

Margaret Abe-Koga, Chair City of Mountain View

Howard Miller, Vice Chair City of Saratoga

Liz Gibbons City of Campbell

Rod Sinks City of Cupertino

Fred M. Tovar City of Gilroy

Jeannie Bruins City of Los Altos

Courtenay C. Corrigan Town of Los Altos Hills

Marico Sayoc Town of Los Gatos

Bob Nuñez City of Milpitas

Javed Ellahie City of Monte Sereno

Yvonne Martinez Beltran City of Morgan Hill

Susan Ellenberg County of Santa Clara

Nancy Smith City of Sunnyvale

svcleanenergy.org

333 W El Camino Real Suite 290 Sunnyvale, CA 94087

Silicon Valley Clean Energy Authority Board of Directors Meeting

Wednesday, April 10, 2019 7:00 pm

Cupertino Community Hall 10350 Torre Avenue Cupertino, CA

AGENDA

Call to Order

Roll Call

Public Comment on Matters Not Listed on the Agenda

The public may provide comments on any item not on the Agenda. Speakers are limited to 3 minutes each.

Presentation of Resolution Recognizing SVCE's Two Years of Service

Consent Calendar (Action)

- 1a) Approve Minutes of the March 13, 2019, Board of Directors Meeting
- 1b) Receive February 2019 Treasurer Report
- 1c) Adopt Resolution Amending the Authority's Conflict of Interest Code to Add Finance and Administration Committee Member to the List of Designated Positions for Filing
- 1d) Approve the Cancellation of the August 21, 2019 Board of Directors Meeting and Reinstate August 14, 2019 Meeting Date

Regular Calendar

- 2) CEO Report (Discussion)
- 3) Adopt Resolution to Approve SVCE Rate Schedules Effective May 1, 2019 and Authorize the CEO to Further Adjust Customer Generation Rates to be 1% Below PG&E's Final Rates (Action)
- 4) Approve the Q1 2019 Update of the Decarbonization Strategy and Programs Roadmap with Revised Program Briefs and Adopt Resolution

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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).



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Susan Ellenberg County of Santa Clara

Nancy Smith City of Sunnyvale Approving the Budget Request for Workforce Development and Training Programs (Action)

- 5) Executive Committee Report (Discussion)
- 6) Finance and Administration Committee Report (Discussion)
- 7) Legislative Ad Hoc Committee Report (Discussion)
- 8) Audit Committee Report (Discussion)

Board Member Announcements and Direction on Future Agenda Items

<u>Adjourn</u>

svcleanenergy.org

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Silicon Valley Clean Energy Authority Board of Directors Meeting

Wednesday, March 13, 2019 7:00 pm

Cupertino Community Hall 10350 Torre Avenue Cupertino, CA

DRAFT MINUTES

Call to Order

Vice Chair Miller called the meeting to order at 7:03 p.m.

Roll Call

Present:

Vice Chair Howard Miller, City of Saratoga
Alternate Director Liz Lawler, City of Monte Sereno
Director Bob Nuñez, City of Milpitas
Director Marico Sayoc, Town of Los Gatos
Alternate Director Gustav Larsson, City of Sunnyvale
Director Rod Sinks, City of Cupertino
Director Courtenay Corrigan, Town of Los Altos Hills
Director Liz Gibbons, City of Campbell
Alternate Director Anthony Eulo, City of Morgan Hill
Director Susan Ellenberg, County of Santa Clara
Director Fred Tovar, City of Gilroy

Absent:

Chair Margaret Abe-Koga, City of Mountain View Director Jeannie Bruins, City of Los Altos

Public Comment on Matters Not Listed on the Agenda

No speakers.

Consent Calendar

General Counsel Greg Stepanicich announced a correction to Item 1g) Authorize CEO to Execute Agreement with EV Alliance for Developing a Joint Action Plan for Silicon Valley Clean Energy and its Member Communities to Pursue Electric Vehicle Charging Infrastructure Programs and Strategies, and addressed the revised staff report at the dais. Stepanicich noted the agreement would be between the party 'E-Mobility Group' and SVCE; the previously listed business, 'EV Alliance', operates under the same personnel but under a non-profit format, while 'E-Mobility Group' is a for-profit business. Stepanicich added the change in business name in the staff report would not alter the contract or nature of business, services or rates proposed.

Vice Chair Miller opened public comment. No speakers. Vice Chair Miller closed public comment. MOTION: Director Gibbons moved and Director Ellenberg seconded the motion to approve the Consent Calendar with the amendment noted by General Counsel on Item 1g) *Authorize CEO to Execute Agreement with EV Alliance for Developing a Joint Action Plan for Silicon Valley Clean Energy and its Member Communities to Pursue Electric Vehicle Charging Infrastructure Programs and Strategies.*

Vice Chair Miller reported he would be recusing from Item 1f) Adopt Resolution to Delegate Authority to Chief Executive Officer to Enter Into Certain Transactions Under Approved Master Agreements Pursuant to the Energy Risk Management Policy and Authorize the Chief Executive Officer to Execute Master Agreement with NextEra Energy Marketing, LLC, due to his investment in stock with NextEra Energy Marketing, LLC.

The motion carried unanimously with an abstention by Vice Chair Miller on Item 1f, and Chair Abe-Koga and Director Bruins absent.

- 1a) Approve Minutes of the February 13, 2019, Board of Directors Meeting
- 1b) Approve Minutes of the February 23, 2019, Board of Directors Special Meeting
- 1c) Receive December 2018 Treasurer Report
- 1d) Receive January 2019 Treasurer Report
- 1e) Approve Appointment of Maria Öberg, County Treasury Administrator, to Serve on the SVCE Finance and Administration Committee
- 1f) Adopt Resolution to Delegate Authority to Chief Executive Officer to Enter Into Certain Transactions Under Approved Master Agreements Pursuant to the Energy Risk Management Policy and Authorize the Chief Executive Officer to Execute Master Agreement with NextEra Energy Marketing, LLC
- 1g) Authorize CEO to Execute Agreement with EV Alliance for Developing a Joint Action Plan for Silicon Valley Clean Energy and its Member Communities to Pursue Electric Vehicle Charging Infrastructure Programs and Strategies
- 1h) Authorize CEO to Execute Amendment to the Current Agreement with Richards, Watson and Gershon in an Amount Not to Exceed \$185,000 for Legal Services
- 1i) Approve Amended Title for Energy Associate, Job Description Updates for Associate Energy Consultant and Energy Consultant Positions, Amendment to Salary Ranges for Senior Analyst and Senior Energy Consultant, and Adopt Resolution Renaming the Organization Chart as the Positions Chart and Amending the Approved Positions Chart, Job Classifications, and Salary Schedule

Regular Calendar

2) CEO Report (Discussion)

CEO Girish Balachandran provided a CEO report which included an introduction of new employee Lisa Lai, Administrative Assistant, and information on a request for proposals (RFP) being issued by five bay area CCAs to develop a consolidated buyer for resource adequacy (RA).

Manager of Regulatory and Legislative Affairs Hilary Staver provided a regulatory and legislative update on RA, the next steps from the California Public Utilities Commission (CPUC) as a result of the SB237 decision, and the order instituting investigation into PG&E's safety culture. Manager of Regulatory and Legislative Affairs Staver responded to Board member questions.

Vice Chair Miller opened public comment. No speakers.

Vice Chair Miller closed public comment.

3) Approve the FY 2018-19 SVCE Mid-Year Budget (Action)

Director of Finance and Administration introduced the item, presented a PowerPoint presentation and responded to Board questions. Staff provided additional information regarding rate projections and PG&E rate changes and responded to Board member questions.

The Board and staff discussed potential SVCE rates and its impact on reserves; Board members provided feedback on the interim rate change option to bring back to the Board for approval in April.

Vice Chair Miller summarized the Board's direction to staff to bring back a rate option in April tracking PG&E's rate change.

Vice Chair Miller opened public comment.

Bruce Karney, Chair of Carbon Free Mountain View and board member of Carbon Free Silicon Valley, summarized his interpretation of previous discussion points on rate policies; Karney commented he is a fan of getting SVCE's reserves to the target level rapidly but once that happens, he is a fan of deploying a lot of money toward carbon reduction programs. Karney noted he would love to see an option in April that shrinks the gap between PG&E's and SVCE's prices.

Vice Chair Miller closed public comment.

MOTION: Director Gibbons moved and Alternate Director Eulo seconded the motion to accept the FY 2018-19 Mid-Year Operating Budget as presented by staff.

The motion carried unanimously with Chair Abe-Koga and Director Bruins absent.

4) Executive Committee Report (Discussion)

Vice Chair Miller reported there was no report as the Executive Committee had not met.

5) Finance and Administration Committee Report (Discussion)

Vice Chair Miller reported there was no report as the Finance and Administration Committee had not met, and the next meeting would occur in spring.

6) Legislative Ad Hoc Committee Report (Discussion)

Director Sinks reported the Legislative Ad Hoc Committee met the previous week and appointed him as Chair and Director Nancy Smith as Vice Chair. The Ad Hoc committee reviewed the role of the committee and SVCE's legislative resources and advocacy history, analyzed the 2019 legislative session, and SVCE lobbyist Steve Baker provided an overview of the legislative landscape by phone. The committee discussed emerging major themes in energy legislation, specific bills of interest, and the relationship between activity at the legislature and the ongoing proceedings at the CPUC. The committee planned for upcoming advocacy opportunities including participation in CalCCA's lobby day in Sacramento on April 3rd.

Alternate Director Eulo requested staff look into the need for a standing committee to discuss legislative issues.

7) Audit Committee Report (Discussion)

Director Corrigan reported there was no report as the Audit Committee had not met and noted the next meeting is tentatively scheduled for April 29th.

Board Member Announcements and Direction on Future Agenda Items

Director Gibbons reported she attended The American Institute of Architects (AIA) Conference, Architectural Intelligence 2019, and reported she was in Washington D.C. for her role on the AIA Strategic

Council to lobby for legislation. Director Gibbons noted one of the lobbying efforts was relevant to SVCE regarding an expired IRS rule that allows businesses to build new buildings to get a tax credit for energy efficient components in their buildings. Director Gibbons commented her group was lobbying legislators to renew the expired rule, but also make it applicable to existing buildings; Dir. Gibbons stated the types of topics that are considered eligible for the IRS credits would be relevant as SVCE looks at programs going forward.

Director Gibbons introduced staff to the commercial building energy index (CBX), which is a platform that tracks buildings designed by architects and indicates how energy is used as well as predicted energy use. Director Gibbons commented they are looking for best practices on how to save energy in the design of buildings, and noted this could be something SVCE can take advantage of and compare notes.

Director Sinks reported the presenter at the AIA Architectural Intelligence Conference on decarbonization strategies, Panama Bartholomy, gave a compelling presentation about the amount of leakage we have through our natural gas distribution system. Director Sinks reported he met with the chief executive of Bay Area Air Quality Management District (BAAQMD) about SVCE and the presentation by Panama Bartholomy, and noted the chief executive will work on BAAQMD providing supplemental incentives to electrify new construction.

CEO Balachandran commented SVCE would hold a special meeting starting at 6:00 p.m. on April 10, 2019 with special speaker Panama Bartholomy, Director of the Building Decarbonization Coalition.

Vice Chair Miller announced England is proposing a measure to ban gas for home heating in all new construction starting in 2025.

Alternate Director Larsson announced the City of Sunnyvale's draft Climate Action Playbook is released for public review and comment at bit.ly/sunnyvaleplaybook, and comments will be accepted through April 26. Public hearings will occur in March and April, there is an online survey at www.opentownhall.com, and the main community meeting will be held at the Murphy Park building in Sunnyvale on Saturday, March 23, from 10:00 a.m. to noon. Alternate Director Larsson noted questions can be answered by emailing green@sunnyvale.ca.gov, or by calling (408) 730-7717.

Vice Chair Miller opened public comment.

Bruce Karney announced the SPUR organization's luncheon on March 22, 2019 at the Computer History Museum which will be honoring SVCE's Implementation Team.

<u>Adjourn</u>

Vice Chair Miller adjourned the meeting at 8:17 p.m.



TREASURER REPORT

Fiscal Year to Date As of February 28, 2019

(Preliminary & Unaudited)

Issue Date: March 13, 2019

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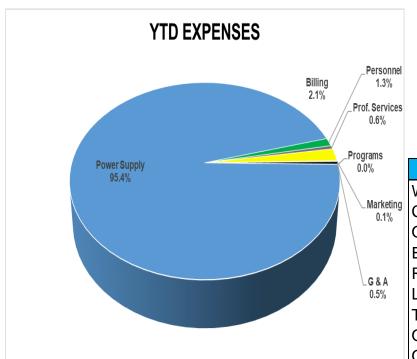
SILICON VALLEY CLEAN ENERGY AUTHORITY Financial Statement Highlights (\$ in 000's)

Financial Highlights for the month of February 2019:

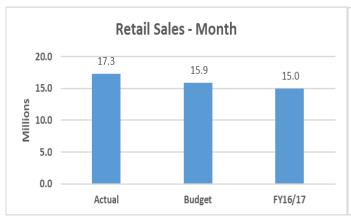
Note: Mid-Year Budget Adjustments approved by the Board in March 2019. A favorable adjustment to revenues based on projected rates was offset by unfavorable adjustment to Power Supply cost resulting in no change to net position.

- > SVCE operations resulted in a negative change in net position for the month of (\$0.5) million and year-to-date change in net position of \$5.7 million.
 - o February revenue of \$17.3 million accounted for 299 GWh in net retail consumption.
 - Year-to-date operating margin is \$9.8 million and is now \$2.0 million above budget.
 - SVCE is above the minimum cash reserve target and has stable liquidity.
- Retail GWh sales for the month were 23 GWh below budget for the month and 7% below budget year-to-date.
 - February was a colder than normal month.
 - The Mid-Year Budget trued up actuals to budget for October through January.
- Power Supply
 - Year-to-date power supply is 4% below budget.
 - Staff is developing risk management guidelines.
- Programs/Capital
 - o The Programs Roadmap was approved by the Board of Directors in December 2018.
 - EV Charging Station program was presented at the February 2019 Board of Directors meeting.
- > Investing/Financing
 - SVCE amended its credit agreement with River City Bank to expand the line of credit to \$35 million.

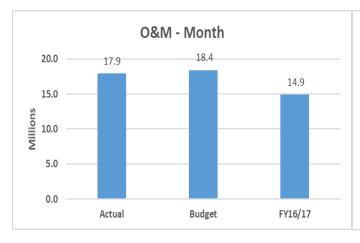
														Amenaea
Change in Net Position	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Budget
Actual	8,092	953	1,947	(4,819)	(523)	-	-	-	-	-	-	-	5,649	29,584
						_						_		
Power Supply Costs	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Budget
Energy & REC's	14,735	13,930	12,890	18,262	14,103								73,920	
Capacity	985	912	1,082	1,554	1,596								6,129	
CAISO Charges	798	1,043	438	1,768	917								4,964	
NEM Expense	74	(82)	(242)	(287)	(146)								(683)	
Charge/Credit (IST/Net Rev)	569	1,089	3,383	2,064	497								7,602	
Net Power Costs	17,161	16,892	17,551	23,361	16,968	-	-	-	-	-	-	-	91,932	234,330
Other	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Budget
Capital Expenditures	2	-	6	1	1								10	150
Energy Programs	37	3	_	1	3								44	5,177
Load Statistics - GWh	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total	Budget
Retail Sales Actual	323	318	354	336	299								1,630	
Retail Sales Budget	323	318	354	336	322	302	308	310	328	353	345	337	3 036	3 036

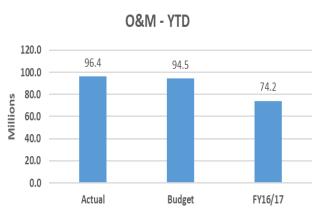


Other Statistics and	Ratios
Working Capital	\$80,785,721
Current Ratio	3.2
Operating Margin	10%
Expense Coverage Days	95
Return on Assets	5%
Long-Term Debt	\$0
Total Accounts	268,342
Opt-Out Accounts	9,736
Opt-Up Accounts	3,120









STATEMENT OF NET POSITION As of February 28, 2019

ASSETS

AGGETG		
Current Assets		
Cash & Cash Equivalents	\$	78,580,297
Accounts Receivable, net of allowance		15,538,656
Accrued Revenue		11,737,256
Other Receivables		200,537
Prepaid Expenses		977,741
Deposits		6,142,300
Restricted cash - lockbox		4,000,000
Total Current Assets		117,176,787
Noncurrent assets		
Capital assets, net of depreciation		167,620
Deposits		3,129,060
Total Noncurrent Assets		3,296,680
Total Assets		120,473,467
LIABILITIES		
Current Liabilities		224 224
Accounts Payable		684,824
Accrued Cost of Electricity		33,609,730
Accrued Payroll & Benefits		322,883
Other accrued liabilities		401,340
User Taxes and Energy Surcharges due to other gov'ts		758,969
Supplier Security Deposits		613,320
Total Current Liabilities		36,391,066
NET POSITION		
NET POSITION		167 600
Net investment in capital assets		167,620 4,000,000
Restricted for security collateral Unrestricted (deficit)		79,914,781
,	<u> </u>	
Total Net Position	\$	84,082,401

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION October 1, 2018 through February 28, 2019

OPERATING REVENUES Electricity Sales, Net GreenPrime electricity premium TOTAL OPERATING REVENUES	\$	101,384,300 344,989 101,729,289
OPERATING EXPENSES		
Cost of Electricity		91,931,952
Staff Compensation and benefits		1,278,797
Data Management		1,506,546
Service Fees - PG&E		476,409
Consultants and Other Professional Fees		462,757
Legal		137,367
Communications & Noticing		129,378
General & Administrative		424,677
Depreciation	_	21,055
TOTAL OPERATING EXPENSES		96,368,938
OPERATING INCOME(LOSS)	_	5,360,351
NONOPERATING REVENUES (EXPENSES)		
Interest Income		344,717
Financing costs		(55,856)
Gain (loss) on sale of equipment		(1,531)
TOTAL NONOPERATING EXPENSES	_	287,330
CHANGE IN NET POSITION		5,647,681
Net Position at beginning of period	_	78,434,720
Net Position at end of period	\$	84,082,401

STATEMENT OF CASH FLOWS October 1, 2018 through February 28, 2019

CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from electricity sales	\$	114,924,951
Receipts from wholesale sales		362,740
Supplier security deposits		28,320
Tax and surcharge receipts from customers		2,219,579
Energy settlements received		223,732
Deposits and collateral received		4,914,470
Payments to purchase electricity		(92,669,211)
Payments for staff compensation and benefits		(1,223,620)
Payments for data manager fees		(1,506,346)
Payments for PG&E service fees		(376,744)
Payments for consultants and other professional services		(424,404)
Payments for legal fees		(128,101)
Payments for communications and noticing		(160,873)
Payments for general and administrative		(489,951)
Payments of deposits and collateral		(500)
Tax and surcharge payments to other governments	_	(2,360,060)
Net cash provided (used) by operating activities	_	23,333,982
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Interest and related expense payments		(55,856)
Net cash provided (used) by non-capital financing activities	_	(55,856)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition of capital assets	_	(5,886)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Interest income received	_	344,717
Net change in cash and cash equivalents		23,616,957
Cash and cash equivalents at beginning of year	_	58,963,340
Cash and cash equivalents at end of period	\$	82,580,297

STATEMENT OF CASH FLOWS (Continued) October 1, 2018 through February 28, 2019

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

Operating Income (loss) \$ 5,360,351

Adjustments to reconcile operating income to net cash provided (used) by operating activities

Net cash provided (used) by operating activities	<u>\$</u>	23,333,982
Increase (decrease) in supplier security deposits		28,320
Increase (decrease) in taxes and surcharges due to other governments		(261,416)
Increase (decrease) in accrued liabilities		401,340
Increase (decrease) in accrued cost of electricity		(1,147,882)
Increase (decrease) in energy settlements payable		573,939
Increase (decrease) in accrued payroll & benefits		131,594
Increase (decrease) in accounts payable		(35,714)
(Increase) decrease in current deposits		4,913,970
(Increase) decrease in prepaid expenses		146,105
(Increase) decrease in accrued revenue		5,194,105
(Increase) decrease in other receivables		(114,276)
(Increase) decrease in net accounts receivable		7,611,288
Revenue reduced for uncollectible accounts		511,203
Depreciation expense		21,055

SILICON VALLEY CLEAN ENERGY BUDGETARY COMPARISON SCHEDULE October 1, 2018 through February 28, 2019

	FYTD	FYTD Amended	<u>Variance</u>		FY 2018-19 Amended	% Budget
REVENUES & OTHER SOURCES	<u>Actual</u>	Budget	<u>\$</u>	<u>%</u>	<u>Budget</u>	<u>Spent</u>
Energy Sales	\$ 101,384,300	\$ 102,950,438	\$ (1,566,138)	-2%	\$ 281,890,000	
Green Prime Premium	344,989	327,211	17,778	5%	630,000	
Other Income	-	12,500	(12,500)	-100%	100,000	
Investment Income	344,717	323,884	20,833	<u>0%</u>	850,000	
TOTAL REVENUES & OTHER SOURCES	102,074,006	103,614,033	(1,540,027)	<u>-1%</u>	283,470,000	
EXPENDITURES & OTHER USES						
CURRENT EXPENDITURES						
Power Supply	91,931,952	95,442,385	3,510,433	4%	234,330,000	39%
Data Management	1,506,546	1,498,712	(7,834)	-1%	3,560,000	42%
PG&E Fees	476,409	470,135	(6,274)	-1%	1,120,000	43%
Salaries & Benefits	1,278,797	1,437,047	158,250	11%	4,300,000	30%
Professional Services	556,586	722,719	166,133	23%	2,290,000	24%
Marketing & Promotions	108,837	180,707	71,870	40%	910,000	12%
Notifications	20,541	33,499	12,958	39%	160,000	13%
Lease	133,359	134,054	695	1%	330,000	40%
General & Administrative	292,849	289,710	(3,139)	<u>-1%</u>	836,000	<u>35%</u>
TOTAL CURRENT EXPENDITURES	96,305,876	100,208,969	3,903,093	4%	247,836,000	39%
OTHER USES						
Customer Programs	43,538	740.419	696,881	94%	5,640,000	1%
•	43,536 9,844	-, -	•	94% 34%	, ,	1% 5%
Office Equipment	9,044	14,864	5,020	34%	200,000	5%
Financial Security Requirement	-	-	=		147,000	
Refund of Bond					(100,000)	
TOTAL OTHER USES	53,382	755,283	701,901	<u>93%</u>	5,887,000	<u>1%</u>
DEBT SERVICE						
Financing	55,856	60,124	4,268	7%	90,000	62%
Interest	, =	15,000	15,000	100%	120,000	0%
TOTAL DEBT SERVICE	55,856	75,124	19,268	<u>26%</u>	210,000	<u>27%</u>
Total Expenditures, Other Uses						
& Debt Service	96,415,114	101,039,376	4,624,262	<u>5%</u>	253,933,000	38%
a Debt Ocivide	30,413,114	101,033,310	7,024,202	<u>3 /0</u>	233,333,000	30 76
Net Increase(Decrease) in Available						
Fund Balance	\$ 5,658,892	\$ 2,574,657	\$ 3,084,235	<u>120%</u>	\$ 29,537,000	

BUDGET RECONCILIATION TO STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

Change in Net Position	 5,647,681
Add back capital asset acquisitions	 9,844
Subtract depreciation expense	(21,055)
Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position	
Net Increase (decrease) in available fund balance per budgetary comparison schedule	\$ 5,658,892

SILICON VALLEY CLEAN ENERGY AUTHORITY STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION October 1, 2018 through February 28, 2019

	October	November	December	January	February	March	April	M	lay	June	July	Augu	ıst	September	YTD
OPERATING REVENUES															
Electricity sales, net	\$ 26,013,308	\$ 18,589,640	\$ 20,295,540	\$ 19,278,907	\$ 17,206,905										\$ 101,384,300
Green electricity premium	76,005	66,459	67,567	73,924	61,034										344,989
Other income		-	-	-	-										-
Total operating revenues	26,089,313	18,656,099	20,363,107	19,352,831	17,267,939	-		-	-	-	-	•	-	-	101,729,289
OPERATING EXPENSES															
Cost of electricity	17,160,575	16,892,744	17,551,069	23,433,656	16,893,908										91,931,952
Staff compensation and benefits	236,907	256,926	264,613	269,608	250,743										1,278,797
Data manager	301,479	300,856	301,200	301,385	301,626										1,506,546
Service fees - PG&E	94,279	94,000	94,377	94,000	99,753										476,409
Consultants and other professional fees	130,737	114,869	129,909	123,353	230,634										729,502
General and administration	99,316	70,743	74,028	73,621	106,969										424,677
Depreciation	4,179	4,179	4,335	4,393	3,969										21,055
Total operating expenses	18,027,472	17,734,317	18,419,531	24,300,016	17,887,602	-		-	-	-		•	-	-	96,368,938
Operating income (loss)	8,061,841	921,782	1,943,576	(4,947,185)	(619,663)	-	-		-	-	-			-	5,360,351
NONOPERATING REVENUES (EXPENSES)															
Interest income	30,474	30,758	58,997	128,308	96,180										344,717
Interest and related expense	-	-	(55,856)	-	-										(55,856)
Total nonoperating revenues (expenses)	30,474	30,758	3,141	128,308	96,180	-		-	-	-			-	-	288,861
CHANGE IN NET POSITION	\$ 8,092,315	\$ 952,540	\$ 1.946.717	\$ (4,818,877)	\$ (523,483)	\$ -	\$ -	\$	- \$	- \$	-	\$	- 9	\$ -	\$ 5,649,212

PERSONNEL REPORT FOR FEBRUARY 2019

HEADCO	UNT		
Position Director of Account Services and Community Relations	Budget 1	<u>Actual</u> 1	Variance 0
Account Services Manager	1	1	0
Energy Consultant	2	1	1
Energy Associate	2	0	2
Communications Manager	1	1	0
Community Outreach Specialist	1	1	0
Communications Specialist	1	1	0
Board Clerk/Executive Assistant	1	1	0
Chief Executive Officer	1	1	0
Director of Finance and Administration	1	1	0
Administrative Services Manager	1	0	1
Management Analyst	1	1	0
Administrative Analyst	1	1	0
Administrative Assistant	1	1	0
Director of Power Resources	1	1	0
Power Resources Manager	1	0	1
Power Resources Planner	1	1	0
Power Settlements & Compliance Analyst	1	1	0
Manager of Regulatory and Legislative Affairs	1	1	0
Senior Regulatory Analyst	1	1	0
Director of Decarboniation and Grid Innovation	1	1	0
Data Analyst	1	0	1
Analyst	<u>1</u>	<u>1</u>	<u>0</u>
Total*	<u>25</u>	<u>19</u>	<u>6</u>

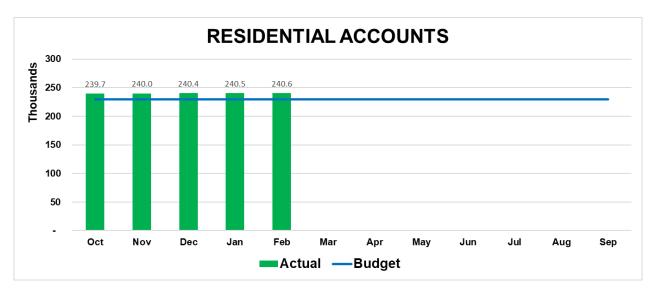
VTD

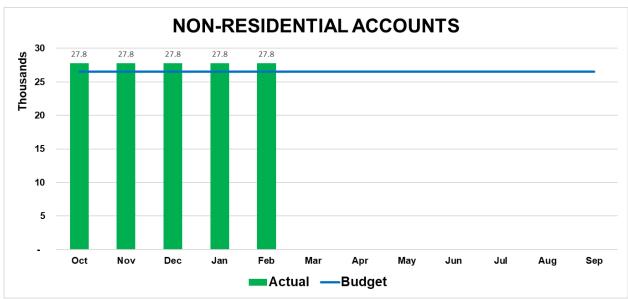
SILICON VALLEY CLEAN ENERGY AUTHORITY INVESTMENTS SUMMARY October 1, 2018 through February 28, 2019

Return on Investments Money Market	<u>Oct</u> \$30,474	<u>Nov</u> \$30,758	<u>Dec</u> \$58,997	<u>Jan</u> \$128,308	<u>Feb</u> \$96,180	<u>Mar</u> \$0	<u>Apr</u> \$0	<u>May</u> \$0	Jun \$0	<u>Jul</u> \$0	Aug \$0	Sep \$0	YTD <u>Total</u> \$344,717
Portfolio Invested Average daily portfolio available to invest*	55,148,395	63,583,109	62,254,625	69,135,839	70,770,817								
Average daily portfolio invested	20,154,823	20,185,339	35,700,846	60,277,386	60,380,303								
% of average daily portfolio invested	36.5%	31.7%		87.2%	85.3%								
Detail of Portfolio													
Manay Markat - Piyar City Pank	Opening Rate % 1.26%		Current Rate %	-	Carrying Value \$60,473,048								
Money Market - River City Bank	1.20%		1.91%		Φ 00,473,048								

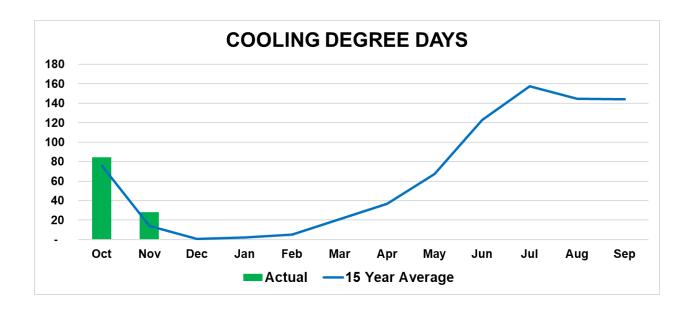
^{*} Note: Balance available to invest does not funds in the lockbox or deposits for power supply.

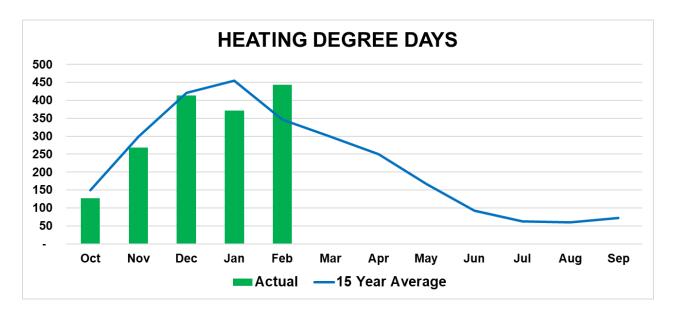
CUSTOMER ACCOUNTS





WEATHER STATISTICS





SILICON VALLEY CLEAN ENERGY AUTHORITY ACCOUNTS RECEIVABLE AGING REPORT

		Days				
	Total	0-30	31-60	61-90	90-120	Over 120*
Accounts Receivable	\$17,777,873	\$15,478,025	\$1,146,442	\$267,308	\$205,888	\$680,209
Period %	100%	87.1%	6.4%	1.5%	1.2%	3.8%

^{*}Note: A portion of accounts that are 120 days old have been sent back to PG&E, however the receivable remains outstanding until PG&E writes the account off.



Staff Report - Item 1c

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 1c: Adopt Resolution Amending the Authority's Conflict of Interest Code to Add Finance

and Administration Committee Member to the List of Designated Positions for Filing

Date: 4/10/2019

RECOMMENDATION

Adopt Resolution 2019-05 amending the SVCEA conflict of interest code to add Finance and Administration Committee Member as a designated position.

BACKGROUND

Shortly after the formation of SVCEA, the Board of Directors adopted a conflict of interest code as required by the Political Reform Act, commencing at Government Code Section 81000. The code lists the positions within the Authority that are required to file statements of economic interests (Form 700). As a joint powers authority with members located entirely within Santa Clara County, the County Board of Supervisors is the conflict code reviewing body that is required to approve all changes to the conflict of interest code. County Counsel has advised that when positions are added or removed from the conflict code, a new resolution must be adopted approving a new conflict of interest code with the added or removed position(s).

At the March 13, 2019 SVCE Board of Directors meeting, the Board of Directors approved the appointment of Maria Öberg, County Treasury Administrator, to serve on the 2019 SVCE Finance and Administration Committee.

ANALYSIS & DISCUSSION

SVCE has not had an agency staff member serve on a committee before, so the need to add a position to the conflict of interest code for committee members did not arise. With Ms. Öberg's appointment in March, it was advised by general counsel that Finance and Administration Committee members, who are not Directors of the Board, file a Form 700 to disclose any economic interests due to the topics addressed at Finance and Administration committees.

In accordance with the requirements of the Political Reform Act and the County of Santa Clara, a new conflict of interest code must be adopted by resolution which includes the newly created or identified positions as well as any changes to the existing Conflict of Interest Code. The attached resolution amends Appendix A to the Authority's Code to reflect the addition of "Finance and Administration Committee Member".

STRATEGIC PLAN

Not applicable.

ALTERNATIVES

None.

Agenda Item: 1c Agenda Date: 4/10/2019

FISCAL IMPACT

There is no fiscal impact as a result of the addition of the position.

ATTACHMENT

1. Resolution 2019-05 Amending the Authority's Conflict of Interest Code to Add One Position

RESOLUTION NO. 2019-05

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY AMENDING THE AUTHORITY'S CONFLICT OF INTEREST CODE TO ADD ONE POSITION

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 Political Reform Act, Government Code Section 81000, et seq., (the "Political Reform Act") requires each public agency in California, including the Authority, to adopt and promulgate a conflict of interest code; and

WHEREAS, Government Code Section 87306 requires each public agency in California to amend its conflict of interest code when change is necessitated by a change in circumstances, including the creation of new positions and relevant changes to the duties assigned to existing positions; and

WHEREAS, the Board of Directors of the Authority has adopted a conflict of interest code, and has amended this code as appropriate due to changed circumstances, with the most recent code adopted by Resolution 2018-19; and

WHEREAS, the Board of Directors, after consultation with the County of Santa Clara as its code reviewing body, desires to amend the list of designated positions in Appendix A by adding one position.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Authority rescinds Resolution No. 2018-19 and adopts the following attached Conflict of Interest Code including its Appendices of Designated Positions and Disclosure Categories.

BE IT FURTHER RESOLVED that The Board of Directors of the Authority hereby directs the Secretary of the Board to coordinate the preparation of a revised Conflict of Interest Code in succeeding even-numbered years following notice and instructions from the County of Santa Clara as the code-reviewing body for the Authority, in accordance with the requirements of Government Code Sections 87306 and 87306.5. Future revisions to the Conflict of Interest Code should reflect changes in employee or official designations. If no revisions to the Code are required, the Authority shall submit a response as indicated in the instructions provided by the County of Santa Clara no later than October 1st of the same year, stating that amendments to the Authority's Conflict of Interest Code are not required.

Resolution 2019-05 -1-

ADOPTED AND APPROVED this 10th day of April 2019, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Sinks				
City of Gilroy	Director Tovar				
City of Los Altos	Director Bruins				
Town of Los Altos Hills	Director Corrigan				
Town of Los Gatos	Alternate Director Rennie				
City of Milpitas	Director Nuñez				
City of Monte Sereno	Alternate Director Lawler				
City of Morgan Hill	Director Martinez-Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Ellenberg				
City of Saratoga	Director Miller				
City of Sunnyvale	Director Smith				

	Chair
ATTEST:	
Clerk	

Resolution 2019-05 -2-

SILICON VALLEY CLEAN ENERGY AUTHORITY CONFLICT OF INTEREST CODE

The Political Reform Act (Government Code § 81000, et seq., hereinafter referred to as the Act) requires state and local government agencies to adopt and promulgate conflict of interest codes. The Fair Political Practices Commission ("FPPC") has adopted a regulation (2 California Code of Regulations § 18730) which contains the terms of a standard conflict of interest code, which can be incorporated by reference in an agency's code. After public notice and hearing, the standard code may be amended by the FPPC to conform to amendments in the Act. Therefore, the terms of 2 California Code of Regulations § 18730 and any amendments to it duly adopted by the FPPC are hereby incorporated by reference. This regulation and the text here designating positions and establishing disclosure categories shall constitute the conflict of interest code of the Silicon Valley Clean Energy Authority ("Authority").

The most current version of 2 Cal. Code of Regs. Section 18730 is available on the website of the Fair Political Practices Commission (http://www.fppc.ca.gov/content/dam/fppc/NS-Documents/LegalDiv/Regulations/Index/Chapter7/Article2/18730.pdf).

Individuals holding a designated position shall file their Statements of Economic Interests with the Authority's Filing Official, which will make the Statements available for public inspection and reproduction subject to Government Code section 81008. If Statements are received in signed paper format, the Authority's Filing Official shall make and retain a copy and forward the original Statements to the Filing Officer, the County of Santa Clara Clerk of the Board of Supervisors. If Statements are electronically filed using the County of Santa Clara's Form 700 e-filing system, both the Authority's Filing Official and the County of Santa Clara Clerk of the Board of Supervisors will receive access to the e-filed Statements simultaneously.

Resolution 2019-05 -3-

SILICON VALLEY CLEAN ENERGY AUTHORITY CONFLICT OF INTEREST CODE

APPENDIX "A"

DESIGNATED POSITIONS

<u>Designated Position</u>	Assigned Disclosure Category
Member of Board of Directors	1
Alternate Member of Board of Directors	1
Chief Executive Officer	1
Finance and Administration Committee Member	2
General Counsel	1
Account Services Manager	2
Administrative Services Manager	2
Communications Manager	2
Director of Account Services & Community Relations	2
Director of Decarbonization & Grid Innovation Progra	ms 2
Director of Finance & Administration	1
Director of Power Resources	1
Management Analyst	2
Manager of Decarbonization & Grid Innovation Progra	ams 2
Manager of Regulatory & Legislative Affairs	2
Senior Regulatory Analyst	2
Power Resources Manager	1
Power Resources Planner	1
Power Settlements & Compliance Analyst	1
Consultant	3

Resolution 2019-05 -4-

Newly Created Position

* Newly Created Position

A newly created position that makes or participates in the making of governmental decisions that may foreseeably have a material effect on any financial interest of the position-holder, and which specific position title is not yet listed in the Authority's conflict of interest code is included in the list of designated positions and shall disclose pursuant to the broadest disclosure category in the code, subject to the following limitation: The Chief Executive Officer of the Authority may determine in writing that a particular newly created position, although a "designated position," is hired to perform a range of duties that are limited in scope and thus is not required to fully comply with the broadest disclosure requirements, but instead must comply with more tailored disclosure requirements specific to that newly created position. Such written determination shall include a description of the newly created position's duties and, based upon that description, a statement of the extent of disclosure requirements. The Chief Executive Officer's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict-of-interest code. (Gov. Code Section 81008.)

As soon as the Authority has a newly created position that must file Statements of Economic Interests, the Authority's Filing Official shall contact the County of Santa Clara Clerk of the Board of Supervisors Form 700 division to notify it of the new position title to be added in the County's electronic Form 700 record management system, known as eDisclosure. Upon this notification, the Clerk's office shall enter the actual position title of the newly created position into eDisclosure and the Authority's Filing Official shall ensure that the name of any individual(s) holding the newly created position is entered under that position title in eDisclosure.

Additionally, within 90 days of the creation of a newly created position that must file Statements of Economic Interests, the Authority shall update this conflict-of-interest code to add the actual position title in its list of designated positions, and submit the amended conflict of interest code to the County of Santa Clara Office of the County Counsel for code-reviewing body approval by the County Board of Supervisors. (Gov. Code Section 87306.)

Resolution 2019-05 -5-

SILICON VALLEY CLEAN ENERGY AUTHORITY CONFLICT OF INTEREST CODE

APPENDIX "B"

DISCLOSURE CATEGORIES

Designated positions must report financial interests in accordance with the assigned disclosure categories.

Category 1: Persons in this category shall disclose:

- (a) investments and business positions in business entities, and income (including gifts, loans, and travel payments) from sources that contract with the Authority, or that provide, plan to provide, or have provided during the previous two years, facilities, goods, technology, equipment, vehicles, machinery, or services, including training or consulting services, of the type utilized by the Authority; and
- (b) all interests in real property located: in whole or in part within the jurisdiction of the Silicon Valley Clean Energy Authority, or within two miles of the borders of any of the parties to the Joint Powers Agreement for the Authority, or within two miles of any land owned or used by the Authority.
- **Category 2:** Persons in this category shall disclose investments and business positions in business entities, and income (including gifts, loans, and travel payments) from sources that contract with the Authority, or that provide, plan to provide, or have provided during the previous two years, facilities, goods, technology, equipment, vehicles, machinery, or services, including training or consulting services, of the type utilized by the Authority.
- Category 3: Each Consultant, as defined for purposes of the Political Reform Act, shall disclose pursuant to the broadest disclosure category in the Authority's conflict of interest code subject to the following limitation: The Chief Executive Officer of the Authority may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that are limited in scope and thus is not required to comply fully with the disclosure requirements of the broadest disclosure category, but instead must comply with more tailored disclosure requirements specific to that consultant. Such a written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Chief Executive Officer's written determination is a public record and shall be retained for public inspection in the same manner and location as this Conflict of Interest Code.

Resolution 2019-05 -6-



Staff Report - Item 1d

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 1d: Approve the Cancellation of the August 21, 2019 Board of Directors Meeting and

Reinstate August 14, 2019 Meeting Date

Date: 4/10/2019

RECOMMENDATION

Staff recommends that the Board of Directors approve the cancellation of the recently moved August Board meeting on August 21, 2019, and reinstate the regularly scheduled August 14, 2019 Board of Directors meeting.

EXECUTIVE COMMITTEE RECOMMENDATION

At the March 22, 2019 Executive Committee meeting, the committee approved to recommend the August 14, 2019 Board of Directors meeting date via the consent calendar with Chair Abe-Koga absent.

BACKGROUND

At the February 13, 2019 Board of Directors Meeting, the Board approved the cancellation of the July 10, 2019 Board of Directors meeting, and to move the August 14th Board meeting to August 21st.

ANALYSIS & DISCUSSION

Staff has identified scheduling conflicts for the new August 21st Board meeting date. As opposed to polling availability for Directors for a new date or time, staff would like to reinstate the original August Board meeting details as follows:

Date: Wednesday, August 14th

Time: 7pm

Location: Cupertino Community Hall

10350 Torre Ave. Cupertino, CA 95014

Being that this date was the regularly scheduled meeting, staff anticipates there will be greater attendance than if the meeting were to be moved.

STRATEGIC PLAN

Not applicable.

ALTERNATIVE

Staff is open to suggestions from the Board regarding the August board meeting date and/or time.

FISCAL IMPACT

None.

Agenda Item: 1d Agenda Date: 4/10/2019

ATTACHMENTS

None.



Staff Report - Item 2

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 2: CEO Report

Date: 4/10/2019

REPORT

SVCE Staff Update

Interviews for the Data Analyst position have concluded; the Power Resources Manager position closes on April 5, 2019; interviews will be conducted in the coming weeks.

The Energy Consultant and Associate Energy Consultant positions are currently posted at https://www.svcleanenergy.org/jobs/ and close on May 1, 2019.

Joint RFO Update

SVCE is teaming up with Monterey Bay Community Power (MBCP) to issue a joint Request for Proposal (RFP) for Carbon-Free Power Supply. The purpose of the RFP is to make progress towards meeting each agencies' goals related to Renewable Portfolio Standard (RPS), greenhouse gas emission reductions and reliability requirements. SVCE and MBCP hopes to acquire up to 400,000 each or 800,000 combined annual MWh of energy of RPS eligible renewables, as defined by the California Energy Commission with a start date as early as January 1st, 2021 and for a minimum term of ten (10) years.

The RFP is expected to be released in mid-April 2019 with evaluation, short-listing of projects and negotiations of power purchase agreements (PPA) happening between mid-May and November 2019. Staff intends to bring one or more PPA to the Board for consideration and approval by the end of calendar year 2019.

CalCCA Lobby Day

On April 3rd, SVCE took part in CalCCA's annual lobby day. Director Bob Nuñez, CEO Girish Balachandran, SVCE lobbyists Steve Baker and Jennifer Tannehill of Aaron Read & Associates, and/or regulatory and legislative manager Hilary Staver visited the offices of all ten legislators representing SVCE's service territory in the California Assembly and Senate. Together with other CalCCA members, the SVCE delegation also met with key decisionmakers on relevant policy committees, representatives from Governor Newsom's office, and authors of major CCA-relevant bills this session. The conversations centered primarily around the utility (or lack thereof) of a "central buyer" for various types of resources. SVCE and CalCCA have supported the idea of a limited, non-market-participant central buyer in the resource adequacy (RA) proceeding at the CPUC, but several legislators are interested in the concept and envision expanding it beyond what SVCE considers beneficial or conducive to meeting state policy goals. The major energy reform bills so far this session both either deal with this already (AB 56, which envisions a broad central buyer for reliability, RPS, and other types of resources, and which SVCE and CalCCA oppose in its current form) or are expected to via amendments (SB 350, which author Hertzberg has indicated will be significantly amended and for which he is actively seeking stakeholder input). AB 56 is currently in the Assembly Utilities and Energy committee and SB 350 is in the Senate Appropriations committee. None of SVCE's legislators is facing an imminent vote on either bill, so for SVCE legislators this round of meetings focused on setting the stage for future, more concrete asks by

Agenda Item: 2 Agenda Date: 4/10/2019

providing a CCA perspective on the central buyer concept as well as the many factors driving interest in major energy reform this session. SVCE expects to arrange further meetings with legislators as these bills mature into their final forms and move closer to floor votes in their respective houses.

CEO Agreements Executed

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

- 1) Gridworks: Virtual Power Plant Initiative, not to exceed \$45,000
- 2) Edward Bedwell: Labor Consulting services, not to exceed \$12,000
- 3) Community Choice Partners: Consulting services, not to exceed \$10,000
- 4) Claremont Partners, Inc.: Human Resource services, not to exceed \$47,000
- 5) Derek May Photography: Photography and Videography services, not to exceed \$30,000

CEO Power Supply Agreements Executed

The following power supply agreements have been executed by the CEO, consistent with the authority delegated by the Board;

Counter Party_Name	Execution Date	Transaction Type	Product	Start Date	End Date	Notional Value
Shell Energy North America (US), L.P.	3/15/2019	Purchase	Physical Price Hedge	6/1/2019	12/31/2019	\$6,172,275.85
Direct Energy Business Marketing, LLC	3/21/2019	Purchase	Physical Price Hedge	4/1/2019	9/30/2019	\$6,354,073.38
Shell Energy North America (US), L.P.	3/21/2019	Purchase	Physical Price Hedge	1/1/2021	12/31/2021	\$14,808,585.00
Morgan Stanley Capital Group	3/21/2019	Purchase	Physical Price Hedge	1/1/2020	12/31/2020	\$14,647,893.50

These agreements are included in the Board packet as Appendix A.

ATTACHMENTS

- 1. Account Services & Community Relations Update, April 2019
- 2. Agenda Planning Document, April 2019 July 2019



Account Services & Community Relations Update

April 2019

1a. Outreach Events & Sponsorships

Earth month is here!

 Staff is excited to be out in these communities this month to share general info about SVCE and generate early interest in program participation.

Date	Time	Description	Location
Apr. 10	10 AM - 3 PM	Google Environment Day – tabling	Mountain View
Apr. 12	11 Am - 2 PM	LinkedIn Environmental Fair – tabling	Sunnyvale
Apr. 13	10 AM - 4 PM	Saratoga Blossom Festival – sponsor and tabling	Saratoga Civic Center
Apr. 13	11 AM – 3 PM	Cupertino Earth & Arbor Day Festival – <i>sponsor and tabling</i>	Cupertino Civic Center Plaza
Apr. 14	10 AM - 1 PM	Spring into Green – sponsor and tabling	Town Plaza Park, Los Gatos
Apr. 14	1 – 4 PM	Los Altos Hill Earth Day Celebration – tabling	Westwind Barn, Los Altos Hills
Apr. 18	4 – 7 PM	Morgan Hill Earth Day – tabling	Morgan Hill Community and Cultural Center
Apr. 20	12 – 4 PM	Milpitas Earth Day – tabling	Milpitas Library
Apr. 20	11 AM – 3 PM	Mountain View Earth Day – tabling	Mountain View Community Center
Apr. 22	11 AM – 2 PM	Facebook Employee Energy Marketplace – <i>tabling</i>	Facebook HQ
Apr. 23	11:30 AM - 1 PM	Western Digital Earth Day Fair - tabling	Milpitas



1b. Event Photos



SPUR Impact Awards

From left to right: Senator Jerry Hill, Misty Mersich (Cupertino), Elaine Marshall (formerly Sunnyvale, now Milpitas), Andrea Pizano (formerly Sunnyvale, now SVCE), Tim Kirby (Sunnyvale), Melody Tovar (Sunnyvale), Erin Cooke (formerly Cupertino), Don Bray (SVCE), Steve Attinger (Mountain View), Kevin Armstrong (formerly Santa Clara County)



Milpitas Senior Center Energy Clinic



Mexican Consulate presentation

2. Customer Participation

	Upgrade	Opt Out	Opt Outs by Account Type	Total Opt Out, All Accounts
Residential	1,118	8,977	3.57%	2 500/
Commercial	2,003	854	2.94%	3.50%



3. Bike to the Future – April 27

Please join us from 9 a.m. – 1 p.m. at the Santa Clara County Fairgrounds to cheer on your team!

Participating teams:

- Cupertino
 - Homestead (*3 teams*)
- Gilroy
 - Dr. TJ Owens Gilroy Early College Academy
- Milpitas
 - Calaveras Hills High School
 - Milpitas High School
- Morgan Hill
 - Live Oak High School
- Mountain View
 - Mountain View High School (2 teams)

- Saratoga
 - Saratoga High School (2 teams)
- Sunnyvale
 - Fremont High School (2 teams)
- Campbell/Unincorporated County
 - Leigh High School (3 teams)
 - Branham High School
- Multiple school team
 - Mountain View, Los Altos & Kehillah Jewish High School

Team mid-point check-in prodfest photos are posted to Facebook and Instagram @SVCleanEnergy:



Homestead High School – Mustang Riders



Calaveras Hills High School - Mustangs

Item 2 Attachment 1

4. Member Agency Working Group Update

March's MAWG meeting covered the following:

- SVCE Happenings
- City report out roundtable
- Reach Code
 - Stakeholder workshop results 120+ persons, excellent input over the 2 day, 6 sessions
 - Individual city meetings scheduled, with more to come
 - Draft Reach Code format in progress

EV Efforts

- Guest presentation from Richard Schorske and Sam Irvine
 - Electric Vehicle Supply Equipment (EVSE) Primer
- Review and input on goals for SVCE transportation working group
- Guest presentation from Tyson Eckerle
 - "EV Guidebook" and Statewide EV efforts

5. Reach Code Webinars - April 11 & 24

Webinars

- Hosting webinars on the draft model reach codes for city and county staff
- Details and registration: <u>SiliconValleyReachCodes.org</u>

March Workshop Participation

- The set of stakeholder workshops held in mid-March between SVCE and PCE had more than 120 participants.
- SVCE had a strong showing of member agency staff, thank you to our board for your support with your municipalities.



6. Media

Latest SVCE News

• SVCE Receives Clean Financial Audit, SVCE news post, 03-15-2019

Mentions

- <u>Greentown Presents Decarbonization Forum</u>, Los Altos Town Crier, 04-03-2019
- <u>Guest view: Mayor's State of the City address</u>, *Morgan Hill Times*, 03-18-2019
- <u>Calif.: CCAs, Decarbonization Pose Reliability Challenges</u>, *RTO Insider*, 03-11-2019



	APRIL 2019	MAY 2019	JUNE 2019	JULY 2019
MILESTONES				
		Board of Directors, May 8: Consent: Minutes March 2019 Treasurer Report Power Supply Contracts ERM Policy Update Regular Calendar Strategic Plan Update SYCE Rates Bike to the Future Recap Long term Power Supply Request For Proposals Update	Board of Directors, June 12: Consent: Minutes April 2019 Treasurer Report Regular Calendar IT Audit Results AMI Audit Results SVCE Rates - August 2019 and Beyond	Board of Directors, July 10: CANCELLED
	Executive Committee, April 26: Special Presentation on Specific Decarbonization Programs Strategic Plan Update	Executive Committee, May 24: Special Presentation on Specific Decarbonization Programs	Executive Committee, June 28: Special Presentation on Specific Decarbonization Programs Future Stakeholder and Community Engagement	Executive Committee, July 26: CANCELLED
	Audit Committee, April 29 (Tentative): Receive IT Audit AMI Audit Results			
ڹ				
ADMININSTRATION, POLICIES, ETC.				

2019-0410-02 Attach 2 Agenda Planning Document - Working Copy v5



Staff Report - Item 3

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 3: Adopt Resolution to Approve SVCE Rate Schedules Effective May 1, 2019 and

Authorize the CEO to Further Adjust Customer Generation Rates to be 1% Below

PG&E's Final Rates

Date: 4/10/2019

RECOMMENDATION

Adopt Resolution 2019-06 approving SVCE Rate Schedules effective May 1, 2019 that maintains the 6% discount to PG&E customer generation rates, and delegate authority to the CEO to further adjust customer generation rates to achieve a 1% discount to final PG&E generation rates shortly after those rates are released. Expectation is August 1^{st} as the effective date of further rate adjustments.

EXECUTIVE COMMITTEE RECOMMENDATION

At the March 22, 2019 Executive Committee meeting, the committee was in consensus (with one absence) to recommend a 6% discount from PG&E generation rates in May, and a 1% discount effective in August. The committee discussed the option in great length, and considered the following key policy points for the recommendation:

Stable, small changes are better than volatile market;

Fiscally responsible;

Enhances flexibility;

Manages risk;

Maintains a discount: and

Allows SVCE to remain carbon-free.

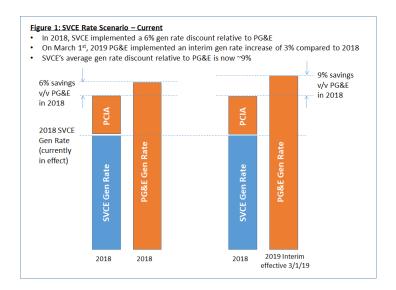
BACKGROUND

In June 2016, the SVCE Board approved a policy to set initial electric rates, inclusive of the power charge indifference adjustment (PCIA) and franchise fee, at 1% below the comparable generation rates offered by PG&E. On January 11, 2017, the SVCE Board approved a full set of detailed SVCE generation rates, effective as of SVCE's launch on April 1, 2017. These rates remained in effect through March of 2018.

SVCE's updated rates for 2018 became effective as of April 1st, 2018, and were set at 6% below PG&E's comparable rates. This 6% discount relative to PG&E's 2018 rates applied evenly to all SVCE rate schedules (e.g. residential, commercial) and all billing determinants. These rates currently remain in effect.

Anticipating 2019 decreases of 8% in PG&E generation rates and a PCIA rate increase averaging 21%, the 2018/2019 SVCE budget assumed significantly lower SVCE revenues and contribution margins. The budget assumed lowering of the SVCE discount from 6% to 1% effective February 1^{st} , 2019, significantly lower SVCE rates and revenue, and lowered overall contributions to reserves of approximately \$29.5 million for FY 2018/19.

On March 1^{st} , 2019, PG&E implemented an interim generation rate increase averaging approximately 3% across all rate schedules. As a result, SVCE's current discount to PG&E generation rates is approximately 9%, as shown in Figure 1 below:



Based upon PG&E's most recent Energy Resource Recovery Account (ERRA) and Annual Electric True-up (AET) filings, PG&E's final 2019 generation and PCIA rate changes are anticipated to be published in late June, to be effective as of July 1, 2019. PG&E generation rates are now projected to decrease by 6.5% relative to March 1st rates (or 3.5% relative to 2018 rates), and PCIA is projected to increase by a weighted average of approximately 1.5%. To maintain a consistent SVCE discount level relative to PG&E, the combined effect of these projected generation rate and PCIA changes would equate to a ~4% reduction in SVCE generation rates relative to PG&E's 2018 generation rates. Note these are still estimated projections. Finalized PG&E generation and PCIA rates for 2019 are anticipated in late June, to be made effective July1.

As a result of PG&E's generation rate decrease and PCIA increase now being lower than expected, SVCE revenues are expected to remain relatively flat compared to 2018. Yet supply costs have increased considerably this year, so increases in revenue have been offset by increases in supply costs. The net effect is that current projected SVCE contributions to reserves remain very close to what was originally planned in the 2018/2019 budget of \$29.5 million.

ANALYSIS & DISCUSSION

At the present time, SVCE is facing significant uncertainties and risks. These include:

- Regulatory PG&E restructuring, central buyer
- Power Supply higher market prices for capacity and energy, underlying commodity volatility
- PG&E Bankruptcy customer reserves, plan of reorganization
- Legislative IOUs exit retail, central buyer
- Direct Access 4,000 GWh expansion in 2020, potential further expansion
- PG&E Rates generation and PCIA rates for 2019 remain to be finalized

In this light, SVCE has identified and analyzed four rate change options, as shown below:

SVCE Rate Options	Summary	May Rate Change	May Discount	August Rat Change	August Discount	Variance to Budget
Option A	No change in rates until August 1, then 1%	-	9%	+1%	1%	\$0MM
Option B	Two Rate Changes – 6% May 1 1% August 1	+3%	6%	-2%	1%	\$3.6MM
Option C	Two Rate Changes – 3% May 1 3% August 1	+6%	3%	-7%	3%	\$3.8MM
Option D	Two rate changes – 6% May 1 3% August 1	+3%	6%	-4%	3%	\$0MM

Option A would leave rates at current levels until August 1st, 2019, when they would be increased slightly so that the SVCE discount relative to PG&E's new generation rates would be 1%. Options B, C, and D involve interim increases in SVCE rates effective May 1st, and final rate changes effective August 1st. Interim and final discounts vary between these three options as shown in the table.

The net impact to SVCE operating reserve contribution (versus plan) varies by option, ranging from no impact to additional contributions of \$3.8M.

The chart below compares options relative to rate stability, discount consistency, and incremental reserve contributions



Option B returns SV

Option B returns SVCE's discount to 6% as of May 1st (consistent with SVCE's 2018 discount), and then lowers the discount to 1% effective August 1st, after PG&E's rate reductions become effective in July of 2018. This option results in an incremental reserve contribution of \$3.6M between May and December 2019 – desirable given current market volatility and regulatory uncertainty. This option provides the most flexibility to respond to changing market conditions and maintains a reasonable level of rate stability and discount consistency throughout the year. Relatively, the other options provide less future flexibility, contribute less to reserves, offer lower rate stability and/or discount consistency.

Rate Design and Update Methodology

For 2018/2019, the SVCE budget assumed lowering all GreenStart generation rates when PG&E updated its rates, to be exactly 1% below PG&E's corresponding generation rate, including surcharges (PCIA and Franchise Fee). This rate design approach has the advantages of comparability and ease of customer communications in that the generation cost savings will be set at 1% for all customers, rates and rate determinants.

To illustrate the rate design approach underlying proposed changes to 2018 rates for 2019, Table 1 below (using hypothetical rates) shows how rate determinant are priced for the E-19 rate schedule (utilized by large commercial customers). The PCIA and FFS surcharges are applied on a per kWh basis and the SVCE energy charges are reduced to offset these charges. No additional PG&E surcharges apply to demand charges, so no adjustment is necessary for SVCE's demand charges.

Table 1: Rate Design Example, Schedule E-19S

Rate Determinant		PG&E Generation			PCIA		FFS		SVCE GreenStart Generation
ENERGY CHARGE									
(\$/kWh)	Summer								
	Peak	\$0.12552	*0.99	-	\$0.01889	-	\$0.00064	=	\$0.10473
	Part-Peak	\$0.08501	*0.99	-	\$0.01889	-	\$0.00064	=	\$0.06463
	Off-Peak	\$0.05819	*0.99	-	\$0.01889	-	\$0.00064	=	\$0.03808
	<u>Winter</u>								
	Part-Peak	\$0.07871	*0.99	-	\$0.01889	-	\$0.00064	=	\$0.05915
	Off-Peak	\$0.06423	*0.99	-	\$0.01889	-	\$0.00064	=	\$0.04467
DEMAND CHARGE									
(\$/kW)	Summer								
	Peak	\$12.63	*0.99		N/A		N/A	=	\$12.50
	Part-Peak	\$3.12	*0.99		N/A		N/a	=	\$3.09

100% Renewable Energy Option

The GreenPrime rate for 2019, SVCE's 100% renewable energy option, will remain unchanged from 2018. The charge is equivalent to the per unit cost difference between the default energy mix of 50% eligible renewable/carbon free energy and the 100% eligible renewable energy mix. This premium is calculated to be \$0.008 per kWh, which is added to the otherwise applicable rate for the default GreenStart service offering.

Planned Timing and Approach for 2019 Rate Updates

Under Option B, SVCE rates would be increased by approximately 3% effective May 1st, 2019, to a standard 6% discount. The attached updated rate tables reflect a 6% discount across all rate schedules and billing determinants, consistent with SVCE's rate policy throughout 2018.

Subsequently, SVCE rates would be reduced by approximately 2% effective August 1st, such that SVCE's rates are 1% lower than PG&E's anticipated 2019 generation and PCIA rates effective July 1st.

As there is no SVCE Board meeting in July, SVCE staff will present an updated reserve contribution analysis at the June Board meeting, based on setting rates at a 1% discount on August 1st. This will factor in updated supply cost projections, current legislative/regulatory development and risks, and updates if any to PG&E generation or PCIA rate forecasts for 2019. In the event July PG&E rate reductions are less than anticipated, and significant additional contributions to reserves are projected at that time, staff will present an alternative discount guidelines and policy for August 1.

If publication of PG&E's 2019 rates are delayed again (e.g. beyond July 2019), the timeline for SVCE 2019 rates will be pushed out by a similar length of time.

STRATEGIC PLAN

Rate setting is directly supported by SVCE Strategic Plan Goal 2 – maintain competitive rates to acquire and retain customers.

FISCAL IMPACT

The fiscal impact of the recommended Option B is \$3.8M in additional reserve contributions to SVCE's 2018/2019 budget.

ATTACHMENT

1. Resolution 2019-06, Approving Customer Generation Rates

SILICON VALLEY CLEAN ENERGY AUTHORITY RESOLUTION NO. 2019-06

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY APPROVING CUSTOMER GENERATION RATES

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, at the June 8, 2016 Board of Directors Meeting, the Board adopted the policy that the Authority's customer generation rates for the default service will be 1% lower than Pacific Gas & Electric's generation rates in place as of January 2017; and the policy allows reexamination of the rates during the first two years of operation, provided significant deviations in market prices or other extraordinary circumstances mandate an adjustment to the rates; and

WHEREAS, PG&E has announced its customer generation rates that went into effect on March 1, 2019 that reflect a substantial and unexpected increase in its existing rates; and

WHEREAS, SVCE has a need to adopt customer generation rates that are competitive and contribute to the Authority's cash reserves to allow the Authority to respond to risk, and

WHEREAS, due to these unexpected circumstances and for the reasons described in more detail in the agenda report, staff is recommending an increase in the 2019 customer generation rates so that the Authority's customer generation rates will be maintained at 6% lower than PG&E's generation rates that will be effective on May 1, 2019.

WHEREAS, since PG&E will not issue its final customer generation rates until this summer, the Board of Directors desire to grant the Chief Executive Officer the authority to further adjust the Authority's customer generation rates to be 1% below PG&E's final rates.

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

<u>Section 1.</u> The rate schedules as set forth in Exhibit A, attached hereto, are hereby approved.

<u>Section 2.</u> Upon the release of PG&E's final customer generation rates, the Chief Executive Officer is hereby authorized to amend the Authority's

customer generation rates set forth in Exhibit A to be 1% lower than PG&E's final customer generation rates.

<u>Section 3.</u> The Authority's customer generation rates, as adjusted by the Chief Executive Officer pursuant to Section 2 above, shall become effective the later of July 31, 2019 or the first day of the month following thirty days after PG&E releases if final 2019 customer generation rates.

<u>Section 4.</u> Resolution No. 2018-04 is hereby rescinded.

PASSED AND ADOPTED this 10th day of April 2019, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Sinks				
City of Gilroy	Director Tovar				
City of Los Altos	Director Bruins				
Town of Los Altos Hills	Director Corrigan				
Town of Los Gatos	Alternate Director Rennie				
City of Milpitas	Director Nuñez				
City of Monte Sereno	Alternate Director Lawler				
City of Morgan Hill	Director Martinez-Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Ellenberg				
City of Saratoga	Director Miller				
City of Sunnyvale	Director Smith				

	 Chair	
ATTEST:		
Andrea Pizano Board Secretary		



Exhibit A

Silicon Valley Clean Energy Generation Rates Effective May 1, 2019 (proposed)

PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	SVCE PROPOSED RATE WITH PG&E SURCHARGES (2)	PG&E GENERATION RATE (3)
RESIDENTIAL CUSTOMERS					
E-1, EL-1, EM, EML, ES, ESL, ESR, ESRL, ET, ETL	E-1				
	ENERGY CHARGE (\$/KWH)	All Energy	0.07121	0.10522	0.11194
	ENERGY CHARGE (\$1KWII)	All Ellergy	0.07121	0.10322	0.11194
	E-1-P				
	ENERGY CHARGE (\$/KWH)	All Energy	0.06836	0.10237	-
E-6, EL-6	E-6				
	ENERGY CHARGE (\$/KWH)				
	ENERGY OFFICE (WIRWIT)	SUMMER PEAK	0.19805	0.23206	0.24687
		SUMMER PART-PEAK	0.08790	0.12191	0.12969
		SUMMER OFF-PEAK WINTER PART-PEAK	0.04293	0.07694	0.08185
		WINTER PART-PEAK WINTER OFF-PEAK	0.06790 0.05553	0.10191 0.08954	0.10841 0.09526
			0.00000	0.0000	0.00020
EV-A, EV-B	EV (EV-A and EV-B)				
	ENERGY CHARGE (\$/KWH)				
		SUMMER PEAK	0.20684	0.24085	0.25622
		SUMMER PART-PEAK SUMMER OFF-PEAK	0.08206 0.02432	0.11607 0.05833	0.12348 0.06205
		WINTER PEAK	0.05600	0.09001	0.09575
		WINTER PART-PEAK	0.02222	0.05623	0.05982
		WINTER OFF-PEAK	0.02640	0.06041	0.06427
E-TOU-A, EL-TOU-A	E-TOU-A				
	ENERGY CHARGE (\$/KWH)				
	Σπεποι στη πτου (φπτιτή)	SUMMER PEAK	0.14896	0.18297	0.19465
		SUMMER OFF-PEAK	0.07792	0.11193	0.11907
		WINTER PEAK	0.06685	0.10086	0.10730
		WINTER OFF-PEAK	0.05342	0.08743	0.09301
E-TOU-B, EL-TOU-B	E-TOU-B				
	ENERGY CHARGE (\$/KWH)				
		SUMMER PEAK	0.16952	0.20353	0.21652
		SUMMER OFF-PEAK	0.07264	0.10665	0.11346
		WINTER PEAK WINTER OFF-PEAK	0.06909 0.05142	0.10310 0.08543	0.10968 0.09088
		2 2	5.55.1.2	3.3340	2.23000
E-TOU-C3	E-TOU-C3				
	ENERGY CHARGE (\$/KWH)				
		SUMMER PEAK	0.12634	0.16035	0.17059
		SUMMER OFF-PEAK WINTER PEAK	0.06671 0.07327	0.10072 0.10728	0.10715 0.11413
		WINTER OFF-PEAK	0.05698	0.09099	0.09680



PG&E EQUIVALEN	T SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
COMMERCIAL, INDUSTRIAL A	AND GENERAL SERVI	CE CUSTOMERS				
A-1-A		A-1-A				
		ENERGY CHARGE (\$/KWH)	SUMMER WINTER	0.09562 0.05790	0.12090 0.08318	0.12862 0.08849
		A-1-A-P				
		ENERGY CHARGE (\$/KWH)	SUMMER WINTER	0.09180 0.05558	0.11708 0.08086	
A-1-B		A-1-B				
		ENERGY CHARGE (\$/KWH)	SUMMER PEAK PART-PEAK OFF-PEAK WINTER PART-PEAK OFF-PEAK	0.10877 0.08654 0.06082 0.08636 0.06670	0.13405 0.11182 0.08610 0.11164 0.09198	0.14261 0.11896 0.09160 0.11877 0.09785
		A-1-B-P				
		ENERGY CHARGE (\$/KWH)	SUMMER PEAK PART-PEAK OFF-PEAK WINTER PART-PEAK OFF-PEAK	0.10442 0.08308 0.05839 0.08291 0.06403	0.12970 0.10836 0.08367 0.10819 0.08931	- - - -
A-6		A-6				
		ENERGY CHARGE (\$/kWH)	SUMMER PEAK PART-PEAK OFF-PEAK WINTER PART-PEAK OFF-PEAK	0.33184 0.10664 0.05184 0.07578 0.05933	0.35712 0.13192 0.07712 0.10106 0.08461	0.37992 0.14034 0.08204 0.10751 0.09001
		A-6-P				
		ENERGY CHARGE (\$/KWH)	SUMMER PEAK PART-PEAK OFF-PEAK WINTER	0.31857 0.10237 0.04977	0.34385 0.12765 0.07505	- - -
			PART-PEAK OFF-PEAK	0.07275 0.05696	0.09803 0.08224	-



	PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
A-10-A-S		A-10-A				
		ENERGY CHARGE (\$/KWH)	SUMMER	0.08482	0.11050	0.11755
		DEMAND CHARGE (\$/KW)	WINTER	0.05915	0.08483	0.09024
			SUMMER MAX	5.15000	5.15000	5.48000
A-10-A-P		A-10-A-P				
		ENERGY CHARGE (\$/KWH)				
			SUMMER WINTER	0.07576 0.05343	0.10144 0.07911	0.10791 0.08416
		DEMAND CHARGE (\$/KW)	SUMMER MAX	4.49000	4.49000	4.78000
A-10-B-S		A-10-B				
		ENERGY CHARGE (\$/KWH)	SUMMER			
			PEAK	0.13531	0.16099	0.17127
			PART-PEAK OFF-PEAK	0.08349 0.05712	0.10917 0.08280	0.11614 0.08808
			WINTER			
			PART-PEAK OFF-PEAK	0.06851 0.05247	0.09419 0.07815	0.10020 0.08314
		DEMAND CHARGE (\$/KW)	SUMMER MAX	5.15000	5.15000	5.48000
			OOMMER W. O.	0.10000	0.10000	0.40000
A-10-B-P		A-10-B-P				
		ENERGY CHARGE (\$/KWH)				
			<u>SUMMER</u>	0.40400	0.45007	0.45005
			PEAK PART-PEAK	0.12439 0.07686	0.15007 0.10254	0.15965 0.10909
			OFF-PEAK	0.05184	0.07752	0.08247
			<u>WINTER</u> PART-PEAK	0.06399	0.08967	0.09539
			OFF-PEAK	0.04906	0.07474	0.07951
		DEMAND CHARGE (\$/KW)	SUMMER MAX	4.49000	4.49000	4.78000



	PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
E-19-S, V		E-19-S				
		ENERGY CHARGE (\$/KWH)				
		,	SUMMER			
			PEAK	0.11094	0.13259	0.14105
			PART-PEAK	0.06815	0.08980	0.09553
			OFF-PEAK	0.03982	0.06147	0.06539
			WINTER			
			PART-PEAK	0.06229	0.08394	0.08930
			OFF-PEAK	0.04685	0.06850	0.07287
		DEMAND CHARGE (\$/KW)				
			SUMMER			
			PEAK	13.35000	13.35000	14.20000
			PART-PEAK	3.30000	3.30000	3.51000
E-19-P, V		E-19-P				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.10082	0.12247	0.13029
			PART-PEAK	0.06044	0.08209	0.08733
			OFF-PEAK	0.03447	0.05612	0.05970
			WINTER			
			PART-PEAK	0.05498	0.07663	0.08152
			OFF-PEAK	0.04089	0.06254	0.06653
		DEMAND CHARGE (\$/KW)				
			<u>SUMMER</u>	44.00000	44.00000	10.01000
			PEAK PART-PEAK	11.88000 2.90000	11.88000 2.90000	12.64000 3.08000
E-19-T, V		E-19-T				
L-13-1, V						
		ENERGY CHARGE (\$/KWH)	011111150			
			<u>SUMMER</u> PEAK	0.00000	0.00440	0.00007
			PART-PEAK	0.06283 0.04957	0.08448 0.07122	0.08987 0.07577
			OFF-PEAK	0.03203	0.05368	0.05711
			<u>WINTER</u> PART-PEAK	0.05166	0.07331	0.07700
			OFF-PEAK	0.03819	0.05984	0.07799 0.06366
			OI I TEAN	0.03619	0.05984	0.00300
		DEMAND CHARGE (\$/KW)				
			SUMMER BEAK	40.00000	40.00000	42.00000
			PEAK PART-PEAK	13.06000 3.27000	13.06000 3.27000	13.89000 3.48000
			FANT-FEAR	3.27000	3.27000	3.40000



PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
E-19-R-S, V-R-S	E-19-R-S				
	ENERGY CHARGE (\$/KWH)				
		SUMMER			
		PEAK	0.25861	0.28026	0.29815
		PART-PEAK	0.10251	0.12416	0.13209
		OFF-PEAK	0.03982	0.06147	0.06539
		WINTER			
		PART-PEAK	0.06229	0.08394	0.08930
		OFF-PEAK	0.04685	0.06850	0.07287
E-19-R-P, V-R-P	E-19-R-P				
E-10-10-1, V-10-1	L-13-1(-1				
	ENERGY CHARGE (\$/KWH)				
		SUMMER			
		PEAK	0.24533	0.26698	0.28402
		PART-PEAK	0.09354	0.11519	0.12254
		OFF-PEAK	0.03447	0.05612	0.05970
		WINTER			
		PART-PEAK	0.05498	0.07663	0.08152
		OFF-PEAK	0.04089	0.06254	0.06653
E-19-R-T, V-R-T	E-19-R-T				
	ENERGY CHARGE (\$/KWH)				
		SUMMER			
		PEAK	0.23549	0.25714	0.27355
		PART-PEAK	0.09030	0.11195	0.11910
		OFF-PEAK	0.03203	0.05368	0.05711
		WINTER			
		PART-PEAK	0.05166	0.07331	0.07799
		OFF-PEAK	0.03819	0.05984	0.06366



	PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
E-20-S		E-20-S				
		ENERGY CHARGE (\$/KWH)				
		(, ,	SUMMER			
			PEAK	0.10255	0.12338	0.13126
			PART-PEAK	0.06360	0.08443	0.08982
			OFF-PEAK	0.03685	0.05768	0.06136
			WINTER			
			PART-PEAK	0.05793	0.07876	0.08379
			OFF-PEAK	0.04345	0.06428	0.06838
		DEMAND CHARGE (\$/KW)				
			SUMMER			
			PEAK	12.94000	12.94000	13.77000
			PART-PEAK	3.20000	3.20000	3.40000
E-20-P		E-20-P				
		ENERGY CHARGE (\$/KWH)				
			SUMMER	0.40050	0.40504	0.40000
			PEAK	0.10256	0.12594	0.13398
			PART-PEAK OFF-PEAK	0.05968	0.08306	0.08837
			OFF-PEAK	0.03332	0.05670	0.06032
			WINTER			
			PART-PEAK	0.05403	0.07741	0.08236
			OFF-PEAK	0.03979	0.06317	0.06721
		DEMAND CHARGE (\$/KW)				
			SUMMER			
			PEAK	14.18000	14.18000	15.09000
			PART-PEAK	3.36000	3.36000	3.57000
E-20-T		E-20-T				
L-20-1						
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.06508	0.08294	0.08823
			PART-PEAK	0.05207	0.06993	0.07439
			OFF-PEAK	0.03485	0.05271	0.05607
			WINTER BART BEAU	0.0	0.0	0.07057
			PART-PEAK	0.05412	0.07198	0.07657
			OFF-PEAK	0.04089	0.05875	0.06250
		DEMAND CHARGE (\$/KW)	CLIMMED			
			<u>SUMMER</u> PEAK	16.90000	16.90000	17.98000
			PART-PEAK	4.02000	4.02000	4.28000
			FANT-FEAN	4.02000	4.02000	4.20000



	PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
E-20-R-S		E-20-R-S				
		ENERGY CHARGE (\$/kWH)	SUMMER PEAK PART-PEAK OFF-PEAK WINTER PART-PEAK OFF-PEAK	0.23508 0.09564 0.03685 0.05793 0.04345	0.25591 0.11647 0.05768 0.07876 0.06428	0.27224 0.12390 0.06136 0.08379 0.06838
E-20-R-P		E-20-R-P				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.24856	0.27194	0.28930
			PART-PEAK OFF-PEAK	0.09179 0.03332	0.11517 0.05670	0.12253 0.06032
			OIT-I LAK	0.0332	0.00070	0.00032
			WINTER			
			PART-PEAK	0.05403	0.07741	0.08236
			OFF-PEAK	0.03979	0.06317	0.06721
E-20-R-T		E-20-R-T				
		ENERGY CHARGE (\$/KWH)				
			<u>SUMMER</u> PEAK	0.24756	0.26542	0.28236
			PART-PEAK	0.09071	0.10857	0.11550
			OFF-PEAK	0.03485	0.05271	0.05607
			<u>WINTER</u> PART-PEAK	0.05412	0.07198	0.07657
			OFF-PEAK	0.04089	0.05875	0.06250
STANDB	Y - S	STOUS				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.09564	0.10810	0.11500
			PART-PEAK OFF-PEAK	0.07849 0.05605	0.09095 0.06851	0.09676 0.07288
			OIT-I LAK	0.00000	0.00031	0.07200
			<u>WINTER</u>			
			PART-PEAK	0.08122	0.09368	0.09966
			OFF-PEAK	0.06384	0.07630	0.08117
		RESERVATION CHARGE (\$/K	(W)	0.42000	0.42000	0.45000
STANDB	Y - P	STOUP				
		ENERGY CHARGE (\$/KWH)				
			SUMMER BEAK	0.0056	0.406:5	0.44500
			PEAK PART-PEAK	0.09564	0.10810	0.11500
			PART-PEAK OFF-PEAK	0.07849 0.05605	0.09095 0.06851	0.09676 0.07288
			- · · - · · ·	0.00000	3.33301	5.57.200
			<u>WINTER</u>			
			PART-PEAK	0.08122	0.09368	0.09966
			OFF-PEAK	0.06384	0.07630	0.08117
		RESERVATION CHARGE (\$/K	(W)	0.42000	0.42000	0.45000



PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)	
STANDBY - T	STOUT					
	ENERGY CHARGE (\$/KWH)					
		SUMMER				
		PEAK	0.07764	0.09010	0.09585	
		PART-PEAK	0.06351	0.07597	0.08082	
		OFF-PEAK	0.04480	0.05726	0.06091	
		WINTER				
		PART-PEAK	0.06573	0.07819	0.08318	
		OFF-PEAK	0.05136	0.06382	0.06789	
	RESERVATION CHARGE (\$/k	(W)	0.35000	0.35000	0.37000	



PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
AGRICULTURAL CUSTOMERS					
AG-1-A	AG-1-A				
	ENERGY CHARGE (\$/KWH)	SUMMER WINTER	0.07660 0.05645	0.10176 0.08161	0.10825 0.08682
	CONNECTED LOAD (\$/HP)	SUMMER MAX	1.39000	1.39000	1.48000
AG-1-B	AG-1-B				
	ENERGY CHARGE (\$/KWH)	SUMMER	0.07995	0.10511	0.11182
	DEMAND CHARGE (\$/KW)	WINTER SUMMER MAX	0.05678 2.11000	0.08194 2.11000	0.08717 2.24000
AG-RA	AG-RA				
	ENERGY CHARGE (\$/KWH)	SUMMER	0.05540	0.0004	0.00055
		PEAK OFF-PEAK	0.25548 0.04552	0.28064 0.07068	0.29855 0.07519
		WINTER PART-PEAK OFF-PEAK	0.05300 0.04137	0.07816 0.06653	0.08315 0.07078
	CONNECTED LOAD (\$/HP)	SUMMER	1.37000	1.37000	1.46000
AG-RB	AG-RB				
	ENERGY CHARGE (\$/KWH)				
		SUMMER PEAK OFF-PEAK	0.22912 0.04523	0.25428 0.07039	0.27051 0.07488
		WINTER PART-PEAK OFF-PEAK	0.03942 0.02984	0.06458 0.05500	0.06870 0.05851
	DEMAND CHARGE (\$/KW)	<u>SUMMER</u>			
		MAX PEAK	2.05000 2.30000	2.05000 2.30000	2.18000 2.45000



	PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
AG-VA		AG-VA				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.22038	0.24554	0.26121
			OFF-PEAK	0.04266	0.06782	0.07215
			WINTER			
			PART-PEAK	0.05140	0.07656	0.08145
			OFF-PEAK	0.04001	0.06517	0.06933
		CONNECTED LOAD (\$/HP)				
			SUMMER	1.44000	1.44000	1.53000
AG-VB		AG-VB				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.20469	0.22985	0.24452
			OFF-PEAK	0.04402	0.06918	0.07360
			WINTER			
			PART-PEAK	0.04032	0.06548	0.06966
			OFF-PEAK	0.03060	0.05576	0.05932
		DEMAND CHARGE (\$/KW)				
		,	SUMMER			
			MAX	1.90000	1.90000	2.02000
			PEAK	2.43000	2.43000	2.59000



PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
AG-4-A, AG-4-D	AG-4-A				
	ENERGY CHARGE (\$/KWH)				
		<u>SUMMER</u> PEAK	0.14099	0.16615	0.17676
		OFF-PEAK	0.04657	0.07173	0.07631
		OTT TEAR	0.04001	0.07170	0.07001
		WINTER			
		PART-PEAK	0.05086	0.07602	0.08087
		OFF-PEAK	0.03961	0.06477	0.06890
	CONNECTED LOAD (\$/HP)				
	CONTROLL LOND (WITH)	SUMMER	1.41000	1.41000	1.50000
AG-4-B, AG-4-E	AG-4-B				
	ENERGY CHARGE (\$/KWH)				
		<u>SUMMER</u>	0.40454	0.40070	0.40.470
		PEAK OFF-PEAK	0.10154 0.04838	0.12670 0.07354	0.13479 0.07823
		OIT-I LAK	0.04030	0.07354	0.07023
		WINTER			
		PART-PEAK	0.04655	0.07171	0.07629
		OFF-PEAK	0.03586	0.06102	0.06491
	DEMAND CHARGE (\$/KW)				
	DEMAND CHARGE (\$/KW)	SUMMER			
		MAX	2.49000	2.49000	2.65000
		PEAK	2.64000	2.64000	2.81000
AG-4-C, AG-4-F	AG-4-C				
	ENERGY CHARGE (\$/KWH)				
	Σπεποι στη που (φ/πτι)	SUMMER			
		PEAK	0.12140	0.14656	0.15591
		PART-PEAK	0.05780	0.08296	0.08826
		OFF-PEAK	0.03470	0.05986	0.06368
		<u>WINTER</u>			
		PART-PEAK	0.04126	0.06642	0.07066
		OFF-PEAK	0.03133	0.05649	0.06010
	DEMAND CHARGE (\$/KW)	CUMMED			
		<u>SUMMER</u> PEAK	6.15000	6.15000	6.54000
		PART-PEAK	1.05000	1.05000	1.12000
					2000



PG&E	EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)
AG-5-A, AG-5-D		AG-5-A				
		ENERGY CHARGE (\$/KWH)				
		,	SUMMER			
			PEAK	0.12901	0.15417	0.16401
			OFF-PEAK	0.05106	0.07622	0.08109
			WINTER			
			PART-PEAK	0.05466	0.07982	0.08492
			OFF-PEAK	0.04292	0.06808	0.07243
		CONNECTED LOAD (\$/HP)				
			SUMMER	3.84000	3.84000	4.08000
AG-5-B, AG-5-E		AG-5-B				
		ENERGY CHARGE (\$//CAUL)				
		ENERGY CHARGE (\$/KWH)	SUMMER			
			PEAK	0.12729	0.15245	0.16218
			OFF-PEAK	0.02609	0.05125	0.05452
			WINTER			
			PART-PEAK	0.04718	0.07234	0.07696
			OFF-PEAK	0.01738	0.04254	0.04525
		DEMAND CHARGE (\$/KW)				
			SUMMER			
			MAX	4.67000	4.67000	4.97000
			PEAK	5.85000	5.85000	6.22000
AG-5-C, AG-5-F		AG-5-C				
		ENERGY CHARGE (\$/KWH)				
			SUMMER			
			PEAK	0.10117	0.12633	0.13439
			PART-PEAK	0.04777	0.07293	0.07759
			OFF-PEAK	0.02791	0.05307	0.05646
			WINTER BART BEAU		0.0	0.00075
			PART-PEAK	0.03386	0.05902	0.06279
			OFF-PEAK	0.02483	0.04999	0.05318
		DEMAND CHARGE (\$/KW)	CLIMMED			
			SUMMER PEAK	10.84000	10.84000	11.53000
			PART-PEAK	2.04000	2.04000	2.17000
				2.04000	2.07000	2.17000



PG&E EQUIVALENT SCHEDULE	SVCE RATE SCHEDULE	UNIT/PERIOD	SVCE PROPOSED RATE (1)	RATE WITH PG&E SURCHARGES (2)	GENERATION RATE (3)	
STREET AND OUTDOOR LIGHTING						
LS-1, LS-2, LS-3, OL-1	STREET LIGHTING (LS-1, LS-2,	LS-3 and OL-1)				
	ENERGY CHARGE (\$/KWH)		0.07815	0.08465	0.09005	
TC-1	TC-1					
	ENERGY CHARGE (\$/KWH)		0.06857	0.09385	0.09984	
GreenPrime 100% Renewable Energy						

Customers electing the 100% renewable energy service option will pay the applicable rate for the default service option plus the 100% Renewable Energy Charge.

ENERGY CHARGE (\$/KWH) 0.00800

¹⁾ SVCE Generation Rates, without added PG&E fees, effective 5/1/2019

²⁾ For reference, SVCE Generation Service reflects SVCE Generation Rate, plus added PG&E fees (PCIA and Franchise Fees) as of 5/1/2019

³⁾ For reference, PG&E Generation service rate, effective as of 3/1/2019



Staff Report - Item 4

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 4: Approve the Q1 2019 Update of the Decarbonization Strategy and Programs

Roadmap with Revised Program Briefs and Adopt Resolution Approving the Budget

Request for Workforce Development and Training Programs

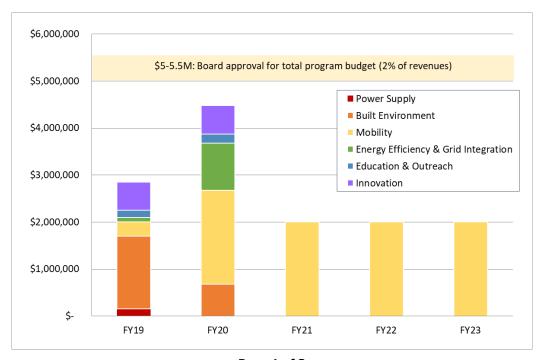
Date: 4/10/2019

RECOMMENDATION

Staff recommends the Board approve the Q1 2019 Update of the Decarbonization Strategy & Programs Roadmap with revised program briefs (Attachments 1 and 2) and adopt Resolution No. 2019-07 (Attachment 3) to approve the budget request and associated program brief (Attachment 4) for Workforce Development & Training programs totaling \$200,000 for FY2019 and FY2020.

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 adopted Strategy 5.2 of the Strategic Plan, to establish an SVCE decarbonization strategy and programs roadmap (abbv. "Roadmap"). In December 2018, the Board approved the Roadmap and approximately \$6M to begin implementation. In February 2019, the Board approved an additional budget request of \$8M for electric vehicle service equipment (EVSE) incentives for FY2020-2023. Figure 1 shows all existing funding commitments for programs. The figure also includes a band representing the total programs budget approved by the Board through the budgeting process of 2% of annual operating revenues, which is approximately \$5-5.5M annually.



Page 1 of 3

Figure 1: Programs budget by program area and fiscal year

ANALYSIS & DISCUSSION

Q1 2019 Update

Since Board adoption of the Roadmap in December 2018, staff has focused significant efforts on implementation of the eleven identified priority programs. Attachment 1 is the first quarterly update since Roadmap adoption, covering January through March of 2019. The quarterly update includes bulleted highlights, a timeline of the status of the development of all programs in the portfolio, a budget summary, and a table with brief updates and next steps for each initiative. Attachment 2 provides additional detail about each initiative in the form of revised program briefs. Non-substantive changes to several program briefs are highlighted through redline updates to the original briefs.

Workforce Development & Training

A program brief (BE5) dealing with Workforce Development and Training has been added and is part of Attachment 4.

Much of GHG mitigation boils down to accelerating transitions from traditional technologies to lower-carbon alternatives. Deployment of low-carbon technologies depends as much on the presence of a skilled professional community that can supply, install, maintain, and repair them as it does on consumer adoption decisions. Implementation of the Programs Roadmap provides an opportunity for professionals in SVCE communities to develop new expertise ahead of their industry curves that will be valuable for decades to come. A new program is proposed, Workforce Training and Development, that addresses this need.

As with the development of the Roadmap itself, SVCE's efforts should begin with seeking stakeholder input on where and how we can participate most effectively. SVCE efforts should leverage and synergize with existing workforce training and development organizations in SVCE's communities, that is, be additive and not duplicative. SVCE efforts should be inclusive and should consider how the opportunities in decarbonization can be made available to all segments of the relevant workforce. By investing in workforce development, we can help make SVCE's communities a hub of advanced decarbonization expertise that provides unique, valuable employment opportunities right here in Silicon Valley. Expertise is contagious, by fostering industry expertise in our own service territory, SVCE can contribute to the development of new knowledge and best practices that spread and drive decarbonization far beyond our borders.

STRATEGIC PLAN

The proposal supports SVCE's Strategic Plan Goal 5, which is to work with the community to achieve energy and transportation GHG emissions reductions of 30% emissions reduction from the 2015 baseline by 2021, 40% by 2025 and 50% by 2030. The resultant programs portfolio also supports specifically Strategy 5.3 to develop and conduct SVCE programs that promote decarbonization via grid innovation and fuel switching.

FISCAL IMPACT

Figure 2 shows existing and proposed funding commitments for programs including this budget request of \$200k for FY19-FY20 for workforce programs. As shown in the figure, program commitments collectively remain within the anticipated program budget of 2% of operating revenues (approx. \$5M-5.5M annually) approved through SVCE's budget process.

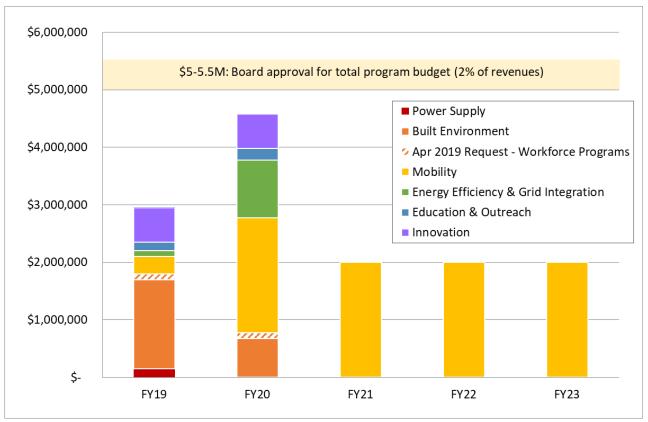


Figure 2: Programs budget by program area and fiscal year

ATTACHMENTS

- 1. Decarbonization Strategy & Programs Roadmap Q1 2019 Update
- 2. Revised Program Briefs
- 3. Resolution 2019-07 to approve the budget request for Workforce Development programs totaling \$200k for the two-year period of FY19-FY20
- 4. Program Brief for Proposed Workforce Development Initiatives

Decarbonization Strategy & Programs Roadmap Q1 2019 Update

April 10, 2019 BOD Meeting

Highlights:

- SVCE and Peninsula Clean Energy (PCE) forged a partnership to sponsor the collaborative development of forward-thinking building and transportation electrification reach codes for our service territories. SVCE and PCE are providing extensive technical assistance plus a \$10,000 incentive to each member agency that brings reach codes to their council. Six stakeholder workshops were held on March 19 and 20 to gather initial input on potential reach code options. Over 120+city staff, builders, developers, property owners, architects, and other external stakeholders participated in the workshop. Draft reach codes are currently in preparation and will be released at two webinars for city staff scheduled April 11 and April 24 for further stakeholder feedback and development. Reach codes are tentatively planned to be submitted for council review in late summer in order to coordinate their adoption with the new 2019 building code taking effect January 1, 2020.
- Grant recipients have been actively sharing information about SVCE to customers in targeted communities and in places that serve low-income and underrepresented customers. SVCE learned that 30% of customers eligible to participate in income-qualified discount programs are not enrolled. We have provided translated fact sheets about CARE, FERA and Medical Baseline to grantees to share. Acterra hosted several "energy clinics" at community centers, senior centers and other community meeting places and have reached more than 500 customers. Grantees are also distributing in-language surveys during outreach events to collect valuable input from non-English speaking customers.
- The Innovation Onramp program was launched at the end of March 2019 to leverage SVCE's unique position to engage and support the innovation ecosystem in addressing key technical, market and policy barriers to achieving deep decarbonization in our service territory and beyond. The program provides grant funding for promising pilot projects with external partners. To support market transformation, two stages of grant funding are available: Stage 1 funding supports proofs of concept with an anticipated grant award of \$10,000 \$75,000, while Stage 2 funding supports demonstrations with an anticipated grant award of \$50,000 \$100,000. Applications will be reviewed on a quarterly basis starting April 30, 2019.
- In March, SVCE launched the Electric Vehicle (EV) Infrastructure Strategy & Plan. The goal is to develop an overarching set of strategies and program implementation plans to guide SVCE's \$8M investment in EV charging equipment over the coming four years. Staff issued an RFP in February and contracted with a consultant to begin work on the initial market assessment starting mid-March. Member agency staff provided initial feedback on the vision and purpose of establishing a standing regional EV Working Group to help to guide ongoing program deployment. Concurrently, SVCE led the formation of a two-county coalition with Peninsula Clean Energy, San Jose, Santa Clara, and Palo Alto and submitted "letter of intent" to the California Energy Commission (CEC) in February to apply for block grant funding for coordinated EVSE build-out in the two counties. Early input from the EV Working Group will guide the regional collaboration.

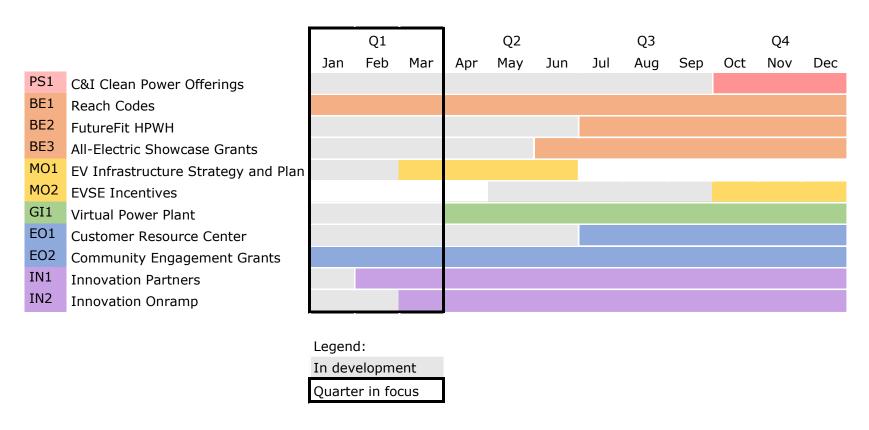


Figure: Timeline by program and quarter

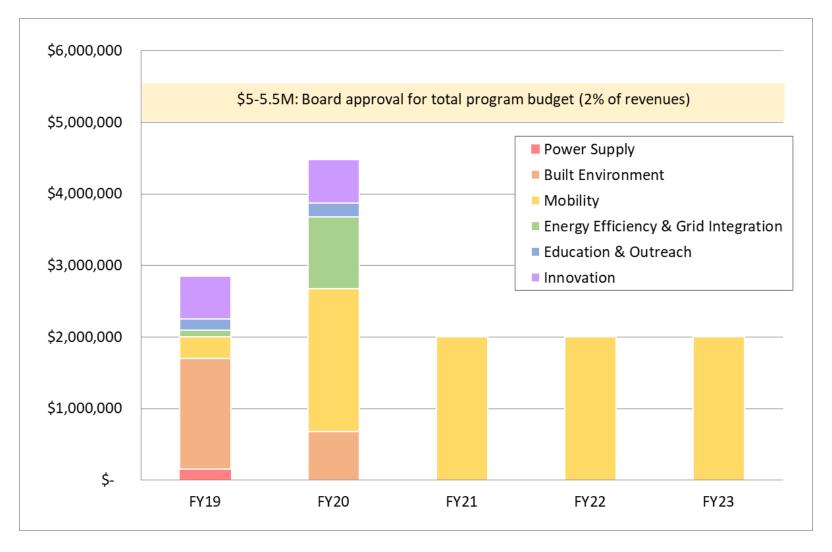


Figure: Programs budget by program area and fiscal year

Sector	Program	Q1 Activities	Q2 Outlook
Power Supply	PS1: 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	 Program plan developed, and consulting contracts in place for market strategy, pricing/cost analysis Completed initial assessment of CCE positioning relative to electric service providers (ESP) for serving customers interested in direct access related services Initial conversations with two large customers about possible alternative clean power offers 	 Continue to define/refine possible alternative offers Conduct meetings with target C&I customers to further define needs, alternative products of interest Develop detailed cost models to assess economics of current and alternative customer offerings On track to develop, launch and test pilot offerings by Q4
onment	BE1: Reach Codes Provide model energy code supportive of all-electric design and EV infrastructure to member agencies along with consultant support	 Partnered with PCE to contract for technical consulting support Conduct city-specific meetings to gather initial input Carried out initial kick-off event for member agencies in January Received draft cost effective analysis results, and synthesized and shared with city partners and stakeholders Draft model reach codes 	 Continue city-specific meetings with consultant support Complete development and share draft model reach codes with city staff at April 11 webinar Continue comprehensive external stakeholder education & engagement through Q2 On track to support member agencies choosing to bring reach codes to their councils in Q3
Built Environment	BE2: All-Electric Showcase Grants Provide incentives for all-electric buildings and share case studies about them and the professionals involved in their design	 Developed program design and go-to-market strategy that is in final stages of internal review 	 Complete internal program design review in April Issue RFP for program administration support in April On track for launch by end of Q2
	BE3: FutureFit Heat Pump Water Heaters Provide incentives for electric heat pump water heaters and service panel upgrades to residents using natural gas currently	 Developed program design and go-to-market strategy Collaborated extensively on program design with City of San Jose, which also received grant funding from BAAQMD for a heat pump water heater program 	 Issue RFP for program administration support in April Issue RFQ for contractors with San Jose Discuss bulk purchase opportunities with suppliers On track for launch by early Q3

Sector	Program	Q1 Activities	Q2 Outlook Attach
Mobility	MO1: EV Infrastructure Strategy & Plan Develop a near- to mid-term strategy for EV infrastructure and a set of program implementation plans	 Ran competitive solicitation process to identify consulting support for the strategy and action plan development Completed contracting with E-Mobility Group, who began work in mid-March Defined and launched an EV working group with member agencies, industry and other community stakeholders to provide input Formed coalition with Peninsula Clean Energy, San Jose, Santa Clara, and Palo Alto and submitted "letter of intent" to the California Energy Commission (CEC) for CALeVIP block grant funding for EVSE buildout in the two counties 	 Complete SVCE EV infrastructure strategy and plan by end of Q2 Complete discussions with two-county coalition to define regional program requirements for CEC CALeVIP block grant funding by May - CEC decision on CALeVIP grant awards expected in June Presentation to Board planned for August On track to launch identified priority programs by Q4 (see MO2)
	MO2: EVSE Incentive Program Incentivize EV charging infrastructure development to support various use cases	Program design phase integrated into MO1	 RFP issuance expected in Q3 On track for program launch in Q4
Energy Efficiency & Grid Integration	GI1: Virtual Power Plant 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	 Carried out informational interviews with key industry stakeholders to inform scoping of program Defined and developed scope work for initial stakeholder engagement effort and contracted with Gridworks for their consulting services to execute 	 Release a discussion paper for public review in April Solicit, receive and integrate stakeholder feedback Release updated discussion paper for final publication in June, with recommendation for SVCE action RFP issuance expected in Q3
n & Outreach	EO1: Customer Resource Center Develop customer resource center to enable engagement and awareness- building, education and action related to understanding energy usage, vehicle and building electrification	Refined project objectives and continued research in what information should be included in the resource center	 Issue RFI to gather information on available technologies to incorporate into an online resource center RFP issuance expected by Q4
Education	EO2: Community Engagement Grants Partner with local organizations in under-reached customer segments to promote SVCE accomplishments and programs	 The grantees outreach activities are ongoing and include connecting eligible customers to state, income-qualified energy discount programs, and hosting 'energy clinics' to help customers better understand their electricity charges. 	 Grantees submit mid-point progress reports in May Outreach events ongoing Collect customer input via in-language surveys

Sector	Program	Q1 Activities	Q2 Outlook	Attachr
Innovation	IN1: 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	 Developed program objectives and general approach Identified sponsorship opportunities for existing energy-focused innovation events Carried out informational discussions with multiple accelerators and incubators about possible partnership for administering an SVCE-initiated innovation challenge event (e.g. hackathons, prizes, etc.) Identified interested regional peers to cosponsor SVCE-initiated innovation challenge event 	 Participate as sponsor in St Cleantech Challenge (April) Powerhouse SunCode Hack and provide "challenge star focused on addressing mar for achieving deep decarbo Contract with one or more administer an SVCE-led inn challenge event in Q3 2019 	and kathon (May) tements" ket barriers onization partners to ovation
	IN2: Innovation Onramp Provide small grants to support innovation through pilot projects with external partners	 Developed program design, including application process, proposal evaluation criteria, grant funding stages and amounts, etc. Publish program overview, application link, evaluation criteria and other supporting information on website 	 Evaluate and select first coprojects after the first apple deadline closes on April 30 Issue RFP for program adm support in April 	ication , 2019



SVCE Program Brief – C&I Clean Power Offerings (PS1)

2019 Q1 Revised Version

April 10, 2019

November 30, 2018

Summary

Develop, market and sell additional SVCE power offerings to address large C&I customers seeking to buy clean power at competitive rates

Key Challenges

- Several large C&I customers are interested in buying lower-cost power through expanding direct access channels, potentially resulting in adverse revenue and GHG impacts
- Some large C&I customers also buying clean power directly via PPA's
- SVCE needs additional market offering(s) to address requirements of some large customers

Goals

 Preserve and grow local market share with large C&I customers, and associated community-wide GHG reduction benefits

Program Approach

General

- Q2 FY2019 Assessment and Strategy
 - Develop an assessment and strategy scope of work, including outreach and fact finding with selected large C&I customers on power supply needs/preferences; evaluate competitive landscape and local market opportunity; model current SVCE power supply economics and profitability by customer segment/load profile; develop conceptual models for alternative offer(s) and evaluate trade-offs; finalize near-term strategy and approach
- Q3 FY2019 Offering Design
 Detail design of alternative market offering(s)
- Q4 FY2019 Sales/Pilot Contract Launch
- Q1 FY2020 Sales/Pilot Contract Launch

Target Participants

Large commercial/industrial customers

Participation Criteria

Load threshold TBD

Program Evaluation, Measurement & Verification Plan

TBD

Third-Party Support



• Initial support from currently-retained third parties Ascend Analytics, Hanover Strategy Advisors, Pacific Energy Advisors, and others

Resources

• \$150,000 FY2019

Staff Support

• 1 FTE through Q1 FY2020

Timeline

- Q2 FY2019 Assessment and Strategy
- Q3 FY2019 Design
- Q4 FY2019 Sales/Pilot Contract Launch
- Q1 FY2020 Sales/Pilot Contract Launch

Program Sector & Activity Type

Sector(s)







Leverage



Coordinate analysis and approach with selected CCAs



Significant innovation opportunity; a number of large customers in our service territory very motivated to by 100% renewable energy in most efficient/cost-effective way possible





Customer data analytics will help SVCE understand cost-to-serve by customer, product and segment

Prioritization Criteria



Help ensure that largest C&I customers are buying clean energy in an efficient and cost-effective fashion



Maintain and expand GHG emissions reduction associated with the largest electricity users in our community



New offering(s) can serve multiple SVCE customers, and be easily modeled by other CCAs



New offering(s) will be available to all customers meeting associated usage thresholds and/or other customer requirements TBD



Given SVCE's core role as a local LSE, SVCE is well-positioned to be an efficient, cost-effective provider of customized clean energy generation services for large C&I customers



SVCE Program Brief – Reach Codes (BE1)

2019 Q1 Revised Version
April 10, 2019 November 17, 2018

Summary

Provide support to member agencies seeking to evaluate and adopt building code modifications to promote all-electric buildings and EV charging infrastructure requirements in the current building code cycle. Hire technical consultant to help coordinate and collaborate across member agencies and relevant stakeholders, add capacity to member agency staff, coordinate input and feedback from key external stakeholder groups during the code development and review process, and provide tools to support implementation. In addition, provide \$10k grant to each member agency to help defray non-outsourceable resource impacts of pursuing a reach code effort.

Key Challenges

At the time of construction is the most cost-effective point to decide to build all-electric and install EV charging infrastructure, yet building codes continue to favor natural gas and omit transportation electrification infrastructure needs.

Member agency resources are limited.

- Building codes encourage mixed-fuel buildings
- Developer inertia aligned with mixed-fuel buildings

Goals

One or more member agencies adopt 2019 reach codes.

Program Approach

General

- SVCE hires a reach code consultant in collaboration with Peninsula Clean Energy, to share costs across the two CCAs and enhance coordination/collaboration across member agencies in both counties
- Reach code consultant will map process flow, organize and carry out external stakeholder meetings, coordinate necessary economic modeling and proposed code language, among other support tasks that can be outsourced by city staffs
- Reach code consultant will manage both building electrification and EV charging infrastructure stakeholder processes
- Provide \$10k grant to each member agency to help defray non-outsourceable resource impacts of pursuing a reach code effort

Target Participants

- Primary -- Member agency staff
- Stakeholders developers, housing authorities, architects, contractors, builders (among others)



Participation Criteria

• The support services offered herein are open to all 13 member agencies.

Program Evaluation, Measurement & Verification Plan

No specific EM&V protocol

Third-Party Support

• Issue RFP to bring on a third-party consultant to develop all-electric and EV reach codes, organize and manage stakeholder meetings in the development and adoption process, and be a technical resource for our member agencies and SVCE staff/Board.

Resources

- \$400,000 in FY2019, which includes technical consultant and member agency grant support
- The above figure does not includeing an additional ~\$100,000 of resources provided by Peninsula Clean Energy to the consultant for deliverables benefiting both CCA member jurisdictions.

Staff Support

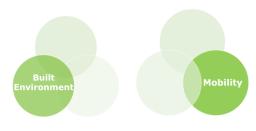
0.5 FTE in FY2019

Timeline

- Q1 FY2019 Concept, Release RFP, Cost-sharing agreement with Peninsula Clean Energy
- Q2 FY2019 Execute contract with consultant; Engage municipal agency staff and other stakeholders in reach code development process process
- Q3-Q4 FY2019 Deliver Reach Code(s) for CEC approval

Program Sector & Activity Type

Sector(s) Activity Type(s)





Leverage



Member agencies & Peninsula Clean Energy





This effort appears to be the first CCA-driven, multi-jurisdiction ordinance effort.



The cost effectiveness and GHG savings models are publicly viewable and may encourage others to adopt the all-electric pathway.

Prioritization Criteria



All-electric buildings and transportation electrification provide a lower cost, simpler, healthier, and safer alternative to their fossil fuel counterparts.



By selecting the all-electric pathway, buildings are effectively guaranteed to remain so, thereby providing decades of GHG reductions.



Much of the cost/benefit analyses necessary for reach codes are usable by other cities within the same climate and utility zone. Member agencies who have adopted reach codes may encourage other member agencies to do the same.



All-electric buildings and transportation electrification improves health and safety, which are typically more impactful to disadvantaged communities.



Aligns well with SVCE's role as a facilitator of improvements within and between our member agencies.



SVCE Program Brief – Heat Pump Water Heaters (BE2)

2019 Q1 Revised Version

April 10, 2019 November 17, 2018

Summary

Education, awareness, training, and incentives to encourage adoption of electric HPWH as a replacement for existing natural gas water heaters in existing buildings.

Key Challenges

 Limited supply available locally, limited contractor experience, potentially higher retrofit cost based on common home designs, lack of customer awareness, lack of clearly quantified economic and noneconomic benefits, no clear leaders in proactive sales in water heater market

Goals

- Install 100 residential HPWHs to replace existing natural gas water heaters, each with data loggers
 - o 90 market rate, 10 CARE/FERA
- Quantify hourly customer usage patterns in preparation for proper rate design and/or demand management solutions
- Quantify frequency of optimal and suboptimal installation conditions for use in future education and incentive opportunities

Program Approach

General

- Identify and coordinate with local supply warehouse, solar and general contractors to improve the supply chain participation
- Share improvements and provide training for permitting and inspection made by local cities to the rest of SVCE member agencies
- Incentive = \$4,500 for HPWH + 200A Service Panel upgrade for 90 installations
- Incentive = \$6,000 for HPWH + 200A Service Panel upgrade for 10 installations dedicated to existing CARE/FERA customers

Target Participants

- Single family and multi-tenant buildings undergoing major remodels and/or installing solar PV.
- Building permit and inspection staff for necessary trainings

Participation Criteria

- Existing buildings utilizing natural gas water heaters
- CARE/FERA enrollment required for 10 installations
- SVCE enrollment required for all 100 installations

Program Evaluation, Measurement & Verification Plan



• Current rate of adoption of HPWH during remodels, rate during, rate after initiative window.

Third-Party Support

- BAAQMD (Air District) grant providing \$325,000
- Program administration partner, outreach partners, data management service

Resources

- SVCE = \$1500,000 in FY2019
- SVCE = $\frac{22}{17}$ 5,000 in FY 2020
- Funds matched 1:1 by Air District grant of \$325,000
- Total Resources equal \$650,000 for the two year program period

Staff Support

- 0.75 FTE in FY2019
- 0.50 FTE in FY2020

Timeline

- Q2 FY2019 Design
- Q3 FY2019 Delivery

Program Sector & Activity Type

Sector(s)

Activity Type(s)





Leverage



BAAQMD (Air District) funding. Discussing partnerships with providers of energy efficiency w/in SVCE territory who are precluded from funding fuel switching.



Including the service panel upgrade simultaneously reduces the first cost barrier and provides a prepared target market for future all-electric initiatives.





Collect and share anonymized usage data to support other CCA, POU, and IOU initiatives encouraging electric heat pump water heaters. Collect and share frequency and type of cost drivers (e.g. ventilation, electric service) impacting retrofit opportunities.

Prioritization Criteria



Electric Heat Pump Water Heaters provide improved safety and air quality improvements. Further, leveraging time-of-use rates, HPWHs can provide ongoing bill savings.



Each HPWH expects to reduce 1 MT CO2e per unit annually. Total expected savings is 100 MTCO2e/year once fully subscribed.



The incentive level for this limited duration learning window is likely not scalable. The matching of optimal building characteristics with time-of-use rates already provides a similar cost-effectiveness to natural gas water heater retrofits.



Improvements in air quality and safety typically are more impactful to the disadvantaged community. Specifically, 10 units are allocated to CARE/FERA customers during this program window. The overall goal of making HPWH viable for all customers will benefit the DAC community.



Identifying and sharing improvements with and between member agencies. Also, SVCE's role as a regional facilitator enables a larger economy of scale than our member agencies working on this market in a fragmented fashion.



SVCE Program Brief – All-Electric Design Grants (BE3)

2019 Q1 Revised Version

April 10, 2019 November 17, 2018

Summary

Incentivize near-term development of showcase all-electric commercial and residential building projects, including potential decarbonized district energy systems.

Provide consultative support during design phase.

Develop and share model requirements for all-electric buildings for architects, developers, practitioners; based on type, square footage etc;

Recipients agree to showcase buildings

Key Challenges

- Limited exposure to and understanding of certain electric technologies leading to reliance on repeating previous mixed-fuel designs
- Demand for natural gas fueled cooking appears to be driving the utilization of mixed-fuels in residential construction

Goals

- 60 all-electric buildings
 - 20 Single Family, 30 Multi-Family units, 10 Commercial/Municipal buildings
- Case studies for 20 buildings

Program Approach

General

Promote consultative and incentive offering within developer and buildings department.

Target Participants

Developers, architects, general contractors

Participation Criteria

Designs must be provided to SVCE prior to submission of building permits

Program Evaluation, Measurement & Verification Plan

General rate of adoption of all-electric buildings prior to and following initiative

Third-Party Support

Program administrator, EM&V contractor, Technical/Building Design contractor

Resources

• \$<u>85</u>1,000,000 in FY2019; \$<u>65</u>500,000 in FY2020



Staff Support

• 1 FTE in FY2019

Timeline

- Q1 FY2019 Concept
 - Validate carbon savings estimate per building type,
- Q2 FY2019 Design, contract with third party support for program administration and technical support
- Q3 FY2019 Delivery through 2021 or until initiative fully subscribed

Program Sector & Activity Type

Sector(s)

Activity Type(s)





Leverage



American Institute of Architects (AIA), Buildings Industry Association (BIA), Stanford University architectural design program



SVCE projects interactive benefit of design incentives when combined with reach codes implemented to promote all-electric building design.



Case studies will share cost, energy, and carbon savings associated with all-electric buildings.



Prioritization Criteria



Cost and operational savings, health and safety improvements of allelectric designs benefit the designers, owners, operators and residents of all-electric buildings.



Varies per building type.



The promotion of all-electric design guidelines is durable within our community beyond initiative timeline and usable outside our service area.



All electric buildings provide improved air quality and safety which typically impacts DACs to a higher degree. All-electric buildings exist within SVCE territory at senior living facilities (for example) and SVCE will increase adoption within additional senior living and affordable housing.



SVCE is well positioned to support an initiative like this across all member agencies especially because the type and rate of new construction varies substantially between each member agency.



SVCE Program Brief – EV Charging Infrastructure Joint ActionStrategy and Plan (MOEV1)

2019 Q1 Revised Version April 10, 2019

Summary

Analyze current state of EVCI and EV deployment across variety of use cases, e.g. fleets, SFH, MUD, workplace and corridor; Aaggregate and integrate existing EVCISE planning resources and goals relevant to SVCE service area; launch community-wide, ongoing EV working group to support and guide SVCE efforts in this space; establish consolidated and simple mechanism for SVCE, member communities and organizations in the SVCE service area to pursue available funding sources; identify priority programs and develop implementation plans under key enabling practices, establish community wide EV infrastructure strategy and plan spanning residential/MUD, commercial, workplace, fleets and corridor requirements; establish priorities and related plan of action, e.g. ordinance/reach code integration, incentives and programs, rates, external funding sources, education, siting and permitting practices; develop overall plan of action and form into a comprehensive EVCI strategy for SVCE and member agencies

Key Challenges

No clear strategy or plan across SVCE service area for community-wide build-out of EV charging
infrastructure to meet goals; including commercial and residential requirements, funding, charging
types/levels, locations, technology, phasing etc.

Goals

Develop directional strategy(ies), priorities, and action plan with SVCE member communities to guide
ongoing build-out of EVSE infrastructure; including regional working group and funding mechanism
to streamline implementation

Program Approach

General

- <u>COMPLETE</u>: Worked with Member Agency Working Group and <u>used previous work in other</u> <u>jurisdictions other key stakeholders</u> to develop scope of work for focused strategy and planning effort; developed RFP and contracted for consultant support <u>with E-Mobility Group</u>;
- IN PROGRESS: ildentify EVSE needs, status and priorities across SVCE service territory spanning single-family residential, MUD, commercial, workplace, fleets and corridor; identify associated priority development opportunities including education, local policy, incentives and deployment programs, locational requirements, external funding sources and associated process/timelines for application; launch EVCI working group to provide ongoing support and input; develop funding mechanism to simplify access to external funding sources for SVCE, member agencies and communities; develop specific plan for addressing identified priorities, acquisition of funding from external sources, and deployment

Target Participants



• Member agencies and other local stakeholders, e.g. transit providers, network providers, major employers and property owners

Participation Criteria

• Interest in the electrification of transportation and transitioning to zero-emission transit TBD

Program Evaluation, Measurement & Verification Plan

• N/ATBD

Third-Party Support

• E-Mobility Group and subconsultants: REACH Strategies, electriphi, D+R International and the Yenter Group TBD

Resources

• \$200,000 in FY2019

Staff Support

• 1 FTE for 6 months

Timeline

- Q2 FY2019 Scope RFP and Select Consultant
- ____/Q3 FY2019 <u>Create</u> Strategy and Plan
- After Q3 FY2019 Launch EVCI Priority Programs

Program Sector & Activity Type

Sector(s)

Activity Type(s)







Leverage



Coordinated approach spanning member agencies and industry stakeholders; seek to obtain and leverage available external funding; CALeVIP engagement





Significant innovation opportunity, especially related to high-volume transit and MUD charging requirements; priority program integration with Innovation Onramp and innovation challenges



Customer and geographic data analytics will help target related outreach and subsequent siting efforts; consolidated forecasts from various tools will be made available for future use

Prioritization Criteria



Will identify critical needs and highest-priority opportunities for enabling vehicle electrification <u>based on current status and barriers</u>



Transportation <u>is</u> the largest single source of emissions within SVCE territory; access to convenient EV charging a key gating factor to expanding vehicle electrification



Approaches and resources can be readily shared with customers, and leveraged with key partners; success can be replicated in other areas as their penetration of EVs catches up to SVCE's



Strategy and planning efforts will be especially focused on key needs related to transit, MUD, and EV charging access in disadvantaged communities



SVCE a natural point of aggregation in supporting our member agency communities in expanding vehicle electrification



SVCE Program Brief – EV Fast Charge Depot Pilots EVSE Incentive Program (MOEV2)

November 30, 2018 2019 Q1 Revised Version

April 10, 2019

Summary

Develop <u>pilot</u> programs to deploy <u>a set of electric vehicle supply equipment (EVSE)</u> <u>high volume Direct Current</u> <u>Fast Charging (DCFC) depots</u> to support unique requirements associated with electrification of local transit fleets, <u>and</u> transportation network company vehicles, and access to EV charging in multi-unit residential developments (MUD) and disadvantaged communities (DAC)

Key Challenges

- Electrification of commercial/public fleets and transportation network company vehicles (e.g. Uber, Lyft) requires ready access to high-volume Direct Current (DC) Fast Charging facilities
- DC Fast Chargers are expensive and difficult to site, often requiring expanded electric service capacity, driver amenities, etc.
- CDeployment of EV charging in multi-unit developments is often complex, expensive and timeconsuming; current access to EV charging in MUD is very limited, making it difficult for MUD residents to own an electric vehicle
- EVSE is challenging to site on MUD properties due to parking codes, electric infrastructure upgrades, uncertain demand, etc. Very limited number of DCFC facilities in place; in general they are oversubscribed, and not capable of supporting high-volume fleet needs

Goals

Build <u>EVSE</u> pilot high-volume DC Fast Charge facilities to support commercial/public transit fleets, TNC drivers, MUD and DAC residents

Program Approach

General

Utilizing outputs of the EVSE Strategy and Planning program (EV1), build on program planning efforts
to define EVSE program characteristics, conduct pilot planning phase to define DCFC 'Depot'
characteristics, relevant external funding opportunities, SVCE financial/matching incentives, and
candidate site requirements; identify candidate locations and related project partners (e.g. site host,
PG&E, EVSE provider, local municipality, dedicated customer communities as applicable); subsequent
development and launch phases involve working with candidate location teams to acquire external
funding (as applicable) and support build-out of pilot depots

Target Participants

• End customer communities include commercial/public fleet owners, MUD and DAC residents; project partner communities include site hosts, PG&E, EVSE providers, municipalities

Participation Criteria

TBD



Program Evaluation, Measurement & Verification Plan

TBD

Third-Party Support

• TBD

Resources

- \$100,000 FY 2019
- \$2,000600,000 FY 2020
- \$2,000,000 FY 2021
- \$2,000,000 FY 2022
- \$2,000,000 FY 2023

Staff Support

• 24 FTE

Timeline

- Q4 2019 <u>DC Fast Charging Pilot Planning/Grant Depots Program</u> Development
- Q1-Q4 2020 DAC, MUD and Fleet EVSE Program Development Ongoing Pilot Development and Launch

Program Sector & Activity Type

Sector(s)

Activity Type(s)





Retail Products and

Services

Leverage



Coordinated approach spanning member agencies; seek to obtain and leverage available external funding through applicable PG&E program and other sources



Significant innovation opportunity, especially related to high-volume transit and MUD charging requirements





Customer and geographic data analytics will help target related outreach and subsequent siting efforts

Prioritization Criteria



Will identify critical needs and highest-priority opportunities for enabling vehicle electrification



Transportation <u>is</u> the largest single source of emissions within SVCE territory; access to convenient EV charging a key gating factor to expanding vehicle electrification



Approaches and resources can be readily shared with customers, and leveraged with key partners



Strategy and planning efforts will be especially focused on key needs related to transit, MUD, and EV charging access in disadvantaged communities



SVCE a natural point of aggregation in supporting our member agency communities in expanding vehicle electrification



SVCE Program Brief – Virtual Power Plant (GI1)

November 30, 2018
2019 Q1 Revised Version
April 10, 2019

Summary

A "virtual power plants" (VPP) is a cloud based energy supply made up of a collection of an aggregation of distributed energy resources (DERs), such as smart EV chargers, smart thermostats, building energy management systems, battery storage systems, solar PV and smart inverters. The VPP is a coordinated response of the DER aggregation to provide energy and demand response in wholesale power markets or to provide other value such as distribution system deferral. This program is focused on monetizing the value VPPs can provide in SVCE service territory. Develop a program to monetize and harness the value that distributed energy resource (DER) aggregations (aka "virtual power plants") in SVCE service territory can provide the grid to advance decarbonization and manage the anticipated load growth resulting from electrification.

Key Challenges

- Widespread electrification of vehicles and buildings could be detrimental to the grid if not integrated into grid operations.
- There are limited market opportunities for DER aggregations (aka "virtual power plants") to receive compensation for the value they can provide.

Goals

- Reduce emissions by supporting grid integration of renewables
- Monetize the value DERs can provide
- Promote additional DER deployment, <u>including</u> specifically <u>those</u> resulting from electrification activities
- Harmonize DER management and operation with grid operations

Program Approach

General

Staff are currently carrying out informational discussions with industry stakeholders and market participants to inform and refine potential SVCE programs related to VPPs. One option under consideration is issuing an RFP for resource adequacy from DER aggregations, which could be similar to a continuation of the Demand Response Auction Mechanism (DRAM)[‡]. Likelihood of pursuing this option depends on the outcome of ongoing CPUC regulatory proceeding on resource adequacy, which may severely limit SVCE's flexibility with capacity procurement. SVCE is also exploring other options, which have other regulatory risks. Staff anticipate issuing an RFI and/or holding a stakeholder workshop in early 2019 as a component of program research and design.

⁴ See for instance PG&E's website for their 2019 DRAM: https://www.pge.com/DRAM/



• Staff carried out initial informational discussions with industry stakeholders and market participants to inform and refine the scope of potential program(s) related to VPPs and grid integration. SVCE contracted with Gridworks to carry out a stakeholder engagement to solicit input and expertise from PG&E, DER providers, other CCAs, state agencies, as well as SVCE's member agencies, customers, community groups and local environmental advocacy organizations. Gridworks will first draft a "Virtual Power Plant Option Analysis", which is a discussion paper produced for public review through subsequent stakeholder engagement. Gridworks will then solicit and receive feedback via one or more workshops and one-on-one interviews. The input will be used to update the discussion paper and to guide recommendations to SVCE. Contingent upon the outcome of the stakeholder engagement process, SVCE anticipates moving forward with an RFP to pursue the recommended program design shortly after the stakeholder engagement process is complete. Furthermore, by publishing the insights gained through this initiative, staff hopes to further the development of VPP Initiatives at other CCAs, and beyond.

Target Participants

- TBD
- Stakeholders: PG&E, DER providers, other CCAs, state agencies, as well as SVCE's member agencies, customers, community groups and local environmental advocacy organizations
- Participants for the final program design are TBD.

Participation Criteria

TBD

Program Evaluation, Measurement & Verification Plan

TBD

Third-Party Support

• TBD

Resources

\$100k in Q1 FY2019; \$1M for Q2 FY2020-Q1 FY2021

Staff Support

• 0.25 FTE through Q2 FY2021

Timeline

- Q1-Q2 FY2019 Concept, <u>initial</u> research, <u>RFI</u>
- Q3-Q4 FY2019 Concerted, public stakeholder engagement effort RFP
- Q4 FY2019 RFP
- <u>FY2020 Third-party partners identified; remaining program design complete; deliveryQ1 FY2020</u>
 <u>Third-party partners identified; remaining program design complete</u>
- Q2 FY2020 Delivery

Program Sector & Activity Type

Sector(s) Activity Type(s)







Leverage



Supports formation of partnerships with key <u>stakeholders</u>, <u>including PG&E</u>, <u>DER providers</u>, <u>etc.</u>; <u>may be carried out in collaboration with other CCAs and municipal utilities</u> <u>vendors</u>; <u>may be carried out in collaboration with other CCAs and municipal utilities</u>



Innovative, emerging concept critical for achieving a high penetration renewables grid



<u>Final program relies on VPP providers' sophisticated data analytics to create a cloud-based, aggregated resource able to provide grid services</u>

Relies on VPP providers' sophisticated data analytics to create a cloudbased, aggregated resource able to provide grid services

Prioritization Criteria



Monetizes value provided by customer-cited DERs; part of value passed on by VPP provider to customers



Realizes demand-side flexibility required to support high penetration renewables grid





May be carried out in collaboration with other CCAs and municipal utilities or replicated by them to scale program and associated impact



VPP provider could be compensated on a performance basis; program could be designed to include all customer types VPP provider compensated on a performance basis



SVCE has as a load serving entity and community-facing agency in a unique position to deliver effective and compelling VPP program to advance our decarbonization goals SVCE has obligation to procure capacity and therefore option to support capacity specifically from VPPs



SVCE Program Brief - Customer Resource Center (EO1)

2019 Q1 Revised Version April 10, 2019

Summary

Develop online 'customer resource center' and related physical tools/resources to enable engagement, awareness-building, education and action; help customers assess energy use, costs and impacts, and opportunities for vehicle and building electrification; market via SVCE emails, newsletter, community events

Key Challenges

- Lack of public awareness regarding the benefits of vehicle and building electrification, and available products and services
- Many residential and commercial customers are interested in learning more, but finding related information is difficult

Goals

 Raise awareness and facilitate action by providing SVCE customers and the community with engaging, useful and easily-accessed information and resources on energy use and the benefits of vehicle and building electrification

Program Approach

General

 Concept phase - completed concept development for customer resource center, including: key requirements, top-level messaging, content framework, key online and physical resource elements, third-party partners/RFP criteria; overall approach and phasing for design and implementation

Target Participants

residential, small/medium business

Participation Criteria

N/A

Program Evaluation, Measurement & Verification Plan

TBD

Third-Party Support

• TBD

Resources

- \$150,000 FY2019 (includes \$100,000 in 2019 SVCE Marketing budget)
- \$200,000 FY2020

Staff Support

• 1 FTE



Timeline

- Q2 FY2019 Scope and Concept Development
- Q3 FY2019 Design
- Q4 FY2019 Resource Center Pilot Launch
- Q1-Q4 FY2020 On-going Resource Center Buildout and Support

Program Sector & Activity Type

Sector(s)



Activity Type(s)



Leverage



Coordinate approach with selected CCAs; seek to leverage third-party enablement platform(s) and content providers



Significant innovation opportunity; customer resources related to electrification and decarbonization currently highly fragmented



Customer data analytics will help target resource center-related communications

Prioritization Criteria



Helps expand awareness and enable customer action by providing useful information on the benefits of key products and services related to electrification



Customer awareness and education identified as critical first steps for taking action on electrification and decarbonization





Online resources can be readily shared with customers, and leveraged with key partners



All customers will have access to resource center materials



Providing education on electrification and decarbonization an integral aspect of SVCE's mission in supporting our member agency communities



SVCE Program Brief – Community Engagement Grants (EO92)

2019 Q1 Revised Version April 10, 2019

Summary

SVCE will direct Community Engagement Grants to local nonprofits to provide underrepresented and hard-to-reach electricity customers with information about SVCE's mission, benefits, programs and upcoming changes on residential energy bills. These organizations will play a critical role in helping the agency reach a broader audience, and in defining and promoting future programs.

Key Challenges

- Underrepresented populations are difficult to access due to a lack of trust for a new organization or government entity, or language barriers creates a need for diverse messaging and communications methods.
- Lack of public awareness regarding the benefits Silicon Valley Clean Energy, as well as discount program eligibility

Goals

- Increase understanding among underrepresented customers of Silicon Valley Clean Energy, its mission and benefits
- Increase understanding of how SVCE savings appear on residential energy bills, and knowledge of eligibility for energy discount, efficiency and associated programs
- Gather input from underrepresented customers to inform future program offerings

Program Approach

General

 Grants are awarded to organizations that can provide messaging to a desired number of households in the SVCE service territory. Outreach may include a mix of in-person presentations and conversations at events, email blasts based on confirmed open rate, confirmed traditional media and/or social media reach, and other creative outreach ideas based on your organization's capacity.

Target Participants

- Low-income residents
- Seniors
- Customers eligible for Medical Baseline discounts
- Customers with low English language proficiency
- Milpitas, south county (Morgan Hill/Gilroy) and unincorporated county residents

Participation Criteria

N/A

Program Evaluation, Measurement & Verification Plan

- Grant deliverables require a final report with the following information:
- Expenses and administrative costs by line item



- Statistics on how many people were reached by each outreach method
 - Estimated demographics of people reached based on target populations
 - Community feedback on SVCE messaging
 - Community input on programs
 - Lessons learned

Third-Party Support

• Grantees are encouraged to collaborate with each other when there are opportunities to partner and expand their reach to their respective audiences.

Resources

- \$100,000 FY2019 (\$75,000 for grant awards, \$25,000 allocated to additional marketing materials and support, such as translation services)
- \$100,000 FY2020

Staff Support

.25 FTE

Timeline

- Q1 FY 2019 Grants awarded, contracts executed, kick-off meeting
- Q2 FY 2019 Provide updated materials to grantees with new rate information, setup presentations and meetings
- Q3 FY 2019 Majority of outreach events performed, administer surveys
- Q4 FY 2019 Final reports due, open up grant cycle for FY 2020

Program Sector & Activity Type

Sector(s)



Activity Type(s)



Leverage



Leveraging trusted community organization to reach out to their existing clients and members to inform customers of SVCE program offerings and benefits.



Opportunity to for SVCE and grant recipient organizations to come up with innovation methods and messaging to engage customers and drive interest in their energy use.





Customers will provide valuable input to SVCE from survey data administer and collected by grant recipient organizations.

Prioritization Criteria



Helps expand awareness and enable customer action by providing useful information on the benefits of key products and services offered by SVCE.



Customer awareness and education identified as critical first steps for acting on electrification and decarbonization.



Retaining customer interest in SVCE activities will provide for a useful database to offer future programs and build an advocate base when needed.



All customers will have access to SVCE offerings in their preferred communication methods and language.



Providing education on SVCE's offerings from carbon-free power supply, competitive rates and electrification to all customer segments, and collecting input for all customers to inform the agency's future offerings.



SVCE Program Brief – Innovation Partners (IN1)

2019 Q1 Revised Version April 10, 2019

November 25, 2018

Summary

SVCE's service territory — Silicon Valley — is arguably the global epicenter of innovation. As such, SVCE has a unique opportunity to engage with the innovation ecosystem to voice SVCE's vision and goals to mitigate climate change and to encourage focus on innovations that accelerate the transition to a decarbonized economy. Examples of engagement by SVCE include but are not limited to speaking at events, participating in technical advisory groups, and launching pilot projects for promising, innovative products and services through the "Innovation Onramp" program (described in a separate program brief). SVCE will enter into memorandums of understanding (MOUs) and other forms of partnership agreements with key strategic partners. Near-term activities with partners include sponsoring existing innovation events (hackathons, challenges, etc.) and launching an SVCE-led innovation challenge in Fall 2019. The MOUs outline overlapping interests, complementary capabilities, and near-term opportunities to engage.

Key Challenges

- Start-up investment activities in the energy sector are dominated by companies with vested interests in fossil fuels that may not share SVCE's vision and goals for decarbonization.
- Engaging individually with hundreds of start-ups, corporates, academics, industry practitioners, etc. would be inefficient and prohibitively staff and resource intensive.

Goals

- Forge key strategic partnerships to efficiently engage the local innovation ecosystem.
- Voice SVCE's vision and goals to mitigate climate change, and encourage focus on innovation that accelerates transition to a decarbonized economy.
- Play a role in moving promising technologies, products, and policies through the process toward commercialization and scale.

Program Approach

General

- SVCE will enter into MOUs and other forms of partnership agreements describing overlapping
 interests, complementary capabilities, and near-term opportunities to engage. MOUs have already
 been drafted with Prospect Silicon Valley and Joint Venture Silicon Valley. SVCE is currently in
 conversation with several other organizations as prospective innovation partners.
- MOUs have been executed with Prospect Silicon Valley and Joint Venture Silicon Valley.
- Identify a partner to administer an SVCE-led innovation challenge in Fall 2019.

Target Participants

N/A



Participation Criteria

N/A

Program Evaluation, Measurement & Verification Plan

N/AMOUs and partnership agreements will identify several near-term opportunities for engagement.
 Success of the partnerships will be evaluated based on progress toward realizing one or more of these near-term opportunities.

Third-Party Support

N/A

Resources

 Budget included under "Innovation Onramp" to cover any partnerships requiring financial resources (From "Innovation Onramp": \$1.2M over two-year period (Q2 FY2019-Q1 FY2021), with \$1M reserved for grants and \$200k reserved for third-party support and partnerships)

Staff Support

• 0.25 FTE for managing both Innovation Partners and Innovation Onramp

Timeline

- Q1 FY2019 Execute MOUs and partnership agreements with key strategic partners
- Q2-Q3 FY2019 Design and plan SVCE-led innovation challenge
- Q3 FY2019 Sponsor and participate in existing innovation challenges (Stanford Cleantech Challenge, Powerhouse SunCode hackathon, etc.)
- Q4 FY2019 Carry out SVCE-led innovation challenge
- FY2020 Evaluate results of program in FY19 & identify how to best proceed Q2 FY2019 Q1 FY2020 Engage with strategic partners, as described in MOUs and partnership agreements
- Q2 FY2020 Evaluate results of partnerships & identify opportunities for improved engagement

Program Sector & Activity Type

Sector(s)



Activity Type(s)



Leverage





Primary goal is identifying and engaging key partners to efficiently engage and influence the innovation ecosystem



(same as above) Primary goal is identifying and engaging key partners to efficiently engage and influence the innovation ecosystem



Significant fraction of start-up initiatives expected to focus on harnessing the value of data

Prioritization Criteria

SVCE will voice support for innovation that achieve the first four criteria: customer & community value, emissions impact, scalable & transferable, and equity in service. Additionally, the criteria are addressed below for the Innovation Partners program as a whole.



Provides a voice for SVCE customers and the community in the innovation ecosystem to enhance value from emerging products and services



Achieving deep decarbonization requires significant incremental innovation, which is the focus of this program



Proposed program could be scaled to the broader CCA community and beyond



SVCE will voice the need for innovation to serve all customer segments, including those traditionally under-represented (e.g. low income)



SVCE's core mission is to reduce greenhouse gas emissions, which will require significantly more innovation to achieve – SVCE's engagement in the innovation ecosystem can influence innovation that supports achieving this mission



SVCE Program Brief – Innovation Onramp (IN2)

2019 Q1 Revised Version April 10, 2019

November 17, 2018

Summary

Innovation Onramp is a program to provide grant funding to work with external partners and customers in launching promising, innovative pilot projects. The program consists of an application process with transparent evaluation criteria and requirements, a quarterly application deadline, and standardized partnership agreements. Innovation Onramp is a program to provide a framework for working with external partners and customers in launching promising pilot projects. The program will consist of an application process with transparent evaluation criteria and requirements, a quarterly application deadline, and standardized partnership agreements. Limited grant funding will be available to cover pilot costs.

Key Challenges

 SVCE currently lacks standardized agreements and defined and transparent processes and policies to nimbly engage with external partners and customers on innovative pilot projects.

Goals

 Engage external partners to carry out pilots that will accelerate innovation in support of SVCE's decarbonization mission.

Program Approach

General

- Establish standardized partnership agreements, an application, and transparent evaluation criteria and program requirements. Define an internal, quarterly review process to evaluate applications and select program participants. Provide grant funding to cover costs associated with selected pilots. Two stages of grant funding available:
 - Stage 1: \$10,000-\$75,000 for proofs of concept
 - Stage 2: \$50,000-\$100,000 for demonstrations
- Prepare standardized partnership agreements, an application, and transparent evaluation criteria
 and program requirements. Define an internal, quarterly review process to evaluate applications and
 select program participants. Provide grant funding to cover costs associated with selected pilots up
 to a limit of \$25k per project. Staff will seek Board review and approval for any exceptions.

Target Participants

 The program will be open to any external partners. Expected program participants include start-ups, corporates, academic researchers, C&I customers and member agencies.

Participation Criteria

The program application will include all evaluation criteria for program participation. Primary
evaluation criteria will be the five prioritization criteria of all SVCE program activities (customer &
community value, emissions impact, scalable & transferable, equity in service, core role for SVCE).



Secondary evaluation criteria could include, <u>but is not limited to for instance</u>, anticipated staff resource impact, overlap in existing/planned program activities, <u>and</u> potential to inform future program activities upon successful completion of the pilot, <u>and acceptance of SVCE's standard contract terms.</u>

Program Evaluation, Measurement & Verification Plan

- A robust plan for evaluation, measurement and verification (EM&V) will be defined for each individual project. A proposed EM&V plan will be requested from the applicant, which will be refined with SVCE staff, as needed, and incorporated into the scope of work of the partnership agreement.
- A robust plan for evaluation, measurement and verification (EM&V) must be defined for each
 individual project. The application process will request a proposed EM&V plan from the applicant. If
 the application is successful and selected, the proposed plan will be refined with SVCE staff, as
 needed, and incorporated into the scope of work of the partnership agreement.

Third-Party Support

 Given limited staff resources, third-party support will likely be needed for activities such as project management, and evaluation, measurement & verification. <u>Staff will issue an RFP for program admin</u> <u>support in April 2019.</u>

Resources

• \$1.2M over two-year period (Q2 FY2019-Q1 FY2021), with \$1M reserved for grants and \$200k reserved for third-party support and partnerships

Staff Support

• 0.25 FTE for managing both Innovation Partners and Innovation Onramp

Timeline

- Q1 FY2019 Develop standardized contracts and budget proposal for Board review.
- Q2 FY2019 Complete program design & Launch program.
- Q3 FY2019-Q4 FY2021 <u>Run program</u>. Manage program and provide regular updates to Board through existing reporting and review processes (annual budget review, annual programs portfolio review, CEO reports, etc.).

Program Sector & Activity Type

Sector(s)



Activity Type(s)





Leverage



Primary goal is identifying and engaging with external partners on innovative pilot projects that show promise to support SVCE's mission to efficiently engage and influence the innovation ecosystem



Primary goal of program is engaging with external partners on innovative pilot projects that show promise to support SVCE's mission(same as above) Primary goal is identifying and engaging with external partners to efficiently engage and influence the innovation ecosystem



Significant fraction of start-up initiatives expected to focus on harnessing the value of data

Prioritization Criteria

These prioritization criteria will comprise the primary evaluation criteria incorporated in the program application process. Additionally, the criteria are addressed below for the Innovation Onramp program as a whole.



Member agencies and customers are prospective participants, and receive direct and indirect value from the program



Achieving deep decarbonization requires significant_<u>incremental</u> innovation, which is the focus of this program



Proposed program could be scaled to the broader CCA community and beyond



Creating an open solicitation for innovation pilots will attract applicants serving all parts of the customer base





SVCE's core mission is to reduce greenhouse gas emissions, which will require significantly more innovation to achieve – SVCE's support of pilots will influence innovation that supports achieving this mission

SILICON VALLEY CLEAN ENERGY AUTHORITY RESOLUTION NO. 2019-07

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY APPROVING WORKFORCE TRAINING AND DEVELOPMENT BUDGET

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 adopted 2021, 2025 and 2030 greenhouse gas emissions reduction targets; and

WHEREAS, the Board adopted the Decarbonization Strategy and Programs Roadmap and initial budget for the implementation of decarbonization programs pursuant to the Roadmap on December 12, 2018 by Resolution No. 2018-20; and

WHEREAS, SVCE staff would return to the Board with additional budget requests as decarbonization programs are developed consistent with the SVCE Decarbonization Strategy & Programs Roadmap; and

WHEREAS, the Board amended the initial budget for approving an allocation of \$8 million for the electric vehicle service equipment (EVSE) incentive program for activities starting in Fiscal Year 2020 and running through Fiscal Year 2023 by Resolution No. 2019-02.

NOW THEREFORE, the Board of Directors of the Silicon Valley Clean Energy Authority does hereby amend the budget for the Decarbonization Strategy and Programs Roadmap adopted by Resolution No. 2018-20 and amended by Resolution No. 2019-02 by approving the allocation of \$200,000 for workforce training and development activities starting in Fiscal Year 2019 and running through Fiscal Year 2020.

PASSED AND ADOPTED this 10th day of April, 2019, by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Gibbons				
City of Cupertino	Director Sinks				
City of Gilroy	Director Tovar				
City of Los Altos	Director Bruins				
Town of Los Altos Hills	Director Corrigan				
Town of Los Gatos	Alternate Director Rennie				
City of Milpitas	Director Nuñez				
City of Monte Sereno	Alternate Director Lawler				
City of Morgan Hill	Director Martinez-Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Ellenberg				
City of Saratoga	Director Miller				
City of Sunnyvale	Director Smith				

	Chair	
ATTEST:		
Andrea Pizano, Board Secretary		



SVCE Program Brief – Workforce Training & Development (BE5)

April 10, 2019 (new initiative)

Summary

SVCE's programmatic activities in the Built Environment – specifically the Reach Code effort (BE1) – have highlighted the need for greater workforce training to position the community for market readiness of all-electric buildings and EV charging infrastructure buildout. This program is to provide support for workforce training and development to support the transition to all-electric buildings and EV charging infrastructure development in the built environment. It is also designed to help build professional expertise in the areas of building electrification and EV charging infrastructure buildout within SVCE's service territory, so that the workforce opportunities created by these transitions are accessible to members of SVCE's member communities.

Key Challenges

 Current workforce initiatives primarily focus on training for the status quo: existing mixed fuel buildings.

Goals

- Help ensure market readiness for building and transportation electrification
- Help ensure that the workforce opportunities created by building and transportation electrification are accessible to professionals in SVCE's communities

Program Approach

General

- The general approach is still under development. Staff are currently carrying out informational interviews to better understand workforce development needs and challenges, and evaluating several opportunities to support workforce development. One option, is to make small grants available through an application process to local workforce training and development organizations to organize events, trainings, and other initiatives to support all-electric and EV charging infrastructure related activities.
- The results of the interviews will help SVCE staff determine where additional workforce development resources can be most helpful to professionals in SVCE communities and conducive to implementing SVCE's Programs Roadmap. The details of the program's structure, outreach plan, and implementation will be developed from there.

Target Participants

• To be decided based on SVCE staff assessment of where supplemental workforce development resources can be most effective and impactful.

Participation Criteria

• To be decided based on SVCE staff assessment of where supplemental workforce development resources can be most effective and impactful.

Program Evaluation, Measurement & Verification Plan



 To be determined based on the specific outcomes that SVCE staff deem most conducive to meeting program goals.

Third-Party Support

To be decided based on results of baseline need and challenge research. However, the intent is to
collaborate where possible with existing workforce development initiatives and organizations in
SVCE's territory in order to develop complementary approaches and improve program outreach.

Resources

\$200,000 in FY2019 and FY2020

Staff Support

• 0.1 FTE in FY2019 and FY2020

Timeline

- FY2019 Staff design the program concept and launches programs.
- FY2020 Based on learnings from FY2019, continue or modify program to achieve program goals.

Program Sector & Activity Type

Sector(s)

Activity Type(s)







Leverage



Labor organizations, community colleges, educational institutes, workforce training centers



SVCE will focus on innovative approaches that maximize leverage



SVCE is crafting an approach that will leverage data and transparency to maximize impact of the effort and facilitate transferability to other regions



Prioritization Criteria



Facilitating the transition to all-electric buildings and transportation electrification provide a lower cost, simpler, healthier, and safer alternative to the fossil fuel status quo



Successful market transformation to all-electric buildings and transportation will enable deep decarbonization



SVCE is focusing on approaches that are scalable and transferable beyond our boundaries



Workforce development initiatives could benefit members of our community thus far not involved in the clean energy economy



Aligns with SVCE's role in identifying barriers to deep decarbonization and identifying key partners to address them



To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 5: Executive Committee Report

Date: 4/10/2019

The Executive Committee met on March 22, 2019 and this item will be addressed as an oral report to the Board.



To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 6: Finance and Administration Committee Report

Date: 4/10/2019

No report as the Finance and Administration Committee has not met since January 25th, 2019.



To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 7: Legislative Ad Hoc Committee Report

Date: 4/10/2019

No report as the Legislative Ad Hoc Committee last met March 7, 2019.



To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 8: Audit Committee Report

Date: 4/10/2019

No report as the Audit Committee last met February 4, 2019.



Silicon Valley Clean Energy Board of Directors Meeting

April 10, 2019

Appendix A

Power Resource Contracts Executed by CEO

CONFIRMATION

Reference:

This Confirmation is governed by the Master Power Purchase and Sale Agreement Between Shell Energy North America (US), L.P. ("Seller")

And

Silicon Valley Clean Energy Authority, a California joint powers authority ("Buyer") dated, November 28, 2016 (the "Master Agreement")

Transaction Date: March 15, 2019 (the "Effective Date")

RECITALS:

WHEREAS, pursuant to California Public Utilities Code Sections 366.1, et. seq., Buyer has been registered as a Community Choice Aggregator (the "<u>CCA</u>");

WHEREAS, Buyer is a California joint powers authority, which has established Silicon Valley Clean Energy for purposes of delivering CCA service to certain customers located within the County of Santa Clara;

WHEREAS, Seller and Buyer desire to set forth the terms and conditions pursuant to which Seller shall supply the Product to Buyer, and Buyer shall take and pay for such supply of Product subject to satisfaction of the conditions herein; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements in this Confirmation and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1. <u>**DEFINITIONS.**</u> Any capitalized terms used in this Confirmation but not otherwise defined below shall have the meaning ascribed to such term in the Master Agreement:

"Applicable Law" means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties, the Project(s), or the terms of the Agreement.

"CAISO" means the California Independent System Operator Corporation or the successor organization to the functions thereof.

"CAISO Tariff" means the California Independent System Operator Corporation Agreement and Tariff, Business Practice Manuals (BPMs), and Operating Procedures, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

"Commercially Reasonable Efforts" for the purposes of this Confirmation, "commercially reasonable efforts" or acting in a "commercially reasonable manner" shall not require a Party to undertake extraordinary or unreasonable measures.

"CPUC" means the California Public Utilities Commission.

"Day Ahead" has the meaning set forth in the Tariff.

"<u>Delivery Period</u>" shall be the period beginning on the Start Date and ending on the End Date, as set forth in Section 3 below.

"Delivery Point" has the meaning set forth in Section 4 hereof.

"Effective Date" has the meaning set forth in the Reference Section at the beginning of this Confirmation.

"Energy" means electrical energy, measured in MWh.

"Exhibits" shall be those certain Exhibits, which are attached hereto and made a part hereof.

"FERC" means the Federal Energy Regulatory Commission.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, or the CAISO or any other transmission authority, having or asserting jurisdiction over a Party or the Agreement.

"<u>IST</u>", an abbreviation for Inter-SC Trade, has the meaning set forth in CAISO Tariff.

"MW" means megawatt.

"MWh" means megawatt-hour.

"PG&E" means the Pacific Gas and Electric Company, its successors and assigns.

"Product" shall have the meaning set forth in Section 2 below.

"Prudent Industry Practices" means any of the practices, methods, techniques and standards (including those that would be implemented and followed by a prudent operator of generating facilities similar to the Project(s) in the United States during the relevant time period) that, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result, giving due regard to manufacturers' warranties and recommendations, contractual obligations, the requirements or guidance of Governmental Authority, including CAISO, Applicable Law, the requirements of insurers, good business practices, economy, efficiency, reliability, and safety. Prudent Industry Practices shall not be limited to the optimum practice, method, technique or standard to the exclusion of all others, but rather shall be a range of possible practices, methods, techniques or

standards.

"Security Documents" has the meaning set forth in the Master Agreement.

"Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended, supplemented or replaced by CAISO from time to time.

"Third-Party SC" means a third party designated by Buyer to provide the SC functions for the benefit of Buyer.

"<u>Unspecified Sources of Power</u>" means electricity that is not traceable to a specific generation source by any auditable contract trail or equivalent, including a tradable commodity system that provides commercial verification that the electricity has been sold once and only once.

2. PRODUCT.

- 2.1 <u>Seller Delivery Obligation</u>. Throughout the Delivery Period, Seller shall sell and deliver or make available, or cause to be sold and delivered or made available to Buyer, the "<u>Product</u>," which is comprised of a quantity of Energy specified in Exhibit A.
- 2.2 <u>No New Construction Without Environmental Review.</u> To the extent that Seller constructs any new facilities to meet its supply obligation hereunder, Seller covenants and agrees that the construction and operation of such facility(ies) will be in accordance with any and all Applicable Law.
- 2.3 <u>Resources</u>. Seller may use Unspecified Sources of Power to provide the required Energy hereunder.
- 3. <u>DELIVERY PERIOD</u>. This Confirmation shall be in full force and effect as of the Effective Date. The terms set forth herein shall apply from the Start Date through the End Date, which entire period will comprise the Delivery Period. This Confirmation shall terminate on the date on which both Parties have completed the performance of their obligations hereunder, unless earlier terminated pursuant to the terms hereof.

Start Date:	End Date:
June 1, 2019	December 31, 2019

- 4. **DELIVERY POINT**. CAISO NP15 EZ Gen Hub
- 5. <u>SCHEDULING.</u> Seller shall be responsible for scheduling the Product to Buyer's Third-Party SC on a Day Ahead basis as an Inter-SC Trade. Seller shall be responsible for all costs associated with the generation and delivery of the Product to the Delivery Point.

6. **PRICING**.

6.1 <u>Energy Contract Price and Payment</u>. For each month during the Delivery Period, Seller will invoice Buyer, and Buyer will pay Seller, an amount equal to the Energy Contract Quantity delivered in accordance with this Confirmation in such month multiplied by the Energy Contract Price specified in <u>Exhibit A.</u>

7. CONTRACT QUANTITIES.

7.1 <u>Energy</u>. Energy Contract Quantities and Energy Contract Prices pursuant to this Confirmation relate to the quantities set forth in Exhibit A.

8. MONTHLY BILLING SETTLEMENT

- 8.1 <u>Monthly Invoice Timeline</u>. Seller agrees to use commercially reasonable efforts to deliver each monthly invoice to Buyer not later than the fifteenth (15th) day of each month for the previous calendar month. The Parties hereby agree that all invoices under this Confirmation shall be due and payable on the twenty-fifth (25th) day of the same month in which Seller delivered such invoice, provided that if such day is not a Business Day, then such invoice will be due and payable on the next Business Day that occurs after the twenty-fifth (25th) day of the month.
- 9. <u>COMPLIANCE REPORTING.</u> Buyer shall be responsible for submitting compliance reports to the CPUC and/or other Governmental Authorities on its own behalf and will require resource information, electronic tagging information, and other documentation to be provided by Seller. Seller shall provide all reasonable information to Buyer necessary for Buyer to timely comply with periodic compliance reporting requirements and as otherwise required by Applicable Law with respect to the Product.
- 10. <u>NO RESTRICTION</u>. Nothing in this Confirmation shall limit Buyer's ability to develop its own generation facilities or prevent Buyer from purchasing Energy from other parties or prevent Seller from selling Energy to other parties; provided, however, that Buyer shall remain responsible to pay Seller for the Contract Quantities represented in <u>Exhibits A</u>.
- 11. FORWARD CONTRACT. This Agreement constitutes a sale of a nonfinancial commodity for deferred shipment or delivery that the parties intend to be physically settled and is excluded from the term "swap" as defined in the Commodity Exchange Act under 7 U.S.C. § 1a(47) and Commodities Future Trading Commission and Securities and Exchange Commission regulations under Title 17 of the Code of Federal Regulations Part 1 and Title 17 of the Code of Federal Regulations Parts 230, 240, and 241, respectively
- 12. <u>STANDARD OF CARE AND GOOD FAITH</u>. When performing its obligations hereunder, Seller shall act in good faith and shall perform all work in a manner consistent with Prudent Industry Practices.
- 13. <u>DODD-FRANK</u>. Each Party represents to the other that it is either (i) an eligible contract participant as defined in section 1a(18) of the Commodity Exchange Act and the regulations of the Commodity Futures Trading Commission, or (ii) a producer, processor,

commercial user of or a merchant handling the commodity that is the subject of this Transaction, or the products or byproducts thereof, and is offering or entering into this Transaction solely for purposes related to its business as such.

14. **SECURITY PROVISIONS.**

- 14.1 <u>Compliance with Security Documents</u>. During the entire period that this Confirmation remains in effect, Buyer shall comply with the Security Documents. Upon the occurrence of an Event of Default (after giving effect to any applicable cure periods) by Buyer under any Security Document or a termination of any Security Document by Seller due to Buyer's failure to perform in accordance with the terms thereof, such event shall constitute an Event of Default of Buyer in accordance with Article Five of the Master Agreement and Buyer shall therefore be the 'Defaulting Party' with regard to such failure to perform.
- 14.2 Buyer Reporting Requirements. During the entire period this Confirmation remains in effect, Buyer shall provide Seller with the report(s) required below and shall also provide Seller with any clarifications requested regarding such report(s) and such other information that Seller reasonably requests regarding Buyer's financial performance, Buyer's performance of its obligations under this Confirmation or any Security Document or the ongoing viability of the CCA. In the event Buyer fails to provide Seller with any required reports requested by Seller and such failure is not remedied within fifteen (15) Business Days of Seller's written request therefor and notice of a potential Event of Default, such failure shall be an Event of Default in accordance with Article Five of the Master Agreement and Buyer shall therefore be the 'Defaulting Party' with regard to such failure to perform.
 - (a) Monthly Reports. The following reports shall be provided by Buyer to Seller not later than twenty (20) days following the end of each calendar month for items (i) through (vi) below, and each report shall be with regard to such previous calendar month or other period as applicable:
 - (i) Customer deposit report including a complete and detailed report of all collateral Buyer is holding from any Customer in the format agreed to between the Parties but shall not include the identity or personal details (name, address, telephone number, family size, social security number, bank account number, credit score, payment history, etc.) of any Customer nor any information that may allow Seller to determine a Customer's identity;
 - (ii) Customer on-bill prepayment report including a complete and detailed report of all Customer on-bill payments that were deposited into the Primary Secured Account (as defined in the Security Documents);

- (iii) Cash reconciliations and bank statements for each of Buyer's banking accounts; and
- (iv) Summary of payments made by Customers or other entities to Buyer and a summary of delinquent accounts regarding Customers, such information to be provided on an aggregate basis (i.e. not by Customer) and shall include information segregated for delinquencies for each of the following time periods: 30 days, 60 days, 90 days and 120 days, plus the total account receivable balance owed to Buyer from its Customers
- (b) Semi-Annual Reports. The following report shall be provided by Buyer to Seller not later than 20 days following the end of the first six calendar months of each Buyer fiscal year: consolidated and consolidating financial statements for such six month period prepared in accordance with generally accepted accounting principles. Such financial statements shall include, at a minimum, a detailed profit and loss statement balance sheet statement of cash flows, a monthly and year to date financial projections showing line item and total variances between such financial projections and actual results and an executive summary describing the causes of any variances which are +/- 5% between the annual financial statements and the financial projections. Such report shall be in the format as Seller may reasonably require from time to time.
- (c) Annual Reports. The following report shall be provided by Buyer to Seller not later than 180 days following the end of Buyer's fiscal year, shall be with regard to such previous fiscal year and shall be as follows: Buyer's financial reports consisting of, at a minimum, statement of revenues, expenses and changes in fund net assets, statement of net assets, and statement of cash flows on a consolidating basis (as applicable), each as prepared in accordance with generally accepted accounting principles and audited by an independent certified public accountant.

This Confirmation is being provided pursuant to and in accordance with the Master Power Purchase and Sale Agreement dated November 28, 2016 (the "Master Agreement") between Buyer and Seller, and constitutes part of and is subject to the terms and provisions of such Master Agreement. This Confirmation and the Master Agreement, including any appendices, exhibits or amendments thereto, shall collectively be referred to as the "Agreement."

This Confirmation is subject to the Exhibit identified below and that is attached hereto:

Exhibit A – Energy Contract Quantity and Price Schedule

[Signatures appear on the following page.]

SHELL ENERGY NORTH AMERICA (US), L.P.

Sign: John W. Pillion

Print: John W. Pillion

Title: Confirmations Team Lead

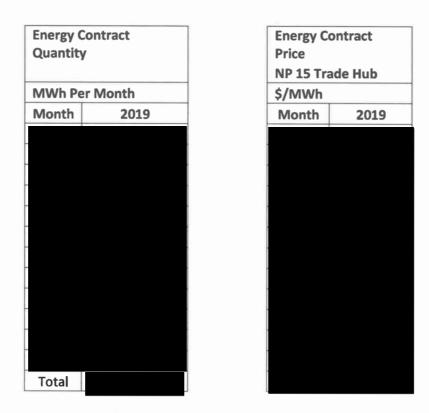
SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers authority

Sign:

Print: GIRISH BALACHANDRAN

Title: CEO

Exhibit A Energy Contract Quantity and Price Schedule



Hourly Load Shapes (MW)

Weekdays

No. Days	Total MWh	HE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
-																										
-																										
-																										
L																										

Weekends																										
No. Days	Total MWh	HE	1	2	3	4	.5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

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CONFIRMATION

Reference:

Master Power Purchase and Sale Agreement Between Direct Energy Business Marketing, LLC ("Seller")

And

Silicon Valley Clean Energy Authority, a California joint powers authority ("Buyer") dated November 28, 2016

Transaction Date: March 21, 2019 (the "Effective Date")

RECITALS:

WHEREAS, pursuant to California Public Utilities Code Sections 366.1, et. seq., Buyer has been registered as a Community Choice Aggregator (the "CCA");

WHEREAS, Buyer is a California joint powers authority, which has established Silicon Valley Clean Energy for purposes of delivering CCA service to certain customers located within the County of Santa Clara;

WHEREAS, pursuant to California Public Utilities Code Section 366.2, Buyer submitted Buyer's CCA Implementation Plan and Statement of Intent ("Implementation Plan") to the CPUC;

WHEREAS, the CPUC certified the Implementation Plan on September 27, 2016;

WHEREAS, Seller and Buyer desire to set forth the terms and conditions pursuant to which Seller shall supply the Product to Buyer, and Buyer shall take and pay for such supply of Product subject to satisfaction of the conditions herein; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements in this Confirmation and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1. <u>**DEFINITIONS**</u>. Any capitalized terms used in this Confirmation but not otherwise defined below shall have the meaning ascribed to such term in the Master Agreement:

"ACS" means "asset-controlling supplier" as that term is defined in the Cap and Trade Regulations.

"Applicable Law" means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties, the Project(s), or the terms of the Agreement.

"Buyer Facilities" has the meaning set forth in Section 10 hereof.

"CAISO" means the California Independent System Operator Corporation or the successor organization to the functions thereof.

"CAISO Tariff" means the California Independent System Operator Corporation Agreement and Tariff, Business Practice Manuals (BPMs), and Operating Procedures, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

"California RPS" or "California Renewables Portfolio Standard" means the California renewables portfolio standard, as set forth in Cal. Pub. Util. Code §§ 399.11 et seq. and Cal. Pub. Res. Code §§ 25740-25751, and as administered by the CEC as set forth in the CEC RPS Eligibility Guidebook (8th Ed.), as may be subsequently modified by the CEC, and the California Public Utilities Commission ("CPUC") as set forth in CPUC Decision ("D") 08-08-028, D.08-04-009, D.11-01-025, D.11-12-020, D.11-12-052, D.12-06-038 and D.14-12-023, and as may be modified by subsequent decision of the CPUC or by subsequent legislation, and regulations promulgated with respect thereto.

"Cap and Trade Regulations" means the Mandatory Greenhouse Gas Emissions Reporting and California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms regulations (California Code of Regulations Title 17, Subchapter 10, Articles 2 and 5 respectively) promulgated by the California Air Resources Board of the California Environmental Protection Agency pursuant to the California Global Warming Solutions Act of 2006.

"Carbon Free Energy" means Energy deliveries from Carbon Free Sources.

"Carbon Free Source" means any energy source, except for nuclear-powered generation assets, that is located within the WECC and that is considered by the State of California to have zero Greenhouse Gas emissions in accordance with the Cap and Trade Regulations. Carbon Free Source does not include any Category 3 Renewables, ACS resources or any energy source with an e-tag with a source point associated with a nuclear or coal-fired generating facility.

"Category 1 Renewable" means Renewable Energy that satisfies the requirements of Section 399.16(b)(1) of the California Public Utilities Code, as applicable to the REC Vintage transferred hereunder.

"Category 2 Renewable" means Renewable Energy that satisfies the requirements of Section 399.16(b)(2) of the California Public Utilities Code, as applicable to the REC Vintage transferred hereunder.

"Category 3 Renewable" means the Renewable Energy Credits that satisfy the requirements of Section 399.16(b)(3) of the California Public Utilities Code, as applicable to the REC Vintage transferred hereunder.

"CEC" means the California Energy Commission.

"Change in Law" has the meaning set forth in Section 2.2 hereof.

"Commercially Reasonable Efforts" for the purposes of this Confirmation, "commercially reasonable efforts" or acting in a "commercially reasonable manner" shall not require a Party to undertake extraordinary or unreasonable measures.

"Compliance Obligation" has the meaning set forth by the Cap and Trade Regulations.

"CPUC" means the California Public Utilities Commission.

"Customers" means the residential, commercial, industrial, and all other retail end use customers that have not opted out of the Silicon Valley Clean Energy Program, as designated from time to time by Buyer as being served by Buyer within the jurisdictional boundaries of the County of San Mateo.

"<u>Delivery Period</u>" shall be the period beginning on the Start Date and ending on the End Date, as set forth in Section 3 below.

"Delivery Point" has the meaning set forth in Section 4 hereof.

"Effective Date" has the meaning set forth in the Reference Section at the beginning of this Confirmation.

"Eligible Renewable Energy Resource" or "ERR" means an Eligible Renewable Energy Resource as such term is defined in Public Utilities Code Section 399.12 or Section 399.16.

"Energy" means electrical energy, measured in MWh.

"Energy Contract Price" means the price (\$/MWh) to be paid by Buyer to Seller for the Energy Contract Quantity delivered hereunder, as set forth on Exhibit A.

"Energy Contract Quantity" means the quantity of Energy set forth in Exhibit A, which will be delivered to the CAISO by Seller and scheduled with Buyer as an IST.

"Exhibits" shall be those certain Exhibits, which are attached hereto and made a part hereof.

"FERC" means the Federal Energy Regulatory Commission.

"GAAP" means generally accepted accounting principles as in effect from time to time in the United States.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, or the CAISO or any other transmission authority, having or asserting jurisdiction over a Party or the Agreement.

"Implementation Plan" has the meaning set forth in the Recitals hereof.

"Inter-SC Trade" or "IST" has the meaning set forth in CAISO Tariff.

"Mandatory Reporting Rule" means the regulations entitled Mandatory Greenhouse Gas Emissions Reporting set forth in Article 2 of Subchapter 10 of Title 17 of the California Code of Regulations.

"MW" means megawatt.

"MWh" means megawatt-hour.

"PG&E" means the Pacific Gas and Electric Company, its successors and assigns.

"Product" shall have the meaning set forth in Section 2.1 below.

"Project" shall mean the Eligible Renewable Energy Resource(s) used to provide Renewable Energy hereunder.

"Prudent Industry Practices" means any of the practices, methods, techniques and standards (including those that would be implemented and followed by a prudent operator of generating facilities similar to the Project(s) in the United States during the relevant time period) that, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result, giving due regard to manufacturers' warranties and recommendations, contractual obligations, the requirements or guidance of Governmental Authority, including CAISO, Applicable Law, the requirements of insurers, good business practices, economy, efficiency, reliability, and safety. Prudent Industry Practice shall not be limited to the optimum practice, method, technique or standard to the exclusion of all others, but rather shall be a range of possible practices, methods, techniques or standards.

"REC Vintage" means the date of Energy generation found on a WREGIS Certificate.

"Renewable Energy" means Energy and associated Renewable Energy Credits generated by an Eligible Renewable Energy Resource.

"Renewable Energy Contract Price" shall mean the price (\$/REC) to be paid by Buyer to Seller for Renewable Energy delivered hereunder, as set forth on Exhibit B.

"Renewable Energy Contract Quantity" shall mean the quantity of RECs to be delivered by Seller to Buyer hereunder, as set forth on Exhibit B.

"Renewable Energy Credits" or "REC" has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision D.08-08-028, as applicable to the specific REC Vintage(s) transferred hereunder.

"RPS Adjustment" means the reduction in the Compliance Obligation of an electricity importer authorized by and calculated in accordance with section 95852 (b)(4) of the Cap and Trade Regulations and section 95111(b)(5) of the Mandatory Reporting Rule.

"Security Documents" has the meaning set forth in the Master Agreement.

"Silicon Valley Clean Energy Program" means the community choice aggregation program operated by Buyer.

"Specified Sources of Power" means electricity that is traceable to a specific generation source by any auditable contract trail or equivalent, including a tradable commodity system, that provides commercial verification that the electricity has been sold once and only once.

"<u>Tariff</u>" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended, supplemented or replaced by CAISO from time to time.

"<u>Unspecified Sources of Power</u>" means electricity that is not traceable to a specific generation source by any auditable contract trail or equivalent, including a tradable commodity system, that provides commercial verification that the electricity has been sold once and only once.

"<u>WREGIS</u>" means the Western Renewable Energy Generation Information System or any successor renewable energy tracking program.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

2. PRODUCT.

- 2.1 <u>Seller Delivery Obligation</u>. Throughout the Delivery Period, Seller shall sell and deliver or make available, or cause to be sold and delivered or made available to Buyer, the "<u>Product</u>," which is comprised of one or more of the following:
 - (a) the quantity of Energy specified in Section 7.1;
 - (b) the quantity of Renewable Energy specified in Section 7.2; and
 - (c) the quantity of Carbon Free Energy specified in Section 7.3.

2.2 Change in Law.

If due to any action by the CPUC or any Governmental Authority, or any change in Applicable Law (a "Change in Law") occurring after the Effective Date that results in material changes to Buyer's or Seller's obligations with regard to the Products sold hereunder and that has the effect of changing the transfer and sale procedure set forth in this Confirmation so that the implementation of this Confirmation becomes impossible or impracticable, or otherwise modifies the California RPS or language required to conform to the California RPS, the Parties shall work in good faith to try and revise this Confirmation so that the Parties can perform their obligations regarding the purchase and sale of Products sold hereunder or Buyer's compliance with California RPS obligations in order to maintain the original intent

of the Parties under this Confirmation. In the event the Parties cannot reach agreement on any such amendments to this Confirmation within 60 days following the Change in Law, to the extent practicable and lawful, Seller shall perform its obligations hereunder with regard to any Product hereunder or compliance with California RPS obligations in accordance with the Applicable Law immediately prior to the Change in Law; provided, however, that notwithstanding the foregoing or anything to the contrary herein, Seller shall not be obligated to perform any obligation hereunder to the extent that doing so would cause Seller to be materially adversely affected. These Change in Law provisions are independent of those set forth in the RPS Standard Terms and Conditions below and in Section 2.8.

2.3 RPS Standard Terms and Conditions.

STC 6: Eligibility

Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Period of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

STC REC-1: Transfer of Renewable Energy Credits

Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Period of this Agreement the renewable energy credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

STC REC-2: Tracking of RECs in WREGIS

Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under this contract.

- 2.4 No New Construction Without Environmental Review. To the extent that Seller constructs any new facilities to meet its supply obligation hereunder, Seller covenants and agrees that the construction and operation of such facility(ies) will be in accordance with any and all Applicable Law.
- 2.5 Resources. For Renewable Energy and Carbon Free Energy delivered under this Confirmation, Seller shall use Specified Sources of Power. For other Energy deliveries, if any, Seller may use Unspecified Sources of Power to provide the required Energy hereunder; provided that any Energy delivered under this Confirmation (including incremental energy associated with Category 2 Renewable products) shall not be procured from unit-specific sources that are nuclear or coal-fired resources. The Energy supplied in connection with any Renewable Energy shall comply with applicable California RPS requirements for such Product.
- 2.6 <u>Delivery of WREGIS Certificates</u>. Throughout the Delivery Period, following generation of the Renewable Energy by the Project(s), Seller shall, at its sole expense, take all actions and execute all documents or instruments necessary to ensure that all WREGIS Certificates associated with the Renewable Energy Contract Quantity are issued and tracked for purposes of satisfying the requirements of the California Renewables Portfolio Standard for Buyer. Prior to the start of each calendar quarter, Seller shall provide Buyer with an indicative, non-binding forecast of the amount of RECs it expects to deliver during such calendar quarter. Such indicative, non-binding forecast shall also identify, if known to Seller, the Eligible Renewable Energy Resource(s) that Seller expects to generate the RECs.

Seller shall comply with all Applicable Law, including, without limitation, the WREGIS Operating Rules, regarding the certification and transfer of such WREGIS Certificates to Buyer and Buyer shall be given sole title to all such WREGIS Certificates. The Parties acknowledge and agree that, as of the Effective Date, the WREGIS Certificates associated with the Renewable Energy Contract Quantity for a month are not available for transfer to Buyer until approximately ninety (90) days after the end of such month. Seller shall transfer such WREGIS Certificates in a timely manner after such WREGIS Certificates are available for transfer to Buyer for Buyer's sole benefit.

Upon receiving written or electronic confirmation from WREGIS that a transfer order has been initiated by Seller, Buyer shall confirm such transfer order in WREGIS within fourteen (14) days to the extent that the WREGIS Certificates included in such transfer conform to the specifications reflected in this Confirmation. In the event that certain WREGIS Certificates fail to conform to the specifications reflected in this Confirmation, Buyer shall be entitled to reject the transfer of any non-conforming WREGIS Certificates and Seller shall promptly replace the non-conforming WREGIS Certificates with an equivalent amount of WREGIS Certificates of the same REC Vintage and that meet the specifications reflected in this Confirmation; provided, however, that if replacement WREGIS Certificates are not immediately available, Seller may provide replacements once available, but in any event shall provide replacement WREGIS Certificates to

Buyer within ninety (90) days after Seller's rejection of such non-conforming WREGIS Certificates.

Upon either Party's receipt of notice from WREGIS that a transfer of WREGIS Certificates was not recognized, that Party will immediately notify the other Party, providing a copy of such notice, and both Parties will cooperate in taking such actions as are necessary and commercially reasonable to cause such transfer to be recognized and completed. Each Party agrees to provide copies of its records to the extent reasonably necessary for WREGIS to verify the accuracy of any fact, statement, charge or computation made pursuant hereto if requested by the other Party.

- 2.7 Retirement of RECs. To facilitate compliance with obligations of suppliers of Renewable Energy as first deliverers of electricity, as defined in Title 17, California Code of Regulations ("CCR") Section 95802, to comply with mandatory greenhouse gas reporting requirements in Title 17 CCR Section 95101 with respect to such Renewable Energy, Buyer agrees to retire the RECs purchased from Seller hereunder for each renewable generation period in accordance with Title 17 CCR Section 95852(b)(3)(D).
- 2.8 RPS Adjustment. The Parties acknowledge that the RPS Adjustment is currently applicable to the Category 2 Renewable Product. In the event that the regulatory requirements for application of the RPS Adjustment change after the Effective Date and such change causes an increase in the greenhouse gas emissions intensity associated with the Category 2 Renewable Product, the Parties agree to discuss in good faith amendments to this Transaction to mitigate the increase in the greenhouse gas emissions intensity. In the event that the Parties are unsuccessful in revising or amending this Transaction or unable to agree upon a mutually acceptable resolution within thirty (30) days after the request of either Party to amend the Transaction pursuant to this Section 2.8 by either Party, either Party may, by written notice to the other, immediately terminate the undelivered portion of Renewable Energy Contract Quantities of Category 2 Renewable Product without penalty, termination payment or liability of either Party.
- 3. <u>DELIVERY PERIOD</u>. This Confirmation shall be in full force and effect as of the Effective Date. The terms set forth herein shall apply from the Start Date through the End Date, which entire period will comprise the Delivery Period. This Confirmation shall terminate on the date on which both Parties have completed the performance of their obligations hereunder, unless earlier terminated pursuant to the terms hereof.

V	
Start Date:	End Date:
04/01/2019	9/30/2019

4. **DELIVERY POINT**.

Product	Delivery Point
Energy	TH_NP15_GEN- V APND
Renewable Energy	Not Applicable
Carbon Free Energy	Not Applicable

SCHEDULING. The Product will be scheduled to Buyer on a Day-Ahead basis using an Inter-SC Trade.

6. PRICING.

- 6.1 Energy Contract Price and Payment. For each month during the Delivery Period, Buyer will pay Seller an amount equal to the Energy Contract Quantity delivered and scheduled in accordance with this Confirmation multiplied by the Energy Contract Price specified in Exhibit A.
- Renewable Energy Contract Price and Payment. For each month during the Delivery Period, Buyer will pay Seller an amount equal to: a) the applicable Renewable Energy Contract Price as specified in Exhibit B multiplied by the portion of the Renewable Energy Contract Quantity transferred from Seller to Buyer through WREGIS during such month plus b) the Day-Ahead LMP at the Delivery Point for each MWh of the Renewable Energy Contract Quantity delivered and scheduled in accordance with this Confirmation in such month.
- 6.3 <u>Carbon Free Energy Price and Payment</u>. For each month during the Delivery Period, Buyer will pay Seller an amount equal to the Carbon Free Energy Contract Quantity delivered in such month multiplied by the Carbon Free Energy Price specified in <u>Exhibit C</u> plus b) the Day-Ahead LMP at the Delivery Point for each MWh of the Carbon Free Energy Contract Quantity delivered and scheduled in accordance with this Confirmation in such month.

7. <u>CONTRACT QUANTITIES</u>.

- 7.1 <u>Energy</u>. Energy Contract Quantities and the Energy Contract Prices pursuant to this Confirmation relate to the quantities set forth in <u>Exhibit A</u>.
- 7.2 Renewable Energy. Renewable Energy Contract Quantities and Renewable Energy Contract Prices pursuant to this Confirmation relate to the quantities set forth in Exhibit B. The Renewable Energy sold by Seller to Buyer shall also include any and all Renewable Energy Credits associated with such Renewable Energy.
- 7.3 <u>Carbon Free Energy</u>. Carbon Free Energy Contract Quantities and Carbon Free Energy Prices pursuant to this Confirmation relate to the quantities set forth in Exhibit C.

8. MONTHLY BILLING SETTLEMENT.

- 8.1 <u>Collection of Customer Payments</u>. In accordance with the Security Documents, Buyer shall direct PG&E to deposit into a lockbox account, all of the proceeds of all of the Customer account receipts (net of the amounts to be paid to PG&E) received from the sale of the Product to the Customers. Seller shall receive, in accordance with the Security Documents, payments for its invoices due and payable, and after Seller's invoice is paid and agreed to reserves have been funded, the amounts remaining in such lockbox shall be immediately released to Buyer or its designee in accordance with the Security Documents. The Parties agree that the lockbox account shall be in the name of Buyer, and any interest earned thereon shall accrue to Buyer, as more fully set forth in the Security Documents.
- 8.2 <u>Monthly Invoice Timeline</u>. The Parties hereby agree that all invoices under this Confirmation shall be due and payable in accordance with each Party's invoice instructions on or before the later of the twenty-fifth (25th) day of the month, or tenth (10th) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day.
- 9. COMPLIANCE REPORTING. Buyer shall be responsible for submitting compliance reports to the CPUC and/or other Governmental Authorities on behalf of Silicon Valley Clean Energy and will require resource information, electronic tagging information, and other documentation to be provided by Seller. Seller shall provide all reasonable information to Buyer necessary for Buyer to timely comply with periodic compliance reporting requirements and as otherwise required by Applicable Law with respect to any Product.
- 10. <u>NO RESTRICTION</u>. Nothing in this Confirmation shall limit Buyer's ability to develop its own generation facilities ("<u>Buyer Facilities</u>") or prevent Buyer from purchasing energy from other parties or Seller from selling energy to other parties.
- 11. <u>STANDARD OF CARE AND GOOD FAITH</u>. When performing its obligations hereunder, Seller shall act in good faith and shall perform all work in a manner consistent with Prudent Utility Practices.

12. SECURITY PROVISIONS.

- Compliance with Security Documents. During the entire period that this Confirmation remains in effect, Buyer shall comply with the Security Documents. Upon the occurrence of an Event of Default (after giving effect to any applicable cure periods) by Buyer under any Security Document or a termination of any Security Document by Seller due to Buyer's failure to perform in accordance with the terms thereof, such event shall constitute an Event of Default of Buyer in accordance with Article Five of the Master Agreement and Buyer shall therefore be the 'Defaulting Party' with regard to such failure to perform.
 - (a) Annual Reports. The following report shall be provided by Buyer to Seller not later than 180 days following the end of Buyer's fiscal year, shall be

with regard to such previous fiscal year and shall be as follows: Buyer's financial reports consisting of, at a minimum, statement of revenues, expenses and changes in fund net assets, statement of net assets, and statement of cash flows on a consolidating basis (as applicable), each as prepared in accordance with generally accepted accounting principles and audited by an independent certified public accountant.

This Confirmation is being provided pursuant to and in accordance with the Master Power Purchase and Sale Agreement dated November 28, 2016 (the "Master Agreement") between Buyer and Seller, and constitutes part of and is subject to the terms and provisions of such Master Agreement. Terms used but not defined herein shall have the meanings ascribed to them in the Master Agreement. This Confirmation and the Master Agreement, including any appendices, exhibits or amendments thereto, shall collectively be referred to as the "Agreement."

This Confirmation is subject to the Exhibits identified below and that are attached hereto:

Exhibit A – Energy Contract Quantity and Price Schedule
Exhibit B – Renewable Energy Contract Quantity and Price Schedule
Exhibit C – Carbon Free Energy Contract Quantity and Price Schedule

DIRECT ENERGY BUSINESS
MARKETING, LLC

Sign:
Print:
Title:

Senior Director, Product Control

SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers

authority Docusigned by:

Girish Baladian dran

Print: Girish Balachandran

Title: CE

Exhibit A Energy Contract Quantity and Price Schedule

Energy Contrac	t Quantity		Energy Contra NP 15 Trade H	I
MWh Per Mon	th]	\$/MWh	
Month	2019]	Month	2019
1	-		1	
2	-		2	
3	-] /	3	
4		/	4	
5		V	5	
6		\checkmark	6	
7		/	7	
8		V/	8	·
9			9	
10			10	
11			11	
12			12	
Total		V		

Hourly Load Shapes (MW)

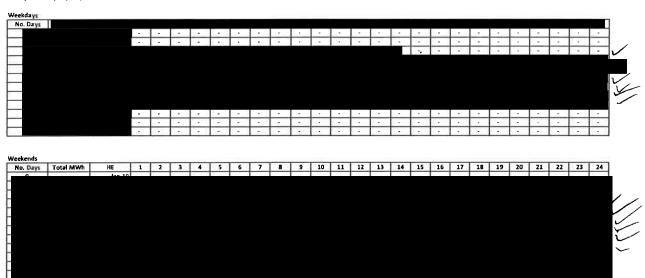


Exhibit B

Renewable Energy Contract Quantity and Price Schedule

The Renewable Energy Contract Quantity is MWhs.

Exhibit C

Carbon Free Energy Contract Quantity and Price Schedule

The Carbon Free Energy Contract Quantity is MWhs.

CONFIRMATION

Reference:

This Confirmation is governed by the Master Power Purchase and Sale Agreement Between Shell Energy North America (US), L.P. ("Seller")

Silicon Valley Clean Energy Authority, a California joint powers authority ("Buyer") dated, November 28, 2016 (the "Master Agreement")

Transaction Date: March 21, 2019 (the "Effective Date")

RECITALS:

WHEREAS, pursuant to California Public Utilities Code Sections 366.1, et. seq., Buyer has been registered as a Community Choice Aggregator (the "<u>CCA</u>");

WHEREAS, Buyer is a California joint powers authority, which has established Silicon Valley Clean Energy for purposes of delivering CCA service to certain customers located within the County of Santa Clara;

WHEREAS, Seller and Buyer desire to set forth the terms and conditions pursuant to which Seller shall supply the Product to Buyer, and Buyer shall take and pay for such supply of Product subject to satisfaction of the conditions herein; and

NOW, THEREFORE, in consideration of the mutual covenants and agreements in this Confirmation and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1. <u>DEFINITIONS.</u> Any capitalized terms used in this Confirmation but not otherwise defined below shall have the meaning ascribed to such term in the Master Agreement:

"Applicable Law" means any statute, law, treaty, rule, tariff, regulation, ordinance, code, permit, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, or any binding interpretation of the foregoing, as any of them is amended or supplemented from time to time, that apply to either or both of the Parties, the Project(s), or the terms of the Agreement.

"<u>CAISO</u>" means the California Independent System Operator Corporation or the successor organization to the functions thereof.

"<u>CAISO Tariff</u>" means the California Independent System Operator Corporation Agreement and Tariff, Business Practice Manuals (BPMs), and Operating Procedures, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

"Commercially Reasonable Efforts" for the purposes of this Confirmation, "commercially reasonable efforts" or acting in a "commercially reasonable manner" shall not require a Party to undertake extraordinary or unreasonable measures.

"CPUC" means the California Public Utilities Commission.

"Day Ahead" has the meaning set forth in the Tariff.

"<u>Delivery Period</u>" shall be the period beginning on the Start Date and ending on the End Date, as set forth in Section 3 below.

"<u>Delivery Point</u>" has the meaning set forth in Section 4 hereof.

"Effective Date" has the meaning set forth in the Reference Section at the beginning of this Confirmation.

"Energy" means electrical energy, measured in MWh.

"Exhibits" shall be those certain Exhibits, which are attached hereto and made a part hereof.

"FERC" means the Federal Energy Regulatory Commission.

"Governmental Authority" means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, or the CAISO or any other transmission authority, having or asserting jurisdiction over a Party or the Agreement.

"IST", an abbreviation for Inter-SC Trade, has the meaning set forth in CAISO Tariff.

"MW" means megawatt.

"MWh" means megawatt-hour.

"PG&E" means the Pacific Gas and Electric Company, its successors and assigns.

"Product" shall have the meaning set forth in Section 2 below.

"Prudent Industry Practices" means any of the practices, methods, techniques and standards (including those that would be implemented and followed by a prudent operator of generating facilities similar to the Project(s) in the United States during the relevant time period) that, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result, giving due regard to manufacturers' warranties and recommendations, contractual obligations, the requirements or guidance of Governmental Authority, including CAISO, Applicable Law, the requirements of insurers, good business practices, economy, efficiency, reliability, and safety. Prudent Industry Practices shall not be limited to the optimum practice, method, technique or standard to the exclusion of all others, but rather shall be a range of possible practices, methods, techniques or

standards.

"Security Documents" has the meaning set forth in the Master Agreement.

"<u>Tariff</u>" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended, supplemented or replaced by CAISO from time to time.

"<u>Third-Party SC</u>" means a third party designated by Buyer to provide the SC functions for the benefit of Buyer.

"<u>Unspecified Sources of Power</u>" means electricity that is not traceable to a specific generation source by any auditable contract trail or equivalent, including a tradable commodity system that provides commercial verification that the electricity has been sold once and only once.

2. PRODUCT.

- 2.1 <u>Seller Delivery Obligation</u>. Throughout the Delivery Period, Seller shall sell and deliver or make available, or cause to be sold and delivered or made available to Buyer, the "<u>Product</u>," which is comprised of a quantity of Energy specified in Exhibit A.
- 2.2 <u>No New Construction Without Environmental Review</u>. To the extent that Seller constructs any new facilities to meet its supply obligation hereunder, Seller covenants and agrees that the construction and operation of such facility(ies) will be in accordance with any and all Applicable Law.
- 2.3 <u>Resources</u>. Seller may use Unspecified Sources of Power to provide the required Energy hereunder.
- 3. <u>DELIVERY PERIOD</u>. This Confirmation shall be in full force and effect as of the Effective Date. The terms set forth herein shall apply from the Start Date through the End Date, which entire period will comprise the Delivery Period. This Confirmation shall terminate on the date on which both Parties have completed the performance of their obligations hereunder, unless earlier terminated pursuant to the terms hereof.

Start Date:	End Date:
January 1, 2021	December 31, 2021

- **4. DELIVERY POINT**. CAISO NP15 EZ Gen Hub
- **SCHEDULING.** Seller shall be responsible for scheduling the Product to Buyer's Third-Party SC on a Day Ahead basis as an Inter-SC Trade. Seller shall be responsible for all costs associated with the generation and delivery of the Product to the Delivery Point.

PRICING.

6.1 <u>Energy Contract Price and Payment</u>. For each month during the Delivery Period, Seller will invoice Buyer, and Buyer will pay Seller, an amount equal to the Energy Contract Quantity delivered in accordance with this Confirmation in such month multiplied by the Energy Contract Price specified in <u>Exhibit A.</u>

7. <u>CONTRACT QUANTITIES.</u>

7.1 <u>Energy</u>. Energy Contract Quantities and Energy Contract Prices pursuant to this Confirmation relate to the quantities set forth in <u>Exhibit A</u>.

8. MONTHLY BILLING SETTLEMENT

- 8.1 Monthly Invoice Timeline. Seller agrees to use commercially reasonable efforts to deliver each monthly invoice to Buyer not later than the fifteenth (15th) day of each month for the previous calendar month. The Parties hereby agree that all invoices under this Confirmation shall be due and payable on the twenty-fifth (25th) day of the same month in which Seller delivered such invoice, provided that if such day is not a Business Day, then such invoice will be due and payable on the next Business Day that occurs after the twenty-fifth (25th) day of the month.
- 9. <u>COMPLIANCE REPORTING</u>. Buyer shall be responsible for submitting compliance reports to the CPUC and/or other Governmental Authorities on its own behalf and will require resource information, electronic tagging information, and other documentation to be provided by Seller. Seller shall provide all reasonable information to Buyer necessary for Buyer to timely comply with periodic compliance reporting requirements and as otherwise required by Applicable Law with respect to the Product.
- 10. <u>NO RESTRICTION</u>. Nothing in this Confirmation shall limit Buyer's ability to develop its own generation facilities or prevent Buyer from purchasing Energy from other parties or prevent Seller from selling Energy to other parties; provided, however, that Buyer shall remain responsible to pay Seller for the Contract Quantities represented in <u>Exhibits A</u>.
- 11. FORWARD CONTRACT. This Agreement constitutes a sale of a nonfinancial commodity for deferred shipment or delivery that the parties intend to be physically settled and is excluded from the term "swap" as defined in the Commodity Exchange Act under 7 U.S.C. § 1a(47) and Commodities Future Trading Commission and Securities and Exchange Commission regulations under Title 17 of the Code of Federal Regulations Part 1 and Title 17 of the Code of Federal Regulations Parts 230, 240, and 241, respectively
- **STANDARD OF CARE AND GOOD FAITH.** When performing its obligations hereunder, Seller shall act in good faith and shall perform all work in a manner consistent with Prudent Industry Practices.
- **13. <u>DODD-FRANK.</u>** Each Party represents to the other that it is either (i) an eligible contract participant as defined in section 1a(18) of the Commodity Exchange Act and the regulations of the Commodity Futures Trading Commission, or (ii) a producer, processor,

commercial user of or a merchant handling the commodity that is the subject of this Transaction, or the products or byproducts thereof, and is offering or entering into this Transaction solely for purposes related to its business as such.

14. SECURITY PROVISIONS.

- 14.1 <u>Compliance with Security Documents</u>. During the entire period that this Confirmation remains in effect, Buyer shall comply with the Security Documents. Upon the occurrence of an Event of Default (after giving effect to any applicable cure periods) by Buyer under any Security Document or a termination of any Security Document by Seller due to Buyer's failure to perform in accordance with the terms thereof, such event shall constitute an Event of Default of Buyer in accordance with Article Five of the Master Agreement and Buyer shall therefore be the 'Defaulting Party' with regard to such failure to perform.
- 14.2 <u>Buyer Reporting Requirements</u>. During the entire period this Confirmation remains in effect, Buyer shall provide Seller with the report(s) required below and shall also provide Seller with any clarifications requested regarding such report(s) and such other information that Seller reasonably requests regarding Buyer's financial performance, Buyer's performance of its obligations under this Confirmation or any Security Document or the ongoing viability of the CCA. In the event Buyer fails to provide Seller with any required reports requested by Seller and such failure is not remedied within fifteen (15) Business Days of Seller's written request therefor and notice of a potential Event of Default, such failure shall be an Event of Default in accordance with Article Five of the Master Agreement and Buyer shall therefore be the 'Defaulting Party' with regard to such failure to perform.
 - (a) <u>Monthly Reports</u>. The following reports shall be provided by Buyer to Seller not later than twenty (20) days following the end of each calendar month for items (i) through (vi) below, and each report shall be with regard to such previous calendar month or other period as applicable:
 - (i) Customer deposit report including a complete and detailed report of all collateral Buyer is holding from any Customer in the format agreed to between the Parties but shall not include the identity or personal details (name, address, telephone number, family size, social security number, bank account number, credit score, payment history, etc.) of any Customer nor any information that may allow Seller to determine a Customer's identity;
 - (ii) Customer on-bill prepayment report including a complete and detailed report of all Customer on-bill payments that were deposited into the Primary Secured Account (as defined in the Security Documents);

- (iii) Cash reconciliations and bank statements for each of Buyer's banking accounts; and
- (iv) Summary of payments made by Customers or other entities to Buyer and a summary of delinquent accounts regarding Customers, such information to be provided on an aggregate basis (i.e. not by Customer) and shall include information segregated for delinquencies for each of the following time periods: 30 days, 60 days, 90 days and 120 days, plus the total account receivable balance owed to Buyer from its Customers
- (b) Semi-Annual Reports. The following report shall be provided by Buyer to Seller not later than 20 days following the end of the first six calendar months of each Buyer fiscal year: consolidated and consolidating financial statements for such six month period prepared in accordance with generally accepted accounting principles. Such financial statements shall include, at a minimum, a detailed profit and loss statement balance sheet statement of cash flows, a monthly and year to date financial projections showing line item and total variances between such financial projections and actual results and an executive summary describing the causes of any variances which are +/- 5% between the annual financial statements and the financial projections. Such report shall be in the format as Seller may reasonably require from time to time.
- (c) Annual Reports. The following report shall be provided by Buyer to Seller not later than 180 days following the end of Buyer's fiscal year, shall be with regard to such previous fiscal year and shall be as follows: Buyer's financial reports consisting of, at a minimum, statement of revenues, expenses and changes in fund net assets, statement of net assets, and statement of cash flows on a consolidating basis (as applicable), each as prepared in accordance with generally accepted accounting principles and audited by an independent certified public accountant.

This Confirmation is being provided pursuant to and in accordance with the Master Power Purchase and Sale Agreement dated November 28, 2016 (the "Master Agreement") between Buyer and Seller, and constitutes part of and is subject to the terms and provisions of such Master Agreement. This Confirmation and the Master Agreement, including any appendices, exhibits or amendments thereto, shall collectively be referred to as the "Agreement."

This Confirmation is subject to the Exhibits identified below and that are attached hereto:

Exhibit A –Energy Contract Quantity and Price Schedule

SHELL ENERGY NORTH AMERICA (US), L.P.

Sign: John W. Pillion
Print: John W. Pillion

Title: Confirmations Team Lead

SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers

authority Docusigned by:

Givish Baladian dran

Sign:
Print:
Girish Balachandran

Title: CEO

Exhibit A

Energy Contract Quantity and Price Schedule

	Energy Contract Quantity								
Month	Peak MW	Off Peak MW	MWh Per Month	\$/MWh					
-									
-									
-									
-									
		Total MWh							

Morgan Stanley

Commodities

Morgan Stanley Capital Group Inc.

Attn: Commodities 1585 Broadway New York, NY 10036-8293

Date:

March 21, 2019

To:

SILICON VALLEY CLEAN ENERGY AUTHORITY

650 WEST OLIVE AVENUE SUNNYVALE CA 94086

Attention:

Affirmation Team

Contact:

Commodity Confirms

Phone:

Fax: Email:

CommodConfsNY@morganstanley.com

Reference No.: Trade Date:

E6463340 v. 1 March 21, 2019

This electronic communication and any attachments hereto, are intended only for use by the addresses(s) named herein and may contain legally privileged and/or confidential information, which is exempt from disclosure under applicable law. If you are not the intended recipient of this electronic communication, you are hereby notified that any examination, dissemination, disclosure, distribution, or copying of, or reliance on or use of this electronic communication, and any attachments hereto, is strictly prohibited. If you have received this electronic communication in error, please notify me immediately on the above telephone number and permanently destroy all copies of this electronic communication.

This confirmation confirms the terms of Morgan Stanley Capital Group Inc. ("MSCGI") agreement regarding the sale of firm energy (the "Transaction") to SILICON VALLEY CLEAN ENERGY AUTHORITY. The terms are as follows:

Purchaser:

SILICON VALLEY CLEAN ENERGY AUTHORITY

Seller:

MSCGI

Term:

January 1, 2020 to December 31, 2020

Delivery Hours:

Peak: Monday through Saturday, Exclude NERC holidays, HE 0700

through 2200 (16 hours) Pacific Prevailing Time (PPT)

Off Peak: Monday through Saturday, HE 0100 through 0600, 2300 through 2400 (8 hours) Sunday, HE 0100 through 2400 (24 hours), including NERC

holidays.





Pacific Prevailing Time (PPT)

Contract Quantity:

As per Appendix I

Delivery Point:

NP15 EZ GEN HUB

Energy Price:

per MWh

Special Conditions:

This purchase and sale of energy is Firm (LD). The parties agree to notify each other as soon as possible of any interruption or curtailment affecting this transaction.

Scheduling:

Scheduling to be completed in accordance with WECC Guidelines.

"CAISO Energy" means with respect to a Transaction, a Product under which the Seller shall sell and the Buyer shall purchase a quantity of energy equal to the hourly quantity without Ancillary Services (as defined in the Tariff) that is or will be scheduled as a Scheduling Coordinator ("SC") to SC transaction pursuant to the applicable tariff and protocol provisions of the California Independent System Operator ("CAISO") (as amended from time to time, the "Tariff") for which the only excuse for failure to deliver or receive is an "Uncontrollable Force" (as defined in the Tariff.

A CAISO "Schedule Adjustment" (defined as a schedule change implemented by the CAISO that is neither caused by or within the control of either Party) shall not constitute an Uncontrollable Force; rather if there is a CAISO Schedule Adjustment, the Party negatively impacted shall notify the other Party and the Parties shall be obligated to exercise their reasonable efforts to reach an equitable resolution that reflects as nearly as practicable, the intention of the Transaction as originally negotiated. All terms used within the definition of CAISO Energy but not defined in the Agreement shall have the meaning ascribed to them in the Tariff.

Morgan Stanley Real-Time Communications and Scheduling

Option Exercise Line: Western Prescheduling: Eastern Prescheduling: Real Time (24 hour):



The parties agree that this transaction is a Forward Contract within the meaning of the U.S. Commodity Exchange Act, and in reliance upon such agreement, each party represents to the other that, as of the date the transaction is entered into:

- (a) It is a commercial market participant with respect to the specified commodity and is entering into the transaction in connection with its business; and
- (b) It intends to make or take physical delivery of the specified commodity.



This letter is being provided pursuant to and in accordance with the EEI Master Agreement for purchase and sale of Physically settled Electricity in the US and Canada dated November 23, 2016, the ("Agreement") between SILICON VALLEY CLEAN ENERGY AUTHORITY and MSCGI, and constitutes part of and is subject to all the terms and provisions of such agreement. Terms used but not defined herein shall have the meaning ascribed to them in the Agreement.

If the recipient of the confirmation disagrees with any of the terms summarized herein, it shall promptly notify MSCGI by telephone and facsimile transmission. Please confirm that terms stated herein accurately reflect the agreement reached between SILICON VALLEY CLEAN ENERGY AUTHORITY and MSCGI by returning an executed copy of this Confirmation Letter. (Fax: 914-750-0445)

Yours Sincerely,

Confirmed as of the date first written above:

SILICON VALLEY CLEAN ENERGY
AUTHORITY

By:

Girish Baladiandran

SCA64B9AC4C24C3...

Name:

Girish Balachandran

Morgan Stanley Capital Group Inc.

Title:

CEO

Appendix I

Calendar Month	Peak (MW per hour)	Off Peak (MW per hour)

