clients of all material conflicts of interest, certain legal or disciplinary events and certain regulatory requirements. Such disclosures are provided in PFMFA's Disclosure Statement delivered to SVCE prior to or together with this Agreement.

Team Members:

Michael Berwanger, Managing Director
James Carbone, SMC
Woodson Powell, SMC
Faisal Alif, Analyst
Other personnel to be assigned as necessary

WORK ORDER #2

PFM SWAP ADVISORS LLC

The terms and conditions of the Agreement between SVCE, PFMFA and PFMSA are incorporated into this Scope of Services by reference.

Working with PFMFA, PFMSA will provide the following portion of the Scope of Services:

PFM Swap Advisors LLC (as Swap Advisor and QIR)
Scope of Services Transaction Services

- PFMSA will serve SVCE as Municipal Advisor and designated Qualified Independent Representative ("QIR") in the provision of general swap advisory services related to any swap-related communication, interaction or other discussion ("Swap Communication") between SVCE and Swap Dealers (as such term is defined by the Securities and Exchange Commission ("SEC") and the Commodity Futures Trading Commission ("CFTC")). PFMSA is obligated to comply with the applicable requirements of CFTC Regulation 17 CFR 23.450(b)(1) in providing QIR services to SVCE.

- As QIR to SVCE, PFMSA will make available qualified professionals to participate in discussions and other interactions with Swap Dealers as SVCE finds necessary or desirable. Additionally, PFMSA will assist SVCE with analysis of any proposals from Swap Dealers. PFMSA may assist SVCE with other swap related tasks such as helping write a swap policy or other related analysis upon SVCE's request. PFMSA will also assist SVCE, as needed, in completing the ISDA Dodd-Frank Protocols and other matters to comply with the regulatory requirements imposed under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
- Analyze and model alternative hedge structures and provide price indications;
- Review and comment on all hedge documentation and business terms;
- Assist in counterparty selection and developing terms for a request for bids (if desired);
- Review competitive bids and make a recommendation for award or if so determined
- Negotiate the pricing terms and structure with the Counterparty(s);
- Coordinate the closing of the transaction.

SWAP ADVISORY REQUIRED DISCLOSURES

PFMSA agrees that it will not deal with itself or with any other affiliated company or individual in making purchases or sales of the swaps or any securities pursuant to this engagement, nor will it take a long or short position in securities subject to purchase or sale in connection with the

Swaps. PFMSA confirms that it has no interest in the purchase or sale of the Swaps other than as described in this Work Order.

MSRB Rules require that municipal advisors make written disclosures to its clients of all material conflicts of interest and certain legal or disciplinary events and certain regulatory requirements. Such disclosures are provided in PFMSA's Disclosure Statement delivered to SVCE prior to or together with the Agreement.

PFMSA is a registered municipal advisor with the SEC and the Municipal Securities Rulemaking Board (the "MSRB"), pursuant to the Securities Exchange Act of 1934 Rule 15Ba1-2. As of the date of the Agreement, SVCE has **not** designated PFMSA as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption."). SVCE agrees not to represent that PFMSA is SVCE's IRMA with respect to any aspect of a municipal securities issuance or municipal financial product, without PFMSA's prior written consent.

Team Members:

George Hu, Director
Other personnel to be assigned as necessary

Exhibit B
Schedule of Performance

Tasks will be performed at the direction of SVCE staff.

Exhibit C
Compensation

The compensation to be paid to Consultant under this Agreement, including the services provided by PFM Swap Advisors LLC, for all services described in Exhibit “A” and reimbursable expenses shall not exceed a total of One Hundred and Seventy Five Thousand and 00/100 dollars ($175,000.00), as set forth below. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to SVCE unless previously approved in writing by SVCE. Consultant compensation will be allocated between PFM Financial Advisors LLC and PFM Swap Advisors LLC based upon final known distribution of work between the two parties for their respective scopes of work.

Payment

All compensation to be paid to Consultant, including payment to PFM Swap Advisors LLC by SVCE under this Agreement shall be paid upon closing of the Bonds and shall be payable solely from the proceeds of the Bonds. In the event that the Bonds do not issue or close for any reason neither SVCE nor the Issuer shall owe any monies to Consultant for the services provided pursuant to this Agreement.

Reimbursable Expenses

Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by SVCE.

Additional Services

Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from SVCE Representative prior to commencement of any additional services. Consultant shall submit, at SVCE Representative’s request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) Professional Liability
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) Privacy and Cybersecurity Liability
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per claim.

Exhibit E
Confidentiality Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of SVCE regarding customers of SVCE ("SVCE Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about SVCE Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbersand account numbers; (e) meter and other identification numbers; (f) SVCE-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to SVCE Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by SVCE, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a "need to know" such Confidential Information in the course of their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and

confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with SVCE.

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that, to the extent not legally prohibited, Consultant notifies SVCE promptly upon receipt thereof to allow SVCE to seek protective treatment for such Confidential Information.

6. Consultant shall immediately notify SVCE if it reasonably believes that there has been unauthorized access to the Confidential Information by a non-authorized person that could reasonably result in the use, disclosure, or theft of the Confidential Information.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if SVCE finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement SVCE shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if SVCE receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, SVCE shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by SVCE directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify SVCE in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate SVCE to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of SVCE’s written request, and at SVCE’s option, Consultant will either return to SVCE all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide SVCE with written certification that all such tangible Confidential Information of SVCE has been destroyed; provided, however, the foregoing shall not include(i) such copies as Consultant is required to retain by law or regulation, (ii) copies automatically saved electronically as part of a computer disaster recovery or similar back- up system or internal document retention and business continuity policies and procedures, or (iii) materials prepared by Consultant or its advisors for its board of directors or any board committee or other applicable decision-making body to the extent such materials contain Confidential Information.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to SVCE and/or SVCE Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that SVCE shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to SVCE, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless SVCE, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys’ fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or SVCE requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to SVCE itemizing the materials destroyed) all Confidential Information then in its possession at the direction of SVCE, subject to Section 10 above. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 5

Item 5:	**Updating SVCE's Investment Policy and Directing PFM Asset Management to Implement full Scope of work as SVCE's Investment Advisor**
From:	Girish Balachandran, CEO
Prepared by:	Amrit Singh, CFO, and Director of Administrative Services
Date:	10/12/2022

RECOMMENDATION

Staff recommends that the Board of Directors:

1. Adopt resolution 2022-24 to revise SVCE's investment policy (Attachment 1) and to direct PFM Asset Management (PFMAM), per the agreement executed earlier, to implement the full scope of work as SVCE's Investment Advisor (Attachment 2)
2. Adopt resolution 2022-25 to join as a Shareholder of the California Asset Management Trust
3. Adopt resolution 2022-26 to join the State's Local Agency Investment Fund (LAIF)

FINANCE AND ADMINISTRATION (F&A) COMMITTEE REVIEW

At its meeting on October 5, 2022, the F&A Committee reviewed the proposed recommendations. The F&A Committee voted unanimously to recommend that the Board approve/adopt the items listed above. As discussed in the background section below, the F&A Committee has reviewed and provided oversight of the process and analyses leading to the above recommendations since December 2021.

BACKGROUND

SVCE's current Investment Policy is much narrower than what is allowed by the California Government Code. SVCE currently keeps all its funds on deposit with River City Bank, approximately $165 million as of September 27, 2022, where funds in the money market account currently earn a low annual return of about 0.35%. Late last year, Staff began exploring opportunities to improve the return on investment and reduce risk by holding a more diversified investment portfolio. To help with this effort, staff worked with Management Partners, a local government consulting firm, to update SVCE's Investment Policy and explore options for managing the investment portfolio. With support from Management Partners, staff issued a Request for Proposals (RFP) for investment management services consistent with the California Society of Municipal Finance Officers guidelines.

After reviewing two finalists, Staff and Management Partners discussed the objectives of the RFP and the process with the F&A Committee at its December 2021 meeting and recommended selecting PFMAM. With the Committee's concurrence, the CEO executed an agreement with PFMAM for Investment Advisory Services. The initial scope of the agreement is limited to preparatory work leading to the Board's adoption of the revised investment policy. PFMAM is not compensated for this work. Payments for PFMAM will only be for assets under management (see the fee schedule in the next section) if the Board approves the revised investment policy and directs Staff to engage PFMAM for the full scope of the work as SVCE's Investment Advisor per the agreement in Attachment 2.

Since earlier this year, Staff and Management Partners have been working with PFMAM to analyze SVCE's cash liquidity needs, update SVCE's Investment Policy, and evaluate different investment strategies.

At the F&A Committee meetings in May and August of 2022, PFMAM provided updates on their engagement, including discussing investment policy changes, cash flow analysis, and investment strategies with illustrative portfolios, along with discussions on relevant credit, market, liquidity, and cyber risks.

Staff, PFMAM, and Management Partners finalized the investment policy changes and an initial investment strategy and presented the results to the F&A Committee at its October 5, 2022, meeting. The F&A Committee reviewed the proposed recommendations and voted unanimously to recommend that the Board approve/adopt them.

ANALYSIS & DISCUSSION

The proposed revised policy enables SVCE to expand the band of investment products to those allowed under the California Government Code (refer to Attachment 3). Management Partners independently reviewed the investment policy and concurs that the proposed investment policy is consistent with best practices for California local governments and concluded that with proper ongoing review and oversight by SVCE staff, updating the Investment Policy and using PFMAM's investment advisory services is a prudent undertaking for SVCE.

The table below summarizes the proposed investment policies expansion of investment types:

	California Code Allowed Investments	SVCE Approved 2017 Policy	2022 PFMAM Recommendations
Overnight	Money Market Funds	Not permitted	Allow
	Local Government Investment Pools	Not permitted	Allow
Government	U.S. Treasuries	Not permitted	Allow
	Federal Agencies	Not permitted	Allow
	Municipal Obligations	Not permitted	**5% per issuer**
	Supranational Obligations	Not permitted	5 years, "AA" rated, 30% of portfolio, **5% per issuer**
Credit	Commercial Paper	Not permitted	270 days, A-1 rated, 40% of portfolio, **5% per issuer**
	Negotiable Certificates of Deposit	Not permitted	30% of portfolio, **5% per issuer**
	Asset-Backed Securities	Not permitted	5 years, "AA" rated, 20% of portfolio, **5% per issuer**
	Medium Term Notes	Not permitted	5 years, "A" rated, 30% of portfolio, **5% per issuer**

Please refer to Attachment 4 for a glossary that defines these investment products and other key investment terms and concepts.

Given significant volatility in our commodity business, we are proposing an initial investment maturity range of 0-to-3 years; in other words, the securities pay back the principal within three years. The funds held in reserves are primarily to manage adverse risk events; therefore, the investment horizon should be reasonable, and staff can better model cashflows over this time horizon.

To determine SVCE's liquidity needs, staff developed a cashflow model that evaluates the timing of cash inflows and outflows under normal operating business conditions and various scenarios, including stress test conditions where:

- Revenues drop significantly

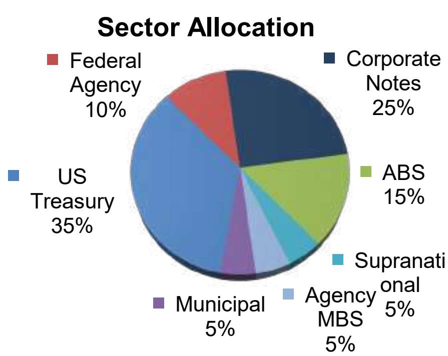
- Cost of energy procurement increases significantly due to increases in energy market prices
- Extreme heat events in summer months trigger large CAISO collateral postings
- Severe drop in market prices trigger large collateral calls from counterparties

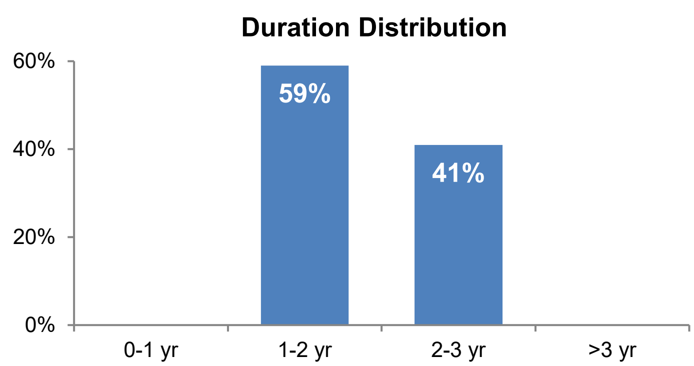
The cash flow analysis is summarized in Attachment 5.

Staff determined that $25 million is sufficient to hold as cash for normal operations. There's also a need to keep an additional $30 million in highly liquid investments where funds could be available overnight, such as the California Asset Management Program (CAMP), which has a reasonably attractive return (yield as of September 23 was 2.61%). The $30 million in highly liquid assets will enable SVCE to respond to volatility, such as the recently experienced record-breaking heat event that drew ~$23 million in collateral calls from the CAISO within a week. Once staff has gained experience with the new cash management approach and further refines the cashflow model, the funds in the highly liquid pool could be reduced.

The funds allocated to an overnight investment vehicle will initially be allocated first to the California Asset Management Pool (CAMP) and secondarily to the Local Agency Investment Fund (LAIF) for additional flexibility. CAMP was created in 1989 when two public agencies formed the (Trust) to meet local government investment needs at a reasonable cost (refer to Attachment 6 for more information). The Local Agency Investment Fund (LAIF), a voluntary program created by statute, began in 1977 as an investment alternative for California's local governments and special districts, and it continues today under the purview of the State Treasurer (refer to Attachment 7 for more information).

SVCE's funds allocated to maturities of 0- to 3- years under PFMAM's management will be invested in individual fixed-income securities with an initial recommended 1- to 3-year maturity structure. The portfolio will be of high credit quality and well diversified by sector, issuer, and maturity. It will comply with SVCE's adopted investment policy and the California Government Code. The charts below illustrate a sample target portfolio that PFMAM proposes to create and manage for SVCE.





The portfolio's performance will be measured and presented quarterly relative to an agreed-upon market benchmark.

PFMAM, as SVCE's investment advisor, will never take control of SVCE's cash or investments. As recommended by the Government Finance Officers Association (GFOA) and industry best practices, SVCE will contract with a third-party bank to provide custody services for SVCE's investments. This separation of the safekeeping function from the investment function is one of the most important protections and controls against fraud.

SVCE will receive timely and comprehensive reporting from both the custody bank and PFMAM so that SVCE can review account information, transaction activity, and portfolio performance. PFMAM will also be available to meet with SVCE staff and present to the Finance and Administration Committee and Board of Directors as requested.

After the Board approves the investment policy and directs PFMAM to engage in the full scope of work as SVCEs investment advisor, PFMAM will manage the Authority's investment portfolio as the Authority's fiduciary pursuant to the specific investment objectives stated in the adopted investment policy. At the time PFMAM assumes management of SVCE's funds, with an initial portfolio of $110 million, SVCE will begin to pay a monthly fee to PFMAM based on the average daily assets under management per the annual fee schedule below:

- Initial $100 million: 8 basis points (0.08%)
- Next $100 million: 6 basis points (0.06%)
- Above $200 million: 5 basis points (0.05%)

The minimum annual fee is $25,000.

Based on a portfolio size of $110 million, the annual fee will be approximately 0.078% on assets under management, or $86,000 annually. In addition to paying fees to PFMAM for managing SVCE's funds, SVCE will also pay fees to a third-party custodian. SVCE has yet to sign an agreement with a bank to provide custody services; however, fees are estimated to range between $4,000 and $8,000 annually, or $20,000 to $40,000 for five years.

STRATEGIC PLAN

The recommendations support SVCE Strategic Plan Goal 13 – "Commit to maintaining a strong financial position."

ALTERNATIVE

The alternative to the recommendation would be to continue to hold a non-diversified investment portfolio with low yields and earnings.

FISCAL IMPACT

Pursuing the above strategy could increase potential earnings for SVCE with more investment portfolio diversification than the current investment practice. A precise estimate is not possible and would depend on the portfolio strategy and market conditions. Using the estimated yield as of September 23, 2022, of the illustrative portfolio with $110 million invested in 1- to 3-year maturity instruments, $25 million in cash earning 0.35%, and $30 million in CAMP using the current rate as of September 22, 2022, an approximate estimate of earnings net of fees paid to PFMAM would be approximately $4.5 million more annually than keeping funds as currently invested.

ATTACHMENTS

1. Redlined Changes to SVCE's Investment Policy
2. Contract with PFM Asset Management LLC for Investment Advisory Services
3. Investments allowed under California Government Code
4. Glossary of Investment Terms
5. Cashflow Analysis
6. Additional Information on California Asset Management Program (CAMP)
7. Additional Information on the Local Agency Investment Fund (LAIF)
8. Resolution 2022-24, Adopting the Revised Investment Policy
9. Resolution 2022-25, Joining as a Shareholder of the California Asset Management Trust
10. Resolution 2022-26, Joining the State's Local Agency Investment Fund (LAIF)

SILICON VALLEY CLEAN ENERGY

FP8

Category: FINANCE

INVESTMENTS POLICY

~~1. Objectives~~

1. Policy

   Silicon Valley Clean Energy ("SVCE") shall invest public funds in such a manner as to comply with state and local laws; ensure prudent money management; provide for daily cash flow requirements; and meet the objectives of the Policy, in priority order of Safety, Liquidity and Return on investment.

2. Scope

   This investment policy applies to all investment activities and financial assets of SVCE.

3. Objective

   The primary objectives, in priority order, of the investment activities of SVCE shall be:

   a. With respect to all investments:

      i. To be in compliance with all Federal, State and local laws as well as all SVCE policies and procedures.

      ii. All investments of SVCE shall be undertaken in a manner which seeks the preservation of principal.

      iii. To remain sufficiently liquid to enable SVCE to meet all operating requirements which might be reasonably anticipated.

      iv. To maximize ~~yield~~return consistent with risk limitations identified herein and prudent investment principles.

   b. With respect to short-term Cash Management objectives:

      i. To accelerate receipt of all funds due to SVCE.

      ii. To accurately monitor and forecast expenditures and revenues, thus enabling SVCE to invest funds to the fullest extent possible.

iii. The investment portfolio shall be designed with the objective of obtaining a rate of return throughout budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow needs.

~~2.~~4. Standard of Care

SVCE will manage funds in accordance with the Prudent Investor Standard pursuant to California Government Code 53600.3.1.

SILICON VALLEY CLEAN ENERGY

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Category: FINANCE

The "prudent investor" standard shall be applied in the context of managing the overall portfolio. Persons authorized to make investment decisions on behalf of SVCE are trustees and therefore fiduciaries subject to the prudent investor standard which states, "When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency".

~~3.~~5. Delegation of Authority

The following individuals are authorized to sign investment documents and/or execute cash transfers and make investments of SVCE's funds:

a. Chief Executive Officer
b. Director of Administration and Finance

SVCE may also delegate investment decision making and execution authority to an investment advisor. The advisor shall follow this Investment Policy and such other written instructions as are provided. Investment advisors must be approved by the SVCE Board prior to engaging with SVCE.

~~4.~~6. Ethics and Conflicts of Interest

The authorized employees who are responsible for the investment of SVCE funds shall refrain from personal business activity that could conflict with the proper execution of SVCE's investment program, or which could impair the ability to make impartial investment decisions.

Pursuant to SVCE's Conflict of Interest Code, employees shall disclose any financial interests and investment holdings that could affect the performance of SVCE's portfolio or the individual's judgement or decisions regarding SVCE's portfolio.

~~5.~~7. Authorized ~~Investments~~Financial Dealers and Institutions

~~The following types of investments are permitted;~~

The Director of Administration and Finance will maintain a list of approved financial institutions authorized to provide investment services to SVCE. These may include "primary" dealers or regional dealers that qualify under Securities & Exchange Commission Rule 15C3-1 (uniform net capital rule). A determination should be made to ensure that all approved broker/dealer firms, and individuals covering SVCE, are reputable and trustworthy. In addition, the broker/dealer firms should have the ability to meet all of their financial obligations in dealing with SVCE. The firms, and individuals covering SVCE, should be knowledgeable and experienced in Public Agency investing and the investment products involved. No public deposit shall be made except in a qualified public depository as established by the established state laws. All financial institutions and broker/dealers who desire to conduct investment transactions with SVCE must supply the Director of Administration and Finance with the following: audited financial statements, proof of NASD certification, trading resolution, proof of State of California registration, completed broker/dealer questionnaire, certification of having read the SVCE's investment policy and depository contracts.

An annual review of the financial condition and registrations of qualified bidders will be conducted by the Director of Administration and Finance. A current audited financial statement is required to be on file for each financial institution and broker/dealer in which SVCE invests.

If SVCE utilizes an investment advisor, the investment advisor may use its own list of authorized broker/dealers to conduct transactions on behalf of SVCE.

8. Authorized and Suitable Investments

SVCE is authorized by California Government Code Section 53600 et

SILICON VALLEY CLEAN ENERGY

FP8

Category: FINANCE

seq. to invest in the types of securities listed below. A security purchased in accordance with this section shall not have a forward settlement date exceeding 45 days from the time of investment.

Where this section specifies a percentage limitation for a particular security type, that percentage is applicable only on the date of purchase. Credit criteria listed in this section ~~refers~~refer to the credit rating at the time the security is purchased. If an investment's credit rating falls below the minimum rating required at the time of purchase, the Director of Administration and Finance will perform a timely review and decide whether to sell or hold the investment.

U.S. Treasury Obligations; United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.

U.S. Agency Obligations; Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government- sponsored enterprises.

Municipal Obligations; Registered state warrants or treasury notes or bonds of California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the state or by a department, board, agency, or authority of California.

Registered treasury notes or bonds of any of the other 49 states in addition to California, including bonds payable solely out of the revenues from a revenue- producing property owned, controlled, or operated by a state or by a department, board, agency, or authority of any of the other 49 states, in addition to California.

Bonds, notes, warrants or other evidence of indebtedness of a local agency within California, including bonds payable solely out of the revenues from a revenue- producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency.

Bonds issued by SVCE, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by SVCE or by a department, board, agency, or authority of

SVCE.

SVCE is prohibited from investing in any debt issued by member agencies of SVCE who are parties to the SVCE Joint Powers Agreement.

Deposits at Bank(s); ~~Funds may be invested in non-interest -bearing depository accounts to meet SVCE's operating and collateral needs and grant requirements. Funds not needed for these purposes will be invested in interest bearing depository accounts or certificates of deposit with maturities not to exceed twelve months.~~ FDIC insured or fully collateralized demand deposit accounts, savings accounts, market rate accounts, time certificates of deposits ("TCDs") and other types of bank deposits in financial institutions located in California. The amount on deposit in any financial institution shall not exceed the shareholder's equity. To be eligible to receive SVCE's deposits, the financial institution must have received a minimum overall satisfactory rating, under the Community Redevelopment Act, for meeting the credit needs of California Communities in its most recent evaluation. Bank deposits are required to be collateralized as specified under Government Code Section 53630 et seq. The Director of Administration and Finance, at his/her discretion, may waive the collateralization requirements for any portion that is covered by federal deposit insurance. SVCE shall have a signed agreement with any depository accepting SVCE's funds per Government Code Section 53649. The maturity of TCDs may not exceed 5 years in maturity. There is no limit on the percentage of the portfolio that may be invested in bank deposits. However, a maximum of 50 percent of the portfolio may be invested in TCDs.

Banks eligible to receive deposits will be federally or state chartered and will conform to Government Code 53635.2.

Placement Service Deposits. Bank deposits placed with a private sector entity that assists in the placement of deposits with eligible financial institutions located in the United States. The full amount of the principal and the interest that may be accrued during the maximum term of each deposit shall at all times be insured by federal deposit insurance. Placement Deposits shall meet all of the requirements of Government Code Section 53601.8. Purchases of Placement Service CDs may not exceed 50% of SVCE's investment portfolio.

Local Agency Investment Fund (LAIF); Funds may be invested in the Local Agency Investment Fund. The LAIF was established by the California State Treasurer for the benefit of local agencies.

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Commercial Paper; Commercial paper of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by a nationally recognized statistical rating organization (NRSRO). The entity that issues the commercial paper shall meet all of the following conditions in either paragraph (1) or (2):

(1) The entity meets the following criteria: (A) Is organized and operating in the United States as a general corporation. (B) Has total assets in excess of five hundred million dollars ($500,000,000). (C) Has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by an NRSRO.

(2) The entity meets the following criteria: (A) Is organized within the United States as a special purpose corporation, trust, or limited liability company. (B) Has program wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or a surety bond. (C) Has commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

Eligible commercial paper shall have a maximum maturity of 270 days or less. Purchases of eligible commercial paper shall not exceed 40% of SVCE's funds.

Medium Term Notes; Defined as all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Notes eligible for investment under this subdivision shall be rated in a rating category of "A" or better by a nationally recognized statistical rating organization (NRSRO). Purchases of medium-term notes shall not exceed 30% of SVCE's funds.

Negotiable Certificates of Deposits; Negotiable certificates of deposit issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 of the California State Code), a state or federal credit union, or by a federally licensed or state-licensed branch of a foreign bank. Purchases of negotiable certificates of deposits shall not exceed 30% of the SVCE's funds.

Mortgage Pass-Through and Asset-Backed Securities; A mortgage pass-through security, collateralized mortgage obligation, mortgaged backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate or consumer receivable backed bond. Securities eligible for investment under this subdivision shall be rated in a rating category of "AA" or its equivalent or better by an NRSRO and have a maximum remaining maturity of five years or less. Purchase of securities authorized by this subdivision shall not exceed 20% of SVCE's funds.

Supranational Obligations; United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated in a rating category of "AA" or better by an NRSRO and shall not exceed 30% of SVCE's funds.

Joint Power Authority Pool; Shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (r), inclusive, of Government Code 53601. Each share shall represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority. To be eligible under this section, the joint powers authority issuing the shares shall have retained an investment adviser that meets all of the following criteria:

1) The adviser is registered or exempt from registration with the Securities and Exchange Commission.

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2) The adviser has not less than five years of experience investing in the securities and obligations authorized in subdivisions (a) to (q), inclusive, of Government Code 53601.

3) The adviser has assets under management in excess of five hundred million dollars ($500,000,000).

Money Market Funds; Shares of beneficial interest issued by diversified management companies that are Money Market Funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940. These funds must either have attained the highest rating/ranking by at least two NRSROs or have retained an investment advisor registered with the Securities and Exchange Commission with not less than five years' experience managing money market mutual funds with assets under management in excess of five hundred million dollars ($500,000,000).

Investments in this category will not exceed 20% of SVCE's funds and no more than 10% may be invested in any one money market fund.

~~6.~~9. Hedging Program

Staff may examine and recommend to the Board an investment strategy that is consistent with this policy and which will hedge against revenue loss due to high PCIA or increased prices of natural gas commodity.

~~7.~~10. Reporting Requirements

The Director of Administration and Finance shall be responsible for preparing a monthly ~~investment~~ report of transactions for the Board of Directors, as required by California Government Code 53607. ~~The investment report shall include:~~

The Director of Administration and Finance may also prepare an investment report four times a year and the report shall include:

a. Type of Investment
b. Institution of Purchase
c. Date of purchase and maturity
d. Par and dollar amounts invested
e. Current market value
~~d.~~f. Interest rate
~~e.~~g. Target benchmark
h. State compliance of the portfolio in accordance with the Policy

11. Investment Pools/Mutual Funds

A thorough investigation of the pool/fund is required prior to investing, and on a regular basis. Best efforts will be made to acquire the following information:

1. A description of eligible investment securities, and a written statement of investment policy and objectives.
2. A description of interest calculations and how it is distributed, and how gains and losses are treated.
3. A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program audited.
4. A description of who may invest in the program, how often, what size deposit and withdrawal are allowed.
5. A schedule for receiving statements and portfolio listings.
6. Are reserves, retained earnings, etc. utilized by the pool/fund?
7. A fee schedule, and when and how is it assessed.
8. Is the pool/fund eligible for bond proceeds and/or will it accept such proceeds?

12. Collateralization

Collateralization will be required on certificates of deposit. In order to anticipate market changes and provide a level of security for all funds, the collateralization level will be 110% of market value for Certificate of Deposits.

Collateral will always be held by an independent third party with whom SVCE has a current custodial agreement. A clearly marked evidence of ownership (safekeeping receipt) must be supplied to the entity and retained. The right of collateral substitution is granted.

13. Safekeeping and Custody

All security transactions, entered into by SVCE shall be conducted on a delivery-versus-payment (DVP) basis. Securities will be held by a third-party custodian and evidenced by safekeeping receipts.

14. Diversification

SVCE will diversify its investments by security type and institution. With the exception of U.S. Treasury securities, federal agencies, and authorized pools, no more than 5% of SVCE's total investment portfolio will be invested in a single security type or with a single financial institution

15. Maximum Maturities

To the extent possible, SVCE will attempt to match its investments with anticipated cash flow requirements. Unless matched to a specific cash flow, SVCE will not directly invest in securities maturing more than 5 years from the date of purchase unless the Board of Directors has provided approval at least three months prior to the investment. For purposes of compliance with this section, an investment's term or remaining maturity shall be measured from the settlement date to final maturity. Reserve funds may be invested in securities exceeding 5 years if the maturity of such investments is made to coincide as nearly as practicable with the expected use of the funds.

16. Internal Controls

The Director of Administration and Finance is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of SVCE are protected from loss, theft, fraud or misuse.

Accordingly, the Director of Administration and Finance shall establish an annual process of independent review by an external auditor. This review will provide internal control by assuring compliance with policies and procedures.

17. Performance Standards

The investment portfolio shall be designed with the objective of obtaining a rate of return throughout budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow needs.

SVCE shall establish an appropriate performance benchmark and compare the total return of its portfolio to the total return of the benchmark.

~~8.~~18. Annual Review

The Investment Policy will be reviewed annually. Any changes to the Investment Policy will be submitted to the Board of Directors for approval.

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND PFM ASSET MANAGEMENT LLC FOR INVESTMENT ADVISORY SERVICES

THIS AGREEMENT ("Agreement") is entered into this 9th day of May, 2022, by and between the SILICON VALLEY CLEAN ENERGY THORITY, an independent public agency, ("Authority"), and PFM Asset Management LLC, a Delaware limited liability company with an office in San Francisco, California (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for investment advisory services upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. TERM

The term of this Agreement shall commence upon execution of this Agreement, shall be for a three-year period and may be extended for an additional two-year period, unless terminated earlier as set forth herein.

2. SERVICES TO BE PERFORMED

A. Consultant shall perform each and every service set forth in Exhibit "A" which is attached hereto and incorporated herein by this reference.

B. Notwithstanding anything in this Agreement to the contrary, Consultant's services shall be limited to the completion of item 1 in Exhibit "A" until such time that the Authority Board of Directors: (i) approves an investment policy prepared by Consultant and (ii) directs Consultant to engage in the full scope of work set forth in Exhibit "A." At such time that the Authority Board of Directors takes such actions, Consultant shall commence services pursuant to the full scope of work set forth in Exhibit "A." Consultant acknowledges and agrees that Consultant is only paid for assets under management as described in Exhibit "B" and that Consultant shall not be compensated for the services provided pursuant to item 1 in Exhibit "A." In the event that the Authority Board of Directors does not: (i) approve an investment policy prepared by Consultant, and (ii) direct Consultant to engage in the full scope of work set forth in Exhibit "A," the Authority may immediately terminate this Agreement.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement based on the rates and terms set forth in Exhibit "B," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel employment practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the

State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. NON-DISCRIMINATION

In the performance of this Agreement, Consultant, and any subconsultant under the Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. HOLD HARMLESS AND INDEMNIFICATION

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its electedofficials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the negligent acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized useor misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold

Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

B. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

C. Consultant's indemnifications and obligations under this section shall survive the expiration or termination of this Agreement.

10. INSURANCE

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "C," which is attached hereto and incorporated herein by this reference. The required General Liability, Automobile Liability and Workers Compensation insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to maintain the foregoing insurance, Authority shall be permitted but not obligated, to terminate this Agreement or obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums, which costs shall not be commercially unreasonable, and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under the General Liability and Automobile Liability insurance coverages required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

11. CONFLICT OF INTEREST

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict-of-interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict-of-interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. PROHIBITION AGAINST TRANSFERS

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. SUBCONTRACTOR APPROVAL

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. REPORTS

Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

A. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

B. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

C. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

D. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority, unless such disclosure is required by law or by regulatory or judicial process.

E. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. RECORDS

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all services required under this agreement

16. PARTY REPRESENTATIVES

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Monique Spyke, Managing Director ("Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. CONFIDENTIAL INFORMATION AND DOCUMENTS

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for

performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law or regulatory or judicial process requires disclosure and Consultant is legally permitted to notify Authority of such requested disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant, if legally permitted, gives Authority notice of such court order or subpoena.

B. If legally permitted, Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authoritymay, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. In the event Authority gives Consultant written notice of a "litigation hold", then as to all data identified in such notice, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

D. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit “D,” attached hereto and incorporated herein by this reference.

E. Consultant’s covenants under this section shall survive the expiration or termination of this Agreement.

18. NOTICES

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant’s and Authority’s regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Monique Spyke
Managing Director
PFM Asset Management LLC
1 California Street, Suite 1000
San Francisco, CA 94111

With a copy to:
PFM Asset Management LLC
213 Market Street
Harrisburg, PA 17101
Attn: Chief Administrative Officer

19. TERMINATION

In the event a Party fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, such Party shall be deemed in default in the performance of this Agreement. If the defaulting Party fails to cure the default within the time specified (which shall be determined by the non-defaulting Party but shall be not less than 10 days) and according to the requirements set forth in non-defaulting Party’s written notice of default, and in addition to any other remedy available to the non-defaulting Party by law, the Authority Representative or Consultant Representative, as applicable, may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. COMPLIANCE WITH LAWS

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. CONFLICT OF LAW

This Agreement shall be interpreted under and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. ADVERTISEMENT

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. WAIVER

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. INTEGRATED CONTRACT

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. AUTHORITY

The individual(s) executing this Agreement represent and warrant that they have the legal authority and authority to do so on behalf of their respective legal entities.

26. INSERTED PROVISIONS

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. CAPTIONS AND TERMS

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. EXHIBITS

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. FORCE MAJEURE

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to

Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within sixty calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy andcompetency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. ATTORNEY FEES

In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. SEVERABILITY

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. SUCCESSORS AND ASSIGNS

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. NO THIRD PARTY BENEFICIARIES INTENDED

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. DRAFTING PARTY

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

38. INVESTMENT ADVISOR PROVISIONS

A. Services of Consultant. Authority hereby engages Consultant to serve as investment advisor under the terms of this Agreement with respect to the funds described in this Agreement and such other funds as Authority may from time to time assign by written notice to Consultant (collectively the "Managed Funds"), and Consultant accepts such appointment. In connection therewith, Consultant will provide investment research and supervision of the Managed Funds investments and conduct a continuous program of investment, evaluation and, when appropriate, sale and reinvestment of the Managed Funds assets. Consultant shall continuously monitor investment opportunities and evaluate investments of the Managed Funds. Consultant shall furnish Authority with statistical information and reports with respect to investments of the Managed Funds. Consultant shall place all orders for the purchase, sale, loan or exchange of portfolio securities for Authority's account with brokers or dealers recommended by Consultant and/or Authority, and to that end Consultant is authorized as agent of Authority to give instructions to the custodian designated by Authority (the "Custodian") as to deliveries of securities and payments of cash for the account of Authority. In connection with the selection of such brokers and dealers and the placing of such orders, Consultant is directed to seek for Authority the most favorable execution and price, the determination of which may take into account, subject to any applicable laws, rules and regulations, whether statistical, research and other information or services have been or will be furnished to Consultant by such brokers and dealers. The Custodian shall have custody of cash, assets and securities of Authority. Consultant shall not take possession of or act as custodian for the cash, securities or other assets of Authority and shall have no responsibility in connection therewith. Authorized investments shall include only those investments which are currently authorized by the state investment statutes and the applicable covenants and as supplemented by such other written instructions as may from time to time be provided by Authority to Consultant. Consultant shall be entitled to rely upon Authority's written advice with respect to anticipated drawdowns of Managed Funds. Consultant will observe the instructions of Authority with respect to broker/dealers who are approved to execute transactions involving the Managed Funds and in the absence of such instructions will engage broker/dealers which Consultant reasonably believes to be reputable, qualified and financially sound.

B. Pool Compensation. Assets invested by Consultant under the terms of this Agreement may from time to time be invested in (i) a money market mutual fund managed by an entity affiliated with Consultant or (ii) a local government investment pool managed by Consultant (either, a "Pool") or in individual securities. Average daily net assets subject to the fees described in this Agreement shall not take into account any funds invested in the Pool. Expenses of the Pool, including compensation for Consultant and the Pool custodian, are described in the relevant prospectus or information statement and are paid from the Pool.

C. Registered Advisor; Duty of Care. Consultant hereby represents it is a registered investment advisor under the Investment Advisers Act of 1940. Consultant shall immediately notify Authority if at any time during the term of this Agreement it is not so registered or if its registration is suspended. The federal securities laws impose liabilities under certain circumstances on persons who act in good faith. Nothing herein shall in any way constitute a waiver or limitation of any rights which Authority may have under any federal securities laws. Authority hereby authorizes Consultant to sign I.R.S. Form W-9 on behalf of Authority and to deliver such form to broker-dealers or others from time to time as required in connection with securities transactions pursuant to this Agreement. Consultant shall provide Authority a copy of such form W-9.

D. Consultant's Other Clients. Authority understands that Consultant performs investment advisory services for various other clients which may include investment companies, commingled trust funds and/or individual portfolios. Authority agrees that Consultant, in the exercise of its professional judgment, may give advice or take action with respect to any of its other clients which may differ from advice given or the timing or nature of action taken with respect to the Managed Funds. Consultant shall not have any obligation to purchase, sell or exchange any security for the

Managed Funds solely by reason of the fact that Consultant, its principals, affiliates, or employees may purchase, sell or exchange such security for the account of any other client or for itself or its own accounts.

E. Disciplinary Actions. Consultant shall promptly give notice to Authority if Consultant shall have been found to have violated any state or federal securities law or regulation in any final and unappealable judgment in any criminal action or civil suit in any state or federal court or in any disciplinary proceeding before the Securities and Exchange Commission ("SEC") or any other agency or department of the United States, any registered securities exchange, the Financial Industry Regulatory Authority ("FINRA"), or any regulatory authority of any State based upon the performance of services as an investment advisor.

F. Books. Consultant shall maintain records of all transactions in the Managed Funds. Consultant shall provide Authority with a monthly statement showing deposits, withdrawals, purchases and sales (or maturities) of investments, earnings received, and the value of assets held on the last business day of the month. The statement shall be in the format and manner that is mutually agreed upon by Consultant and Authority.

G. Brochure and Brochure Supplement. Consultant warrants that it has delivered to Authority prior to the execution of this Agreement Consultant's current SEC Form ADV, Part 2A (brochure) and Part 2B (brochure supplement). Authority acknowledges receipt of such brochure and brochure supplement prior to the execution of this Agreement.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

DocuSigned by:
Amrit Singh
A88F1DF92E8E467
Amrit Singh, Chief Financial Officer/Director of Administrative Services

PFM ASSET MANAGEMENT LLC

DocuSigned by:
By: Monique Spyke
9F3C6924/B994AC...
Name: Monique Spyke
Title: Managing Director
Date: 5/9/2022

SILICON VALLEY CLEAN ENERGY AUTHORITY
A Joint Powers Authority

DocuSigned by:
By: Girish Balachandran
5CA64B9AC4C24C3...
Name: Girish Balachandran
Title: Chief Executive Officer
Date: 5/9/2022

Exhibit A
Scope of Services

Specific responsibilities of the selected investment adviser will include:

1. At the start of the engagement assist the Authority staff in preparing an updated and revised investment policy for review by the Finance and Administration Committee and for approval by the Board of Directors. This step will include a study sessions with the Finance and Administration Committee and the full Board as requested by the Authority staff.

2. Annually review the Authority's then current investment policy and discuss areas for improvement with staff that meet the Authority's risk tolerance.

3. Provide assistance in developing and implementing an investment strategy that will maintain or enhance portfolio quality and performance within the parameters of the Authority's Investment Policy and cash flow needs.

4. Manage the Authority's investment portfolio as the Authority's fiduciary and pursuant to the specific investment objectives stated in the adopted investment policy. Place all orders for the purchase and sale of securities, communicate settlement information to the Authority's staff or custodian and coordinate security settlement.

5. Ensure the portfolio complies with all applicable laws and the Authority's Investment Policy including resolutions relating to the investment of public funds.

6. Provide the Authority with investment reports that shall include, but not be limited to the following:

   a. Monthly holdings and transaction statements including detailed portfolio holdings and portfolio summary statistics.

   b. Quarterly investment reports including a description of market conditions, investment strategies employed, performance, and suggested changes to investment strategy.

   c. Annual portfolio performance reports, based on the Authority's fiscal year, including, but not limited to local and national economy, the Authority's portfolio holdings, performance objectives, and policy compliance.

7. Perform broker/dealer due diligence and maintain relations with the broker/dealer community.

8. Continually monitor market conditions and circumstances and report on any recommended changes to policies, strategies, and specific positions.

9. Attend Finance and Administration Committee and Board of Directors meetings as required.

10. Serve as a general resource to the Authority's staff for information, advice, and training regarding fixed-income investments. Communicate as necessary with the Authority staff to understand the Authority's investment operations.

Exhibit B
Compensation

Authority shall compensate Consultant for professional services in accordance with the termsand conditions of this Agreement based on the rates and compensation schedule set forth below.

For services provided by the Advisor pursuant to this Agreement, the Client shall pay the Advisor an annual fee, in monthly installments, based on the daily net assets under management according to the schedule below:

Average Assets Under Management	Fees
Initial $100 million	8 basis points (0.08%)
Next $100 million	6 basis points (0.06%)
Above $200 million	5 basis points (0.05%)

"Daily net assets" is defined to include the amortized value of securities, accrued interest and cash or any money market fund balance.

The minimum annual fee for assets under management is $25,000, and such minimum annual fee shall be applied in equal monthly installments. For avoidance of doubt, in any month where the amount of the fee calculated under the schedule above is less than the amount of such equal monthly installment, then the amount of such equal monthly installment shall be applied.

Invoices

IMonthly Invoices

In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (include a statement indicating the basis upon which the fee was calculated). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses

Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses.

Additional Services

Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

Exhibit C

Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

1. **Workers Compensation:**
Statutory coverage as required by the State of California.

2. **Liability:**
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

3. **Automotive:**
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

4. **Professional Liability:**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

5. **Privacy and Cybersecurity Liability**

Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.

Exhibit D
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority (“Authority Customers”) and/or other confidential information (collectively “Confidential Information”) may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement or as may be permitted by the Agreement.

   Consultant shall, at all times and in perpetuity or until such time as such Confidential Information is no longer retained by Consultant pursuant to applicable regulatory record keeping requirements or Consultant’s internal document archiving requirements keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect Confidential Information, from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a “need to know” such

Confidential Information in the course of their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, Consultant shall be responsible for establishing, maintaining, and providing written evidence to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. The requirements set forth in the following sentences of this Section shall apply only to the extent that the services include handling credit card information,. The Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report.

4. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that Consultant, if legally permitted, notifies Authority promptly upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

5. In the event that Consultant has actual knowledge of a negligent act or omission, error, misconduct, or breach that permits any external unauthorized access to, or that compromises the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Authority's Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than seventy-two (72) hours of becoming aware of such occurrence; (b) cooperate

with Authority in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials as required by applicable law; (c) in the case of Confidential Information, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence, arising from Consultant's negligence; (g) assist the Authority with recreating lost Data if available through Consultant's disaster recovery plan, with such assistance provided at no additional cost to the Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and other information reasonably required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement, until such time as the requirements of Section 10 hereof have been satisfied.

6. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant.

7. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for

improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

8. If and only to the extent applicable to the services provided by Consultant hereunder, Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

9. In addition to any other requirements set forth in the Agreement, within thirty (30) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with an affidavit of destruction that all such tangible Confidential Information of Authority has been destroyed. The foregoing notwithstanding, copies of Confidential Information may be retained by Consultant for internal record-keeping in accordance with regulatory requirements and in connection with routine electronic archiving.

10. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission (if and only to the extent that such Commission would have jurisdiction over the services to be performed by the Consultant hereunder) for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

11. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the unauthorized use or disclosure of Confidential Information.

FIGURE 1

ALLOWABLE INVESTMENT INSTRUMENTS PER STATE GOVERNMENT CODE (AS OF JANUARY 1, 2022)[A] APPLICABLE TO ALL LOCAL AGENCIES[B]

See "Table of Notes for Figure 1" on the next page for footnotes related to this figure.

INVESTMENT TYPE	MAXIMUM MATURITY[C]	MAXIMUM SPECIFIED % OF PORTFOLIO[D]	MINIMUM QUALITY REQUIREMENTS	GOV'T CODE SECTIONS
Local Agency Bonds	5 years	None	None	53601(a)
U.S. Treasury Obligations	5 years	None	None	53601(b)
State Obligations—CA And Others	5 years	None	None	53601(c) 53601(d)
CA Local Agency Obligations	5 years	None	None	53601(e)
U.S Agency Obligations	5 years	None	None	53601(f)
Bankers' Acceptances	180 days	40%[E]	None	53601(g)
Commercial Paper—Non-Pooled Funds[F] (under $100,000,000 of investments)	270 days or less	25% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53601(h)(2)(c)
Commercial Paper—Non-Pooled Funds (min. $100,000,000 of investments)	270 days or less	40% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53601(h)(2)(c)
Commercial Paper—Pooled Funds[I]	270 days or less	40% of the agency's money[G]	Highest letter and number rating by an NRSRO[H]	53635(a)(1)
Negotiable Certificates of Deposit	5 years	30%[J]	None	53601(i)
Non-negotiable Certificates of Deposit	5 years	None	None	53630 et seq.
Placement Service Deposits	5 years	50%[K]	None	53601.8 and 53635.8
Placement Service Certificates of Deposit	5 years	50%[K]	None	53601.8 and 53635.8
Repurchase Agreements	1 year	None	None	53601(j)
Reverse Repurchase Agreements and Securities Lending Agreements	92 days[L]	20% of the base value of the portfolio	None[M]	53601(j)
Medium-Term Notes[N]	5 years or less	30%	"A" rating category or its equivalent or better	53601(k)
Mutual Funds And Money Market Mutual Funds	N/A	20%	Multiple[P,Q]	53601(l) and 53601.6(b)
Collateralized Bank Deposits[R]	5 years	None	None	53630 et seq. and 53601(n)
Mortgage Pass–Through and Asset–Backed Securities	5 years or less	20%	"AA" rating category or its equivalent or better	53601(o)
County Pooled Investment Funds	N/A	None	None	27133
Joint Powers Authority Pool	N/A	None	Multiple[S]	53601(p)
Local Agency Investment Fund (LAIF)	N/A	None	None	16429.1
Voluntary Investment Program Fund[T]	N/A	None	None	16340
Supranational Obligations[U]	5 years or less	30%	"AA" rating category or its equivalent or better	53601(q)
Public Bank Obligations	5 years	None	None	53601(r), 53635(c) and 57603

TABLE OF NOTES FOR FIGURE 1

[A] *Sources: Sections 16340, 16429.1, 27133, 53601, 53601.6, 53601.8, 53630 et seq., 53635, 53635.8, and 57603.*

[B] *Municipal Utilities Districts have the authority under the Public Utilities Code Section 12871 to invest in certain securities not addressed here.*

[C] *Section 53601 provides that the maximum term of any investment authorized under this section, unless otherwise stated, is five years. However, the legislative body may grant express authority to make investments either specifically or as a part of an investment program approved by the legislative body that exceeds this five year remaining maturity limit. Such approval must be issued no less than three months prior to the purchase of any security exceeding the five-year maturity limit.*

[D] *Percentages apply to all portfolio investments regardless of source of funds. For instance, cash from a reverse repur-chase agreement would be subject to the restrictions.*

[E] *No more than 30 percent of the agency's money may be in bankers' acceptances of any one commercial bank.*

[F] *Includes agencies defined as a city, a district, or other local agency that do not pool money in deposits or investment with other local agencies, other than local agencies that have the same governing body.*

[G] *Local agencies, other than counties or a city and county, may purchase no more than 10 percent of the outstanding commercial paper and medium-term notes of any single issuer.*

[H] *Issuing corporation must be organized and operating within the U.S., have assets in excess of $500 million, and debt other than commercial paper must be in a rating category of "A" or its equivalent or higher by a nationally recognized statistical rating organization, or the issuing corporation must be organized within the U.S. as a special purpose corporation, trust, or LLC, have program wide credit enhancements, and have commercial paper that is rated "A-1" or higher, or the equivalent, by a nationally recognized statistical rating agency.*

[I] *Includes agencies defined as a county, a city and county, or other local agency that pools money in deposits or investments with other local agencies, including local agencies that have the same governing body. Local agencies that pool exclusively with other local agencies that have the same governing body must adhere to the limits set forth in Section 53601(h)(2)(C).*

[J] *No more than 30 percent of the agency's money may be in negotiable certificates of deposit that are authorized under Section 53601(i).*

[K] *Effective January 1, 2020, no more than 50 percent of the agency's money may be invested in deposits, including certificates of deposit, through a placement service as authorized under 53601.8 (excludes negotiable certificates of deposit authorized under Section 53601(i)). On January 1, 2026, the maximum percentage of the portfolio reverts back to 30 percent. Investments made pursuant to 53635.8 remain subject to a maximum of 30 percent of the portfolio.*

[L] *Reverse repurchase agreements or securities lending agreements may exceed the 92-day term if the agreement includes a written codicil guaranteeing a minimum earning or spread for the entire period between the sale of a security using a reverse repurchase agreement or securities lending agreement and the final maturity dates of the same security.*

[M] *Reverse repurchase agreements must be made with primary dealers of the Federal Reserve Bank of New York or with a nationally or state chartered bank that has a significant relationship with the local agency. The local agency must have held the securities used for the agreements for at least 30 days.*

[N] *"Medium-term notes" are defined in Section 53601 as "all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States."*

[O] *No more than 10 percent invested in any one mutual fund. This limitation does not apply to money market mutual funds.*

[P] *A mutual fund must receive the highest ranking by not less than two nationally recognized rating agencies or the fund must retain an investment advisor who is registered with the SEC (or exempt from registration), has assets under management in excess of $500 million, and has at least five years' experience investing in instruments authorized by Sections 53601 and 53635.*

[Q] *A money market mutual fund must receive the highest ranking by not less than two nationally recognized statistical rating organizations or retain an investment advisor registered with the SEC or exempt from registration and who has not less than five years' experience investing in money market instruments with assets under management in excess of $500 million.*

[R] *Investments in notes, bonds, or other obligations under Section 53601(n) require that collateral be placed into the custody of a trust company or the trust department of a bank that is not affiliated with the issuer of the secured obligation, among other specific collateral requirements.*

[S] *A joint powers authority pool must retain an investment advisor who is registered with the SEC (or exempt from registration), has assets under management in excess of $500 million, and has at least five years' experience investing in instruments authorized by Section 53601, subdivisions (a) to (o).*

[T] *Local entities can deposit between $200 million and $10 billion into the Voluntary Investment Program Fund, upon approval by their governing bodies. Deposits in the fund will be invested in the Pooled Money Investment Account.*

[U] *Only those obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB), with a maximum remaining maturity of five years or less.*

GLOSSARY

ACCRUED INTEREST: Coupon interest accumulated on a bond or note since the last interest payment or, for a new issue, from the dated date to the date of delivery.

ANNUAL COMPREHENSIVE FINANCIAL REPORT (ACFR): The official annual report of the *(entity).* It includes five combined statements for each individual fund and account group prepared in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

ASSET-BACKED SECURITIES: Securities that are supported by pools of assets, such as installment loans or leases, or by pools of revolving lines of credits. Asset-backed securities are structured as trusts in order to perfect a security interest in the underlying assets.

ASKED: The price at which securities are offered.

BANKERS' ACCEPTANCE (BA): A draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer.

BASIS POINTS: Refers to the yield on bonds. Each percentage point of yield in bonds equals 100 basis points (1/100% or 0.01%). If a bond yield changes from 2.25% to 2.39%, that is a rate of 14 basis points.

BENCHMARK: A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

BID: The price offered by a buyer of securities. (When you are selling securities, you ask for a bid.) See Offer.

BOOK RETURN: Book return includes interest, amortization/accretion of premiums/discounts, realized gains and losses, over a given period of time.

BOOK VALUE: The value at which an asset is carried on a balance sheet.

BROKER: A broker brings buyers and sellers together for a commission.

CALIFORNIA ASSET MANAGEMENT PROGRAM ("CAMP" or the "Program"): A California Joint Powers Authority ("JPA") established in 1989 to provide California public agencies with professional investment services. CAMP is directed by a Board of Trustees and offers a range of services to assist Program investors/participants with their investment and arbitrage compliance needs.

CALLABLE SECURITIES: An investment security that contains an option allowing the issuer to retire the security prior to its final maturity date.

CERTIFICATE OF DEPOSIT: A short-term, secured deposit in a financial institution that usually returns principal and interest to the lender at the end of the loan period. Certificates of Deposit (CDs) differ in terms of collateralization and marketability. Those appropriate to public agency investing include:

Negotiable Certificates of Deposit

Generally, short-term debt instrument that usually pays interest and is issued by a bank, savings or federal association, state or federal credit union, or state-licensed branch of a foreign bank. The majority of negotiable CDs mature within six months while the average maturity is two weeks. Negotiable CDs are traded in a secondary market and are payable upon order to the bearer or initial depositor (investor). Negotiable CDs are insured by FDIC up to $250,000, but they are not collateralized beyond that amount.

Non-Negotiable Certificates of Deposit

CDs that carry a penalty if redeemed prior to maturity. A secondary market does exist for non-negotiable CDs, but redemption includes a transaction cost that reduces returns to the investor. Non-negotiable CDs issued by banks and savings and loans are insured by the Federal Deposit Insurance Corporation up to the amount of $250,000, including principal and interest. Amounts deposited above this amount may be secured with other forms of collateral through an agreement between the investor and the issuer. Collateral may include other securities including Treasuries or agency securities such as those issued by the Federal National Mortgage Association**.**

COLLATERAL: Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMMERCIAL PAPER: An unsecured short-term promissory note issued by corporations or municipalities, with maturities ranging from 2 to 270 days.

COUPON: (a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value. (b) A certificate attached to a bond evidencing interest due on a payment date.

CREDIT RISK: The chance that an issuer will be unable to make scheduled payments of interest and principal on an outstanding obligation. Another concern for investors is that the market's perception of an issuer/borrower's credit will cause the market value of a security to fall, even if default is not expected.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

DEBENTURE: A bond secured only by the general credit of the issuer.

DELIVERY VERSUS PAYMENT: There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

DERIVATIVES: (1) Financial instruments whose return profile is linked to, or derived from, the movement of one or more underlying index or security, and may include a leveraging factor, or (2) financial contracts based upon notional amounts whose value is derived from an underlying index or security (interest rates, foreign exchange rates, equities or commodities).

DISCOUNT: The difference between the cost price of a security and its maturity when quoted at lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount.

DISCOUNT SECURITIES: Noninterest-bearing money market instruments that are issued a discount and redeemed at maturity for full face value *(e.g., U.S. Treasury Bills.)*

DIVERSIFICATION: The allocation of different types of assets in a portfolio to mitigate risks and improve overall portfolio performance.

DURATION: A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

EFFECTIVE DURATION: Duration measures the weighted average of the present value of the cash flows of a fixed-income investment. Effective duration measures the price sensitivity of fixed-income investments, especially for those with embedded option features such as call options. As yields rise, the effective duration of a callable investment rises to reflect the fact that it has become less likely to be called. The more rates rise, the longer the effective duration will become, approaching the duration to maturity. The converse is true in a declining interest rate environment (that is, the more rates fall, the shorter the effective duration will become, approaching the duration to call). For securities without an embedded option, the duration to call, maturity, and effective duration are all the same. The calculation for effective duration is complicated and involves averaging the duration under a simulation of many possible interest rate scenarios in the future.

FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC): A federal agency that insures bank deposits, currently up to $250,000 per entity.

FEDERAL FUNDS RATE: The rate of interest at which Fed funds are traded. This rate is currently pegged by the Federal Reserve through open-market operations.

GOVERNMENT ACCOUNTING STANDARDS BOARD (GASB): A standard-setting body, associated with the Financial Accounting Foundation, which prescribes standard accounting practices for governmental units.

GOVERNMENT SPONSORED ENTERPRISES (GSE): Privately held corporations with public purposes created by the U.S. Congress to reduce the cost of capital for certain borrowing sectors of the economy. Securities issued by GSEs carry the implicit backing of the U.S. Government, but they are not direct obligations of the U.S. Government. For this reason, these securities will offer a yield premium over Treasuries.

INTEREST: The amount a borrower pays to a lender for the use of his or her money.

INTEREST RATE RISK: Interest rate risk is the risk that an investment's value will change due to a change in the absolute level of interest rates, spread between two rates, shape of the yield curve, or any other interest rate relationship.

LIQUIDITY: A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

LOCAL AGENCY INVESTMENT FUND: A voluntary investment fund open to government entities and certain non-profit organizations in California that is managed by the State Treasurer's Office.

LOCAL GOVERNMENT INVESTMENT POOL (LGIP): The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

MARKET RISK: The chance that the value of a security will decline as interest rates rise. In general, as interest rates fall, prices of fixed income securities rise. Similarly, as interest rates rise, prices fall. Market risk also is referred to as systematic risk or risk that affects all securities within an asset class similarly.

MARKET VALUE: The price at which a security is trading and could presumably be purchased or sold.

MASTER REPURCHASE AGREEMENT: A written contract covering all future transactions between the parties to repurchase—reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

MATURITY: The date upon which the principal or stated value of an investment becomes due and payable.

MEDIUM TERM NOTES: Corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.

MONEY MARKET: The market in which short-term debt instruments (bills, commercial paper, bankers' acceptances, etc.) are issued and traded.

MONEY MARKET MUTUAL FUNDS: MMF's are mutual funds that invest exclusively in short-term money market instruments. MMF's seek the preservation of capital as a primary goal while maintaining a high degree of liquidity and providing income representative of the market for short-term investments.

MORTGAGE BACKED SECURITIES: Mortgage-backed securities (MBS) are created when a mortgagee or a purchaser of residential real estate mortgages creates a pool of mortgages and markets undivided interests or participations in the pool. MBS owners receive a prorata share of the interest and principal cash flows (net of fees) that are “passed through” from the pool of mortgages. MBS are complex securities whose cash flow is determined by the characteristics of the mortgages that are pooled together. Investors in MBS face prepayment risk associated with the option of the underlying mortgagors to pre-pay or payoff their mortgage. Most MBS are issued and/or guaranteed by federal agencies and instrumentalities (e.g., Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA), and Federal Home Loan Mortgage Corporation (FHLMC)).

MORTGAGE PASS-THROUGH OBLIGATIONS: Securities that are created when residential mortgages (or other mortgages) are pooled together and undivided interests or participations in the stream of revenues associated with the mortgages are sold.

MUNICIPAL NOTES, BONDS, AND OTHER OBLIGATIONS: Obligations issued by state and local governments to finance capital and operating expenses.

NET ASSET VALUE: Net asset value (NAV) is a term used in the mutual fund industry to determine the average price per share of a pool or mutual fund. How this measure varies over time provides information on whether the pool is stable or variable. NAV is the market value of all securities in a mutual fund, less the value of the fund’s liabilities, divided by the number of shares in the fund outstanding. Shares of mutual funds are purchased at the fund’s offered NAV.

OFFER: The price asked by a seller of securities. (When you are buying securities, you ask for an offer.) See Asked and Bid.

PAR AMOUNT OR PAR VALUE: The principal amount of a note or bond which must be paid at maturity. Par, also referred to as the “face amount” of a security, is the principal value stated on the face of the security. A par bond is one sold at a price of 100 percent of its principal amount.

PORTFOLIO: Combined holding of more than one stock, bond, commodity, real estate investment, cash equivalent, or other asset. The purpose of a portfolio is to reduce risk by diversification.

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

PRUDENT INVESTOR STANDARD: A standard of conduct where a person acts with care, skill, prudence, and diligence when investing, re-investing, purchasing, acquiring, exchanging, selling, and managing funds. The test of whether the standard is being met is if a prudent person acting in such a situation would engage in similar conduct to ensure that investments safeguard principal and maintain liquidity.

PUBLIC BANK: A corporation, organized as either a nonprofit mutual benefit corporation or a nonprofit public benefit corporation for the purpose of engaging in the commercial banking business or industrial banking business, that is wholly owned by a local agency, as specified, local agencies, or a joint powers authority.

QUALIFIED INSTITUTIONAL BUYER: Federal regulations define qualified institutional buyer (QIB) as any of the following entities, acting for its own account or the accounts of other QIBs, that in the aggregate owns and invests on a discretionary basis at least $100 million in securities of issuers that are not affiliated with the entity: insurance company, investment company, small business investment company, a Rural Business Investment Company, a plan (established and maintained by a public agency) for the benefit of its employees, employee benefit plan, trust fund (bank or trust company), business development company, 501(c)(3), investment adviser, and dealer, an institution that qualifies as an accredited investor. 17 CFR § 230.144A and 230.145

RATE OF RETURN: The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

REINVESTMENT RISK: The risk that interest rates may be lower than the yield on a fixed income security when the investor seeks to reinvest interest income or repaid principal from the security.

REPURCHASE AGREEMENT (REPO): A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security “buyer” in effect lends the “seller” money for the period of the agreement, and the terms of the agreement are structured to compensate them for this.

REVERSE REPURCHASE AGREEMENT (REVERSE REPO): A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specified date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to a repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

SAFEKEEPING: A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank’s vaults for protection.

SECONDARY MARKET: A market made for the purchase and sale of outstanding issues following the initial distribution.

SECURITIES & EXCHANGE COMMISSION: Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15C3-1: See Uniform Net Capital Rule.

STRUCTURED NOTES: Notes issued by Government Sponsored Enterprises (FHLB, FNMA, FHLMC, etc.) and Corporations, which have imbedded options (e.g., call features, step-up coupons, floating rate coupons, derivative-based returns) into their debt structure. Their market performance is impacted by the fluctuation of interest rates, the volatility of the imbedded options and shifts in the shape of the yield curve.

SUPRANATIONAL INSTITUTIONS: International institutions formed by two or more governments that transcend boundaries to pursue mutually beneficial economic or social goals. There are three supranational institutions that issue obligations that are eligible investments for California local agencies: the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB).

TOTAL RETURN: Total return includes interest, realized gains and losses, and unrealized gains and losses over a given period of time.

U.S. TREASURY OBLIGATIONS: Debt obligations of the U.S. Government sold by the Treasury Department in the forms of bills, notes, and bonds. Bills are short-term obligations that mature in one year or less and are sold at a discount. Notes are obligations that mature between one year and ten years. Bonds are long-term obligations that generally mature in ten years or more.

WEIGHTED AVERAGE MATURITY (WAM): The average maturity of all the securities that comprise a portfolio, typically expressed in days or years.

YIELD: The rate of annual income return on an investment, expressed as a percentage. (a) INCOME YIELD is obtained by dividing the current dollar income by the current market price for the security. (b) NET YIELD or YIELD TO MATURITY is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

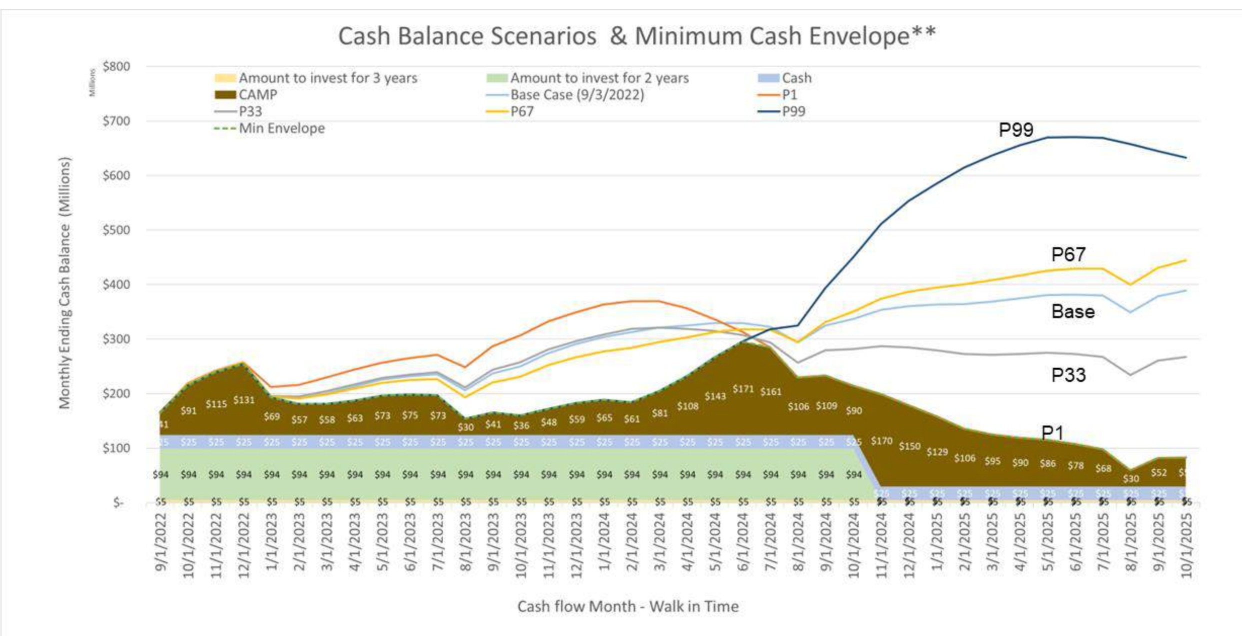
ZERO-COUPON BOND: A bond on which interest is not payable until maturity (or earlier redemption), but compounds periodically to accumulate to a stated maturity amount. Zero-interest bonds are typically issued at a discount and repaid at par upon maturity.

Attachment 5 – Cashflow Analysis

The table below describes the label used for each scenario in the graph below that illustrates the results of the cash flow analysis:

Scenario	Description
Base	The expected scenario using the current forward energy market prices.
P1	Energy prices starting Jan 1, 2023 and going forward, dropping to the one percentile level. This scenario models a significant revenue drop far exceeding the corresponding energy procurement cost decrease.
P33	Energy prices starting Jan 1, 2023 and going forward, dropping to the 33rd percentile level. This scenario models a moderate revenue drop exceeding the corresponding energy procurement cost reduction.
P67	Energy prices starting Jan 1, 2023 and going forward, increasing to the 67th percentile level. This scenario models a moderate increase in energy procurement costs with further increases in CAISO collateral calls.
P99	Energy prices starting Jan 1, 2023 and going forward, increasing to the 99th percentile level. This scenario models a significant increase in energy procurement costs with further increases in CAISO collateral calls.

All scenarios layer in a summer heat event like that experienced recently that drives liquidity needs by an additional ~$30 million.



The graph shows each scenario's cash balance over the modeled time horizon (Sept 2022 to October 2025). The dash-green line, labeled “Min Envelope,” shows the minimum cash balance under all the scenarios over time. This line further indicates that the lowest cash balance occurs in August 2025, when we would only have $60 million. As a result, after holding $25 million for normal operations and an additional $30 million in overnight investments, $5 million is available to invest with a maturity term of 3 years. In other words, under the worst cash balance position of all scenarios, if we do not want to sell securities for operational cash needs at any point in time, then invest at most $5 million with securities that mature in 3 years and $94 million with securities that mature in 2 years.

Using the same methodology described above for the “Min Envelope” case, the table below shows the amount available to invest under all the modeled scenarios for 3-year investment maturities and then any additional amount available for 2-year investment maturities.

Scenario	3-year Investment Maturity ($million)	2-year Investment Maturity ($million)
Base	$110	$0
P1	$5	$106
P33	$111	$0
P67	$111	$0
P99	$99	$0

Staff does not recommend using the most extreme scenario but instead recommends the P33 scenario or $111 million (rounded to $110 million) with an investment maturity term of zero to three years. If the extreme scenario occurs, SVCE will still have access to all the funds invested. The consequence would be selling the securities at a time not desired from an investment management perspective where the agency could incur mark-to-mark loss (loss of some principal). As staff gains more operational experience from the new cash management approach, staff will continue to refine the methodology and the models. As cash balances grow, staff will direct more funds toward the investment portfolio; however, staff will continue to raise additional funds in an overnight investment vehicle, such as CAMP, for potentially large Provider-of-Last-Resort (POLR) posting requirements expected in early 2023. The Stress Test Analysis, discussed at the June Board Meeting, described the POLR posting requirements.

Attachment 6 – Additional Information on California Asset Management Program (CAMP)

CAMP was created in 1989 when two public agencies formed the California Asset Management Trust (Trust) to meet local government investment needs at a reasonable cost. A Board of Trustees directs the Trust's activities, all of whom are finance officials of California public agencies. As a result, the Trust is accountable solely to its public agency shareholders.

The Trust's Cash Reserve Portfolio (Pool) is a short-term portfolio that, in order of priority, seeks to preserve principal, provide daily liquidity, and earn a high level of income. The Pool is a long-established short-term investment alternative for California public agencies. In conjunction with the Pool, the Trust offers a variety of cash management tools to assist public agencies in effectively managing their cash. As of July 31, 2022, the Pool has over $6 billion in public agency assets under management.

Some of the key benefits of the Pool are as follows:

- Safety: Standard and Poor's (S&P), a nationally recognized rating agency, reviews the Pool's assets each week. For the Pool to maintain the "AAAm" rating, the Pool must meet specific credit rating standards and not exceed the average maturity allowed by S&P. In addition, a third-party custodian holds all cash and securities.
- Daily liquidity: Shareholders may make withdrawals any time (the same day if CAMP is notified by 11:00 a.m. Pacific Time), and there is no limit on the number of transactions.
- Competitive yields
- Unlimited investments and withdrawals
- Interest earned daily and credited monthly
- Monthly statements
- For the proceeds of tax-exempt bonds, services to help ensure compliance with the arbitrage requirements of the Internal Revenue Code of the U.S. Department of Treasurys for bond proceeds, including arbitrage tracking, expenditure tests, annual estimates of rebate liability, and rebate calculations on Installment Computation Dates.

CAMP is governed by a seven-member board of highly respected California public finance officials. CAMP's Investment Adviser, PFM Asset Management LLC (PFMAM), provides day-to-day portfolio management and administrative services.

As with all money market funds, local government investment pools (LGIPs), and LAIF (the State of California's pooled investment fund), all expenses of the Trust are deducted from the Pool's yield. There are no out-of-pocket expenses for money invested in the Trust.

Attachment 7 – Additional Information on the Local Agency Investment Fund (LAIF)

The Local Agency Investment Fund (LAIF), is a voluntary program created by statute, began in 1977 as an investment alternative for California's local governments and special districts and it continues today under the purview of the State Treasurer. The enabling legislation for the LAIF is Section 16429.1 et seq. of the California Government Code.

LAIF offers local agencies the opportunity to participate in a major portfolio, which invests hundreds of millions of dollars, using the investment expertise of the State Treasurer's Office professional investment staff at no additional cost to the taxpayer. LAIF is part of the Pooled Money Investment Account (PMIA). The PMIA began in 1955 and oversight is provided by the Pooled Money Investment Board (PMIB) and an in-house Investment Committee. The PMIB members are the State Treasurer, Director of Finance, and State Controller.

The Local Investment Advisory Board (LIAB) provides oversight for LAIF. The Board consists of five members as designated by statute. The State Treasurer, as Chair, or her designated representative, appoints two members qualified by training and experience in the field of investment or finance, and two members who are treasurers, finance or fiscal officers, or business managers employed by any county, city, or local district or municipal corporation of this state. The term of each appointment is two years or at the pleasure of the Treasurer.

All securities are purchased under the authority of Government Code Section 16430 and 16480.4. The State Treasurer's Office takes delivery of all securities purchased on a delivery versus payment basis using a third-party custodian. All investments are purchased at market and a market valuation is conducted monthly.

Additionally, the PMIA has Policies, Goals, and Objectives for the portfolio to make certain that the goals of Safety, Liquidity, and Yield are not jeopardized, and that prudent management prevails. These policies are formulated by Investment Division staff and reviewed by both the PMIB and the LIAB on an annual basis. All of LAIF’s investments are allowed under the State Government Code and are consistent with the Investment Policy before SVCE’s Board.

The State Treasurer's Office is audited by the Bureau of State Audits on an annual basis and the resulting opinion is posted to the State Treasurer’s Office website following its publication. The Bureau of State Audits also has a continuing audit process throughout the year. All investments and LAIF claims are audited on a daily basis by the State Controller's Office as well as an internal audit process.

Under Federal Law, the State of California cannot declare bankruptcy, thereby allowing the Government Code Section 16429.3 to stand. This Section states that "sums of money placed with the Treasurer for deposit in the LAIF by cities, counties, special districts, nonprofit corporations, or qualified quasi-governmental agencies shall not be subject to either of the following: (a) transfer or loan pursuant to Sections 16310, 16312, or 16313, or (b) impoundment or seizure by any state official or state agency."

During the 2002 legislative session, California Government Code Section 16429.4 was added to the LAIF's enabling legislation. This Section states that "the right of a city, county, city, and county, special district, nonprofit corporation, or qualified quasi-governmental agency to withdraw its deposited sums of money from the LAIF, upon demand, may not be altered, impaired, or denied in any way, by any state official or state agency based upon the state's failure to adopt a State Budget by July 1 of each new fiscal year." LAIF has grown from 293 participants and $468 million in 1977 to 2,387 participants and $30.9 billion at the end of August 2022.

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2022-24

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY APPROVING THE INVESTMENT POLICY AND ANNUAL DELGATION OF AUTHORITY TO THE TREASURER

THE BOARD OF DIRECTORS OF THE SILICON VALLEY ENERGY AUTHORITY (“SVCE”) DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. The Board hereby approves the Investment Policy attached hereto as Exhibit A and made a part hereof.

Section 2. PFM Asset Management LLC is hereby directed to engage in the full scope of work set forth in that certain Agreement between SVCE and PFM Asset Management LLC for Investment Advisory Services, dated May 9, 2022.

Section 3. The Board hereby reauthorizes the delegation of its investment authority and the management of the investment program to the Treasurer for a period of one year.

Section 4. This Resolution shall take effect immediately upon its adoption

PASSED AND ADOPTED this 12th day of October 2022, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Willey				
City of Gilroy	Director Hilton				
City of Los Altos	Director Fligor				
Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Ellahie				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

Chair

ATTEST:

Board Secretary

EXHIBIT A

INVESTMENT POLICY

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2022-25

A RESOLUTION AUTHORIZING SILICON VALLEY CLEAN ENERGY AUTHORITY TO JOIN WITH OTHER PUBLIC AGENCIES AS A PARTICIPANT OF THE CALIFORNIA ASSET MANAGEMENT TRUST AND TO INVEST IN SHARES OF THE TRUST AND IN INDIVIDUAL PORTFOLIOS

WHEREAS, Section 6509.7 of Title 1, Division 7, Chapter 5 of the Government Code of the State of California (the “Joint Exercise of Powers Act”) provides that, if authorized by their legislative or other governing bodies, two or more public agencies that have the authority to invest funds in their treasuries may, by agreement, jointly exercise that common power;

WHEREAS, under Sections 6500 and 6509.7(b) of the Joint Exercise of Powers Act, a “public agency” includes, but is not limited to, any California county, county board of education, county superintendent of schools, city, public corporation, public district, regional transportation commission, state department or agency, any joint powers authority formed pursuant to the Joint Exercise of Powers Act by public agencies or any nonprofit corporation whose membership is confined to public agencies or public officials;

WHEREAS, public agencies that constitute local agencies, as that term is defined in Sections 53600 of Title 5, Division 2, Part 1, Chapter 4, Article 2 of the Government Code of the State of California (the “California Government Code”), are authorized pursuant to Section 53601(p), to invest all money belonging to, or in the custody of, a local agency not required for its immediate need in shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7 of the California Government Code that invests in the securities and obligations authorized in subdivisions (a) to (q), inclusive, of Government Code Section 53601;

WHEREAS, the California Asset Management Trust (the “Trust”) was established, pursuant to and in accordance with the Joint Exercise of Powers Act, by a Declaration of Trust, made as of December 15, 1989, as subsequently amended from time to time (the “Declaration of Trust”), as a vehicle for public agencies to jointly exercise their common power to invest the proceeds of debt issues and surplus funds;

WHEREAS, pursuant to and in accordance with the Joint Exercise of Powers Act, the Silicon Valley Clean Energy Authority (“SVCE”) desires to join the other public agencies which are or will be Participants of the Trust by adopting and executing the Declaration of Trust, a form which is on file in the office of the Chief Financial Officer/Director of Administrative Services;

WHEREAS, SVCE is a “public agency” as that term is defined in Sections 6500 and 6509.7(b) of the Joint Exercise of Powers Act and a “local agency” as that term is defined in Section 53600 of the California Government Code;

WHEREAS, SVCE is otherwise permitted to be a Participant of the Trust and to invest funds in the Trust and in the individual portfolios to be managed by the Investment Adviser to the Trust (“Individual Portfolios”); and

WHEREAS, a program guide describing the Trust and the Individual Portfolios (the "Program Guide") is on file in the office of the Chief Financial Officer/Director of Administrative Services.

NOW THEREFORE, the Board of Directors of SVCE does hereby resolve, determine, and order as follows:

Section 1. SVCE shall join with other public agencies pursuant to and in accordance with the Joint Exercise of Powers Act by executing the Declaration of Trust and thereby becoming a Participant in the Trust, which Declaration of Trust is hereby approved and adopted. A copy of the Declaration of Trust, which is available in the office of the Chief Financial Officer/Director of Administrative Services shall be filed with the minutes of the meeting at which this Resolution was adopted. The Chair is hereby authorized to execute, and the Secretary of SVCE is hereby authorized to attest and deliver, the Declaration of Trust.

Section 2. SVCE is hereby authorized to purchase shares in the Trust from time to time with available funds of SVCE, and to redeem some or all of those shares from time to time as such funds are needed.

Section 3. SVCE is hereby authorized to invest available funds of SVCE from time to time in one or more Individual Portfolios managed by the Investment Adviser to the Trust and described in the Program Guide.

Section 4. The appropriate officers, agents and employees of SVCE are hereby authorized and directed in the name and on behalf of SVCE to take all actions and to make and execute any and all certificates, requisitions, agreements, notices, consents, warrants and other documents, and any changes, amendments, modifications, or waivers thereto which they, or any of them, might deem necessary or appropriate in order to accomplish the purposes of this Resolution.

Section 5. This Resolution shall take effect immediately upon its adoption

PASSED AND ADOPTED this 12th day of October 2022, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Willey				
City of Gilroy	Director Hilton				
City of Los Altos	Director Fligor				
Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Ellahie				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				

County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

Chair

ATTEST:

Andrea Pizano, Board Secretary

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2022-26

RESOLUTION OF SILICON VALLEY CLEAN ENERGY AUTHORITY AUTHORIZING INVESTMENT OF MONIES IN THE LOCAL AGENCY INVESTMENT FUND

WHEREAS, the Local Agency Investment Fund is established in the State Treasury under Government Code section 16429.1 et. seq. for the deposit of money of a local agency for purposes of investment by the State Treasurer; and

WHEREAS, the Board of Directors of the Silicon Valley Clean Energy Authority (SVCE) hereby finds that the deposit and withdrawal of money in the Local Agency Investment Fund in accordance with Government Code section 16429.1 et. seq. for the purpose of investment as provided therein is in the best interests of the SVCE;

NOW THEREFORE, the Board of Directors of SVCE does hereby resolve, determine and order as follows:

Section 1. The deposit and withdrawal of SVCE monies in the Local Agency Investment Fund in the State Treasury in accordance with Government Code section 16429.1 et. seq. for the purpose of investment as provided therein is hereby authorized.

Section 2. The following SVCE officers holding the title(s) specified hereinbelow or their successors in office are each hereby authorized to order the deposit or withdrawal of monies in the Local Agency Investment Fund and may execute and deliver any and all documents necessary or advisable in order to effectuate the purposes of this resolution and the transactions contemplated hereby: Amrit Singh, Treasurer/Chief Financial Officer/Director of Administrative Services.

Section 3. This resolution shall remain in full force and effect until rescinded by SVCE Board of Directors by resolution and a copy of the resolution rescinding this resolution is filed with the State Treasurer's Office.

Section 4. This Resolution shall take effect immediately upon its adoption

PASSED AND ADOPTED this 12th day of October 2022, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Willey				
City of Gilroy	Director Hilton				
City of Los Altos	Director Fligor				
Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Ellahie				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

Chair

ATTEST:

Andrea Pizano, Board Secretary

Staff Report – Item 6

Item 6:	**New Construction Reach Code Update**
From:	Girish Balachandran, CEO
Prepared by:	Zoe Elizabeth, Deputy Director of Decarbonization Programs and Policy Justin Zagunis, Director of Decarbonization Programs and Policy
Date:	10/12/2022

RECOMMENDATION
Staff requests that the Board of Directors receive an update from the Decarbonization Programs and Policy team on New Construction Reach Codes.

BACKGROUND
In 2019, SVCE offered technical support to member jurisdictions that were evaluating options for amending the state's 2020 building code. Eleven of SVCE's jurisdiction's passed reach codes applying to the 2019 building code. These reach codes (with the exception of those passed by Morgan Hill and Campbell) will expire 12/31/2022.

Staff is in the process of supporting member agencies with core technical assistance and supportive elements, to adopt, renew, or enhance these codes. In addition, staff is in the process of developing resources that will support policies for existing building electrification.

An initial update was provided to the Board of Directors at the March 9, 2022 board meeting, with additional updates in April, May, June, August, and September.

ANALYSIS & DISCUSSION
In an effort to continue communications with the Board of Directors on reach codes, staff will provide a presentation with status updates and highlight upcoming actions/priorities.

STRATEGIC PLAN
These efforts support SVCE's Strategic Plan Goal 8, "coordinate development of decarbonization and resilience strategy, lead design of local policy and programs, and support program deployment."

FISCAL IMPACT
N/A

ATTACHMENTS
1. This presentation is posted to the SVCE website.