AGENDA

Call to Order

Roll Call

Public Comment on Matters Not Listed on the Agenda

Adoption of Resolutions Commending Directors Craig, Grilli and Harney for Their Dedicated Service to SVCE

Consent Calendar (Action)

1a) Approve Minutes of the November 14, 2018, Board of Directors Meeting

1b) Receive October 2018 Treasurer Report

1c) Receive CPAG Report

1d) Adopt Resolution Amending the Authority’s Conflict of Interest Code to Amend Four Position Titles and Add Four Positions

1e) Approve Renewal of the Legislative Ad Hoc Committee of the Board for 2019

1f) Approve Amendment to Financial Policy 6 – Purchasing to Increase the Authority of the CEO to $100,000 to Approve and Execute Contracts

Regular Calendar

2) CEO Report (Discussion)
Courtenay C. Corrigan, Chair
Town of Los Altos Hills

Margaret Abe-Koga, Vice Chair
City of Mountain View

Liz Gibbons
City of Campbell

Rod Sinks
City of Cupertino

Daniel Harney
City of Gilroy

Jeannie Bruins
City of Los Altos

Rob Rennie
Town of Los Gatos

Marsha Grilli
City of Milpitas

Burton Craig
City of Monte Sereno

Steve Tate
City of Morgan Hill

Dave Cortese
County of Santa Clara

Howard Miller
City of Saratoga

Nancy Smith
City of Sunnyvale

svcleanenergy.org
333 W El Camino Real
Suite 290
Sunnyvale, CA 94087

3) Appoint Representatives for Vacant Seats on the SVCE Audit Committee and Finance and Administration Committee (Action)

4) Adopt Resolution to Revise the SVCE Strategic Plan to Establish 2025 and 2030 GHG Reduction Targets, Adopt the Decarbonization Strategy & Programs Roadmap, and Adopting a FY 2019 and FY 2020 Budget for the Implementation of Decarbonization Programs (Action)

5) SVCE 2019 Electric Rates – Outlook and Rate Setting Process (Discussion)

6) Executive Committee Report (Discussion)

7) Finance and Administration Committee Report (Discussion)

8) Legislative Ad Hoc Committee Report (Discussion)

9) Audit Committee Report (Discussion)

Board Member Announcements and Direction on Future Agenda Items

Adjourn
RESOLUTION NO. 2018-16

RESOLUTION OF THE BOARD OF DIRECTORS OF SILICON VALLEY CLEAN ENERGY AUTHORITY COMMENDING DIRECTOR BURTON CRAIG FOR HIS PROMOTION OF COMMUNITY CLEAN ENERGY IN SANTA CLARA COUNTY AND HIS DEDICATED SERVICE ON THE BOARD OF DIRECTORS OF THE AUTHORITY ON BEHALF OF THE CITY OF MONTE SERENO.

THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY HEREBY RESOLVES AS FOLLOWS:

WHEREAS, the Silicon Valley Clean Energy Authority ("SVCEA") was formed on March 31, 2016, with eleven Cities and Towns and the County of Santa Clara deciding to become the initial members; and

WHEREAS, Burton Craig played an important role as Mayor and Councilmember in the City of Monte Sereno in promoting community clean energy in Santa Clara County and forming SVCEA with his City as a member; and

WHEREAS, the Monte Sereno City Council appointed Burton Craig as its first representative on the Board of Directors of SVCEA; and

WHEREAS, Director Craig actively participated in key decisions setting up the organization and management of SVCEA and establishing the Authority’s Community Choice Energy program; and

WHEREAS, these decisions have made it possible for SVCEA to launch Community Choice Energy service in April 2017; and

WHEREAS, Director Craig approved SVCEA’s award-winning budget for responsible and transparent finances; and

WHEREAS, Director Craig voted to establish SVCEA’s Net Energy Metering Program, which provides greater benefits for solar customers to earn more for their excess solar power; and

WHEREAS, Director Craig supported the creation of the e-bike scholarship competition, Bike to the Future, encouraging high school students with a STEM learning opportunity; and

WHEREAS, Director Craig approved long-term contracts for wind energy and solar-plus-storage, securing new renewable energy projects and reliability for SVCEA customers; and

WHEREAS, Director Craig voted to accept the addition of the City of Milpitas into SVCEA, expanding the benefits of Community Choice Energy to a fellow Santa Clara County community; and

Resolution 2018-16
WHEREAS, Director Craig established committees to provide advice, support and program input to SVCEA; and

WHEREAS, Director Craig voted to match SVCEA funds for the FutureFit Home Electrification Program; and

WHEREAS, Director Craig directed SVCEA to provide carbon-free electricity saving the City of Monte Sereno 4.4 million pounds of carbon emissions in 2018; and

WHEREAS, while serving on the board of SVCEA, Director Craig voted for 2018 electricity rates that saved 1,216 Monte Sereno customers $66,000 on their energy bills.

NOW, THEREFORE, the Board of Directors of SVCEA hereby commends Director Burton Craig and expresses its sincere appreciation for his promotion of Community Choice Energy in Santa Clara County and his dedicated service as a member of the Board of Directors of the Authority.

ADOPTED AND APPROVED this 12th day of December 2018.

__________________________________________
Chair

ATTEST:

__________________________________________
Secretary
RESOLUTION NO. 2018-17

RESOLUTION OF THE BOARD OF DIRECTORS OF SILICON VALLEY CLEAN ENERGY AUTHORITY COMMENDING DIRECTOR MARSHA GRILLI FOR HER PROMOTION OF COMMUNITY CLEAN ENERGY IN SANTA CLARA COUNTY AND HER DEDICATED SERVICE ON THE BOARD OF DIRECTORS OF THE AUTHORITY ON BEHALF OF THE CITY OF MILPITAS.

THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY HEREBY RESOLVES AS FOLLOWS:

WHEREAS, the Silicon Valley Clean Energy Authority (“SVCEA”) was formed on March 31, 2016, with eleven Cities and Towns and the County of Santa Clara deciding to become the initial members; and

WHEREAS, Marsha Grilli played an important role as Councilmember in the City of Milpitas in promoting community clean energy in Santa Clara County; and

WHEREAS, Director Grilli was instrumental in supporting the City of Milpitas’ decision to join SVCEA, expanding the benefits of Community Choice Energy to her community; and

WHEREAS, the Milpitas City Council appointed Marsha Grilli as its first representative on the Board of Directors of SVCEA; and

WHEREAS, Director Grilli guided SVCEA’s award-winning budget for responsible and transparent finances; and

WHEREAS, Director Grilli supported the e-bike scholarship competition, Bike to the Future, encouraging high school students with a STEM learning opportunity; and

WHEREAS, Director Grilli approved a long-term contract for wind energy, securing a new renewable energy project and reliability for SVCEA customers; and

WHEREAS, Director Grilli established committees to provide advice, support and program input to SVCEA; and

WHEREAS, Director Grilli voted to match SVCEA funds for the FutureFit Home Electrification Program; and

WHEREAS, Director Grilli directed SVCEA to provide carbon-free electricity saving the City of Milpitas 59.3 million pounds of carbon emissions in 2018; and

WHEREAS, while serving on the board of SVCEA, Director Grilli voted for 2018 electricity rates that saved 24,581 Milpitas customers $1,221,000 on their energy bills.

NOW, THEREFORE, the Board of Directors of SVCEA hereby commends Director Marsha Grilli and expresses its sincere appreciation for her promotion of Community
Choice Energy in Santa Clara County and her dedicated service as a member of the Board of Directors of the Authority.

ADOPTED AND APPROVED this 12th day of December 2018.

Chair

ATTEST:

Secretary
RESOLUTION NO. 2018-18
RESOLUTION OF THE BOARD OF DIRECTORS OF SILICON VALLEY CLEAN ENERGY AUTHORITY COMMENDING DIRECTOR DANIEL HARNEY FOR HIS PROMOTION OF COMMUNITY CLEAN ENERGY IN SANTA CLARA COUNTY AND HIS DEDICATED SERVICE ON THE BOARD OF DIRECTORS OF THE AUTHORITY ON BEHALF OF THE CITY OF GILROY.

THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY HEREBY RESOLVES AS FOLLOWS:

WHEREAS, the Silicon Valley Clean Energy Authority (“SVCEA”) was formed on March 31, 2016, with eleven Cities and Towns and the County of Santa Clara deciding to become the initial members; and

WHEREAS, Daniel Harney played an important role as Councilmember in the City of Gilroy in promoting community clean energy in Santa Clara County and forming SVCEA with his City as a member; and

WHEREAS, the Gilroy City Council appointed Daniel Harney as its first representative on the Board of Directors of SVCEA; and

WHEREAS, Director Harney actively participated in key decisions setting up the organization and management of SVCEA and establishing the Authority’s Community Choice Energy program; and

WHEREAS, these decisions have made it possible for SVCEA to launch Community Choice Energy service in April 2017; and

WHEREAS, Director Harney approved SVCEA’s award-winning budget for responsible and transparent finances; and

WHEREAS, Director Harney voted to establish SVCEA’s Net Energy Metering Program, which provides greater benefits for solar customers to earn more for their excess solar power; and

WHEREAS, Director Harney supported the creation of the e-bike scholarship competition, Bike to the Future, encouraging high school students with a STEM learning opportunity; and

WHEREAS, Director Harney approved long-term contracts for wind energy and solar-plus-storage, securing new renewable energy projects and reliability for SVCEA customers; and

WHEREAS, Director Harney voted to accept the addition of the City of Milpitas into SVCEA, expanding the benefits of Community Choice Energy to a fellow Santa Clara County community; and
WHEREAS, Director Harney established committees to provide advice, support and program input to SVCEA; and

WHEREAS, Director Harney voted to match SVCEA funds for the FutureFit Home Electrification Program; and

WHEREAS, Director Harney directed SVCEA to provide carbon-free electricity saving the City of Gilroy 79.6 million pounds of carbon emissions in 2018; and

WHEREAS, while serving on the board of SVCEA, Director Harney voted for 2018 electricity rates that saved 17,965 Gilroy customers $1,224,000 on their energy bills.

NOW, THEREFORE, the Board of Directors of SVCEA hereby commends Director Daniel Harney and expresses its sincere appreciation for his promotion of Community Choice Energy in Santa Clara County and his dedicated service as a member of the Board of Directors of the Authority.

ADOPTED AND APPROVED this 12th day of December 2018.

Chair

ATTEST:

Secretary
Call to Order

Chair Corrigan called the meeting to order at 7:00 p.m.

Roll Call

Present:
Chair Courtenay C. Corrigan, Town of Los Altos Hills
Vice Chair Margaret Abe-Koga, City of Mountain View (arrived at 7:06 p.m.)
Alternate Director Tony Ndah, City of Milpitas
Director Steve Tate, City of Morgan Hill
Director Nancy Smith, City of Sunnyvale
Director Howard Miller, City of Saratoga
Director Rod Sinks, City of Cupertino
Director Rob Rennie, Town of Los Gatos
Director Liz Gibbons, City of Campbell
Director Jeannie Bruins, City of Los Altos
Director Burton Craig, City of Monte Sereno

Absent:
Director Daniel Harney, City of Gilroy
Director Dave Cortese, County of Santa Clara

Public Comment on Matters Not Listed on the Agenda
Bruce Karney, Mountain View resident, provided comments regarding the Climate Reality Project and the formation of a Santa Clara County chapter.

Adoption of Resolution 2018-13 Commending Director Tate for His Dedicated Service to SVCE
Chair Corrigan thanked Director Tate for his dedication to SVCE and presented a plaque and resolution of recognition; Director Tate provided brief comments.

MOTION: Director Rennie moved and Director Miller seconded the motion to adopt Resolution 2018-13 commending Director Tate for his dedicated service to SVCE.

The motion carried unanimously with Vice Chair Abe-Koga, Director Cortese, and Director Harney absent.

Consent Calendar
General Counsel Greg Stepanicich provided brief comments regarding Item 1d) Approve Amendment No. 1 to the Employment Agreement for Chief Executive Officer. General Counsel Stepanicich summarized the financial terms to the CEO contract which included: 1) an increase in annual salary for the CEO from $275,000 to $290,000, 2) an increase in paid time off from 200 to 280 hours per year, effective February 19, 2019, and 3) a one-time grant of paid time off of 80 hours to be taken prior to February 19, 2019.

MOTION: Director Bruins moved and Director Smith seconded the motion to approve the Consent Calendar.

The motion carried unanimously with Directors Cortese and Harney absent.

1a) Approve Minutes of the October 24, 2018, Board of Directors Adjourned Regular Meeting
1b) Receive September 2018 Treasurer Report
1c) Adopt Resolution Amending the SVCE Operating Rules and Regulations to Change the Annual Appointment of Committee Assignments, With the Exception of the Executive Committee, to February
1d) Approve Amendment No. 1 to Employment Agreement for Chief Executive Officer
1e) Authorize CEO to Execute Agreement with Aaron Read & Associates, LLC. for 2019 Lobbying Services

Regular Calendar

2) CEO Report (Discussion)

CEO Girish Balachandran provided a CEO report which included acknowledging press coverage for the joint power purchase agreement project for solar plus storage.

Manager of Regulatory and Legislative Affairs Hilary Staver provided a regulatory and legislative update.

Director of Account Services and Community Relations Don Bray responded to member questions regarding the upgrades and opt outs listed in the CEO report; Director Miller suggested staff reach out to residential opt out customers.

The Board discussed press coverage received from the solar plus storage project; Director Sinks requested staff continue to follow up with mainstream media on the project. Communications Manager Pamela Leonard responded to member questions regarding press coverage from the solar plus storage project and provided a community engagement grant update.

3) Adopt Resolution to Authorize the Chief Executive Officer to Execute Service Agreements with 1) Hanover Strategy Advisors; 2) Flynn Resources Consulting Inc.; and 3) Ascend Analytics, Inc. and Delegate Authority to CEO to Spend up to $1,000,000 in Aggregate through September 30, 2021 Under Master Consultant Agreements (Action)

Director of Power Resources Monica Padilla introduced the staff report and responded to Board member questions; CEO Balachandran provided additional information. Director of Power Resources Padilla noted the Board would have the ability to approve consultant funding during the annual budget process.

Board members discussed the frequency of financial reporting for the proposed contracts.
Chair Corrigan opened public comment.
No speakers.
Chair Corrigan closed public comment.

MOTION: Director Tate moved and Director Gibbons seconded the motion to adopt Resolution No. 2018-15 authorizing the Chief Executive Officer (CEO) to execute service agreements, with non-substantive changes, with Hanover Strategy Advisors ("Hanover"), Flynn Resource Consulting Inc. ("Flynn"), and Ascend Analytics Inc. ("Ascend"), collectively referred to as ("Master Consultant Agreements"), for general strategic consulting and support related to: legislative and regulatory, supply portfolio management, energy risk management and retail rate and product offerings; and delegating authority to the CEO to spend in aggregate amount not to exceed one-million dollars through September 30, 2021.

FRIENDLY AMENDMENT: Without objection, Director Gibbons added a friendly amendment to include reports biannually.

The motion carried unanimously with Directors Cortese and Harney absent.

4) **Overview Presentation on Building Design Incentives and Reach Codes (Discussion)**

Director of Account Services and Community Relations Bray introduced the item and a PowerPoint presentation. Account Services Manager John Supp and Director of Decarbonization and Grid Innovation Programs Aimee Bailey provided additional information and responded to Board questions.

The Board provided feedback including comments on the timeline for implementing a new reach code, concerns in regard to new reach code implementation for various cities having a negative impact on the ability to build affordable housing, a suggestion to connect with staff of member agency planning departments and other pertinent staff to communicate SVCE’s support level on the development of a reach code, timing of adoption of a reach code by each member agency, engaging architects and engineers, the challenge of retrofitting an existing home, an idea to require new buildings be equipped with pre-plumbing and pre-electrical for every major appliance to support both gas and electric, consider what it would take to ban gas for either all or certain types of new building, start with a sample ordinance which has a minimum number of all electric building, start with a few of the member agencies adopting a reach code with other agencies to follow, develop an outreach plan, and concern with the staff time required, offering incentives, and potentially using the Los Altos Community Center as a case study for going all-electric.

Chair Corrigan opened public comment.

Tom Kabat, utility resource planner, volunteer with Carbon Free Silicon Valley, and member of the Menlo Park Environmental Quality Commission, commented on Palo Alto’s reach code implementation. Kabat supported SVCE’s proposed reach code, noted all electric construction does not raise the cost of buildings, and commented on his favorable opinion that gasless buildings should be mandated.

Bruce Karney commented his consideration of natural gas as a weapon of mass destruction and his belief the biggest emergency that faces us is the climate crisis. Karney voiced support of SVCE’s proposed reach code and support of a future carbon tax.

James Tuleya, resident of Sunnyvale, supported the reach code idea and thanked staff. Tuleya encouraged directors to think positively about ways that the reach code could be implemented, and noted electrification should be a high priority.

Steve Schmidt, resident of Los Altos Hills, provided two points: 1) bend the carbon curve by addressing existing buildings, setting the direction by first reaching new buildings, and 2) hiring a consultant to assist staff in expediting the process of getting started.
Chair Corrigan closed public comment.

Director Sinks noted he would send reference documents to Board Clerk Andrea Pizano to distribute to the group: a link to the Sustainability Speaker Series from Oct. 18, 2018 with speakers Professor Mark Jacobsen and Director of Decarbonization and Grid Innovation Programs Aimee Bailey, and the Bay Area Air Quality Management District (BAAQMD) Climate Technology Review Report.

Chair Corrigan summarized Board comments of support for the reach code, and requested staff package what is needed for Directors.

5) Executive Committee Report (Discussion)

Chair Corrigan reported there was nothing to report.

6) Finance and Administration Committee Report (Discussion)

Chair Corrigan stated there was no report.

7) Legislative Ad Hoc Committee Report (Discussion)

Director Sinks reported the Legislative Ad Hoc Committee had not met since their last meeting, but was interested in what they might do in the new year with the firm whose agreement was approved on the consent calendar.

Board Member Announcements and Direction on Future Agenda Items

None.

Chair Corrigan commented more detailed information would be provided at the December meeting on the plan for selecting the executive slate for 2019, but would be proceeding with a voluntary process similar to last year.

Adjourn

Chair Corrigan adjourned the meeting at 9:32 p.m. in honor of the cities, residents and businesses fighting the California fires.
TREASURER REPORT
Fiscal Year to Date
As of October 31, 2018
(Preliminary & Unaudited)
Issue Date: December 12, 2018

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Financial Highlights for the month of October 2018:

Note: The financial audit for FY 2017-18 is ongoing with a report to the Board expected in February 2019.

SVCE operations resulted in positive change in net position for the month of $8.5 million.
- October's revenue of $26.1 million accounted for 323 GWh in net retail consumption.
- October's expenses were better than budget by 6% partially offsetting the shortfall in expected revenue.
- SVCE is slightly above the minimum reserve target.

Retail GWh sales for the month came in 3.5% below budget for the month.
- October's expenses were better than budget by 6% partially offsetting the shortfall in expected revenue.

SVCE is slightly above the minimum reserve target.

Retail GWh sales for the month came in 3.5% below budget for the month.
- October's weather was milder than expected.

Power Supply
- Power supply costs were better than expected due to lower demand.
- The Board approved during October the long-term power purchase agreements that include solar plus storage.
- Staff will be presenting a revised risk management policy in January 2019.

Programs/Capital
- A Programs Roadmap will be presented to the Board of Directors in December 2018.

Investing/Financing
- SVCE executed a $20 million line of credit with River City Bank.

### Change in Net Position

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<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
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<th>May</th>
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<th>July</th>
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### Power Supply Costs

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### Other

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### Load Statistics - GWh

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<td>342</td>
<td>363</td>
<td>3,974</td>
<td>3,974</td>
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</table>
YTD EXPENSES

- Power Supply: 95.1%
- Billing: 22.2%
- Personnel: 1.3%
- Prof. Services: 0.4%
- Programs: 0.2%
- Marketing: 0.1%
- G & A: 0.6%
- Other: 0.2%

Other Statistics and Ratios

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<th>Budget</th>
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<td>Retail Sales - YTD</td>
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<td>Actual</td>
<td>17.7</td>
<td>18.8</td>
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</table>

| Working Capital          | $83,592,828 |
| Current Ratio            | 3.2        |
| Contribution Margin      | $9,305,878 |
| Expense Coverage Days    | 108        |
| Return on Assets         | 7%         |
| Long-Term Debt           | $0         |
| Total Accounts           | 267,509    |
| Opt-Out Accounts         | 9,386      |
| Opt-Up Accounts          | 3,090      |

Item 1b
# Statement of Net Position

**Silicon Valley Clean Energy Authority**

**As of October 31, 2018**

## Assets

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</tr>
<tr>
<td>Other Receivables</td>
<td>275,351</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
<td>1,152,719</td>
</tr>
<tr>
<td>Deposits</td>
<td>11,055,770</td>
</tr>
<tr>
<td>Restricted cash - lockbox</td>
<td>2,000,000</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>122,051,981</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital assets, net of depreciation</td>
<td>182,288</td>
</tr>
<tr>
<td>Deposits</td>
<td>3,129,060</td>
</tr>
<tr>
<td><strong>Total Noncurrent Assets</strong></td>
<td><strong>3,311,348</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>125,363,329</strong></td>
</tr>
</tbody>
</table>

## Liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Payable</td>
<td>1,061,892</td>
</tr>
<tr>
<td>Accrued Cost of Electricity</td>
<td>35,708,131</td>
</tr>
<tr>
<td>Accrued Payroll &amp; Benefits</td>
<td>223,565</td>
</tr>
<tr>
<td>User Taxes and Energy Surcharges due to other gov'ts</td>
<td>880,565</td>
</tr>
<tr>
<td>Supplier Security Deposits</td>
<td>585,000</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>38,459,153</strong></td>
</tr>
</tbody>
</table>

## Net Position

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net investment in capital assets</td>
<td>182,288</td>
</tr>
<tr>
<td>Unrestricted (deficit)</td>
<td>86,721,888</td>
</tr>
<tr>
<td><strong>Total Net Position</strong></td>
<td><strong>$ 86,904,176</strong></td>
</tr>
</tbody>
</table>
## SILICON VALLEY CLEAN ENERGY AUTHORITY

### STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

**October 1, 2018 through October 31, 2018**

#### OPERATING REVENUES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Sales, Net</td>
<td>$26,013,308</td>
</tr>
<tr>
<td>GreenPrime electricity premium</td>
<td>76,005</td>
</tr>
<tr>
<td><strong>TOTAL OPERATING REVENUES</strong></td>
<td><strong>$26,089,313</strong></td>
</tr>
</tbody>
</table>

#### OPERATING EXPENSES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Electricity</td>
<td>16,783,435</td>
</tr>
<tr>
<td>Staff Compensation and benefits</td>
<td>236,907</td>
</tr>
<tr>
<td>Data Management</td>
<td>301,479</td>
</tr>
<tr>
<td>Service Fees - PG&amp;E</td>
<td>94,279</td>
</tr>
<tr>
<td>Consultants and Other Professional Fees</td>
<td>102,829</td>
</tr>
<tr>
<td>Legal</td>
<td>11,251</td>
</tr>
<tr>
<td>Communications &amp; Noticing</td>
<td>16,657</td>
</tr>
<tr>
<td>General &amp; Administrative</td>
<td>99,316</td>
</tr>
<tr>
<td>Depreciation</td>
<td>4,179</td>
</tr>
<tr>
<td><strong>TOTAL OPERATING EXPENSES</strong></td>
<td><strong>$17,650,332</strong></td>
</tr>
</tbody>
</table>

**OPERATING INCOME(LOSS)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING INCOME</strong></td>
<td><strong>$8,438,981</strong></td>
</tr>
</tbody>
</table>

#### NONOPERATING REVENUES (EXPENSES)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Income</td>
<td>30,474</td>
</tr>
<tr>
<td><strong>TOTAL NONOPERATING EXPENSES</strong></td>
<td><strong>$30,474</strong></td>
</tr>
</tbody>
</table>

#### CHANGE IN NET POSITION

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Position at beginning of period</td>
<td>78,434,721</td>
</tr>
<tr>
<td><strong>Net Position at end of period</strong></td>
<td><strong>$86,904,176</strong></td>
</tr>
</tbody>
</table>
SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS
October 1, 2018 through October 31, 2018

<table>
<thead>
<tr>
<th>CASH FLOWS FROM OPERATING ACTIVITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts from electricity sales</td>
<td>$29,723,868</td>
</tr>
<tr>
<td>Tax and surcharge receipts from customers</td>
<td>550,475</td>
</tr>
<tr>
<td>Energy settlements received</td>
<td>671,197</td>
</tr>
<tr>
<td>Deposits and collateral received</td>
<td>500</td>
</tr>
<tr>
<td>Payments to purchase electricity</td>
<td>(14,859,382)</td>
</tr>
<tr>
<td>Payments for staff compensation and benefits</td>
<td>(292,457)</td>
</tr>
<tr>
<td>Payments for consultants and other professional services</td>
<td>(101,429)</td>
</tr>
<tr>
<td>Payments for legal fees</td>
<td>(31,855)</td>
</tr>
<tr>
<td>Payments for communications and noticing</td>
<td>(32,376)</td>
</tr>
<tr>
<td>Payments for general and administrative</td>
<td>(78,236)</td>
</tr>
<tr>
<td>Energy settlements paid</td>
<td>(1,243,636)</td>
</tr>
<tr>
<td>Tax and surcharge payments to other governments</td>
<td>(661,129)</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by operating activities</strong></td>
<td><strong>13,645,540</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest and related expense payments</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by non-capital financing activities</strong></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of capital assets</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest income received</td>
<td>30,474</td>
</tr>
</tbody>
</table>

Net change in cash and cash equivalents 13,676,014
Cash and cash equivalents at beginning of year 58,963,340
Cash and cash equivalents at end of period $72,639,354
SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS (Continued)
October 1, 2018 through October 31, 2018

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

Operating Income (loss) $ 8,438,981

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

- Depreciation expense 4,179
- Revenue reduced for uncollectible accounts 131,104
- (Increase) decrease in net accounts receivable 1,665,536
- (Increase) decrease in other receivables (189,090)
- (Increase) decrease in accrued revenue 1,867,082
- (Increase) decrease in prepaid expenses (28,873)
- (Increase) decrease in current deposits 500
- Increase (decrease) in accounts payable 339,207
- Increase (decrease) in accrued payroll & benefits 32,276
- Increase (decrease) in energy settlements payable 195,892
- Increase (decrease) in accrued cost of electricity 1,328,566
- Increase (decrease) taxes and surcharges due to other governments (139,820)

Net cash provided (used) by operating activities $ 13,645,540
## REVENUES & OTHER SOURCES

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD Actual</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Sales</td>
<td>$26,013,308</td>
<td>$28,351,089</td>
<td>$(2,337,781)</td>
<td>$258,831,695</td>
<td>-8%</td>
</tr>
<tr>
<td>Green Prime Premium</td>
<td>76,005</td>
<td>51,141</td>
<td>24,864</td>
<td>613,691</td>
<td>49%</td>
</tr>
<tr>
<td>Other Income</td>
<td>-</td>
<td>8,333</td>
<td>(8,333)</td>
<td>-100%</td>
<td>0%</td>
</tr>
<tr>
<td>Investment Income</td>
<td>30,474</td>
<td>41,667</td>
<td>(11,193)</td>
<td>500,000</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL REVENUES &amp; OTHER SOURCES</strong></td>
<td>$26,119,787</td>
<td>$28,452,230</td>
<td>$(2,332,443)</td>
<td>$260,045,386</td>
<td>-8%</td>
</tr>
</tbody>
</table>

## EXPENDITURES & OTHER USES

### CURRENT EXPENDITURES

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>16,783,435</td>
<td>17,076,411</td>
<td>292,976</td>
<td>211,815,189</td>
<td>8%</td>
</tr>
<tr>
<td>Data Management</td>
<td>301,479</td>
<td>281,275</td>
<td>(20,204)</td>
<td>3,375,301</td>
<td>9%</td>
</tr>
<tr>
<td>PG&amp;E Fees</td>
<td>94,279</td>
<td>89,497</td>
<td>(4,782)</td>
<td>1,073,960</td>
<td>9%</td>
</tr>
<tr>
<td>Salaries &amp; Benefits</td>
<td>236,907</td>
<td>402,791</td>
<td>165,884</td>
<td>4,833,494</td>
<td>5%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>77,398</td>
<td>152,504</td>
<td>75,106</td>
<td>1,830,051</td>
<td>4%</td>
</tr>
<tr>
<td>Marketing &amp; Promotions</td>
<td>11,659</td>
<td>91,875</td>
<td>80,216</td>
<td>1,102,500</td>
<td>1%</td>
</tr>
<tr>
<td>Notifications</td>
<td>4,998</td>
<td>12,917</td>
<td>7,919</td>
<td>155,000</td>
<td>3%</td>
</tr>
<tr>
<td>Lease</td>
<td>26,523</td>
<td>26,636</td>
<td>113</td>
<td>326,040</td>
<td>8%</td>
</tr>
<tr>
<td>General &amp; Administrative</td>
<td>72,793</td>
<td>53,013</td>
<td>(19,780)</td>
<td>636,100</td>
<td>11%</td>
</tr>
<tr>
<td><strong>TOTAL CURRENT EXPENDITURES</strong></td>
<td>17,609,471</td>
<td>18,166,919</td>
<td>577,448</td>
<td>225,147,694</td>
<td>8%</td>
</tr>
</tbody>
</table>

### OTHER USES

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Programs</td>
<td>36,682</td>
<td>567,022</td>
<td>530,340</td>
<td>5,176,634</td>
<td>1%</td>
</tr>
<tr>
<td>Office Equipment</td>
<td>2,147</td>
<td>12,500</td>
<td>10,353</td>
<td>150,000</td>
<td>1%</td>
</tr>
<tr>
<td>Financial Security Requirement</td>
<td>-</td>
<td>147,000</td>
<td>147,000</td>
<td>147,000</td>
<td>100%</td>
</tr>
<tr>
<td>Refund of Bond</td>
<td>-</td>
<td>(100,000)</td>
<td>(100,000)</td>
<td>(100,000)</td>
<td>100%</td>
</tr>
<tr>
<td><strong>TOTAL OTHER USES</strong></td>
<td>38,829</td>
<td>626,522</td>
<td>587,693</td>
<td>5,373,634</td>
<td>1%</td>
</tr>
</tbody>
</table>

### DEBT SERVICE

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>30,000</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL DEBT SERVICE</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>30,000</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total Expenditures, Other Uses & Debt Service**

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17,648,300</strong></td>
<td>18,813,441</td>
<td>1,165,141</td>
<td>6%</td>
<td>230,551,328</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Net Increase(Decrease) in Available Fund Balance**

<table>
<thead>
<tr>
<th>Item</th>
<th>FYTD</th>
<th>FYTD Amended Budget</th>
<th>Variance</th>
<th>FY 2018-19 Amended Budget</th>
<th>% Budget Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$8,471,487</strong></td>
<td>$9,638,789</td>
<td>$(1,167,302)</td>
<td>-12%</td>
<td><strong>$29,494,058</strong></td>
<td></td>
</tr>
</tbody>
</table>
SILICON VALLEY CLEAN ENERGY AUTHORITY

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

Net Increase (decrease) in available fund balance per budgetary comparison schedule $ 8,471,487

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

Subtract depreciation expense (4,179)
Add back capital asset acquisitions 2,147
Change in Net Position 8,469,455
## SILICON VALLEY CLEAN ENERGY AUTHORITY
### STATEMENT OF REVENUES, EXPENSES
### AND CHANGES IN NET POSITION
### October 1, 2018 through October 31, 2018

<table>
<thead>
<tr>
<th>Item</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPERATING REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green electricity premium</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
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<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
<td>76,005</td>
</tr>
<tr>
<td>Other income</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
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<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
<td>26,089,313</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data manager</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
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<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
<td>301,479</td>
</tr>
<tr>
<td>Consultants and other professional fees</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
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<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
<td>130,737</td>
</tr>
<tr>
<td>Depreciation</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
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<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
<td>4,179</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
<td>17,650,332</td>
</tr>
<tr>
<td>Operating income (loss)</td>
<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
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<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
<td>8,438,981</td>
</tr>
<tr>
<td><strong>NONOPERATING REVENUES (EXPENSES)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
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<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
</tr>
<tr>
<td>Interest and related expense</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total nonoperating revenues (expenses)</strong></td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
<td>30,474</td>
</tr>
<tr>
<td><strong>CHANGE IN NET POSITION</strong></td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
<td>$8,469,455</td>
</tr>
</tbody>
</table>
# Personnel Report for October 2018

<table>
<thead>
<tr>
<th>Position</th>
<th>Budget</th>
<th>Actual</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Account Services and Community Relations</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Account Services Manager</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Energy Consultant</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Energy Associate</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Communications Manager</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Community Outreach Specialist</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Communications Specialist</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Board Clerk/Executive Assistant</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Director of Finance and Administration</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Administrative Services Manager</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Management Analyst</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Administrative Analyst</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Director of Power Resources</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Power Resources Manager</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Power Resources Planner</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Power Settlements &amp; Compliance Analyst</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Manager of Regulatory and Legislative Affairs</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Senior Regulatory Analyst</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Director of Decarboniation and Grid Innovation</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Data Analyst</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Analyst</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>*<em>Total</em></td>
<td>25</td>
<td>17</td>
<td>8</td>
</tr>
</tbody>
</table>
### SILICON VALLEY CLEAN ENERGY AUTHORITY
### INVESTMENTS SUMMARY
October 1, 2018 through October 31, 2018

<table>
<thead>
<tr>
<th>Return on Investments</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Market</td>
<td>$30,474</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$30,474</td>
</tr>
</tbody>
</table>

**Portfolio Invested**
- Average daily portfolio available to invest* 55,148,395
- Average daily portfolio invested 20,154,823
- % of average daily portfolio invested 36.5%

**Detail of Portfolio**

<table>
<thead>
<tr>
<th>Money Market - River City Bank</th>
<th>Opening Rate</th>
<th>Current Rate</th>
<th>Carrying Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.26%</td>
<td>1.81%</td>
<td>$20,184,314</td>
</tr>
</tbody>
</table>

* Note: Balance available to invest does not funds in the lockbox or deposits for power supply.
WEATHER STATISTICS

COOLING DEGREE DAYS

HEATING DEGREE DAYS
<table>
<thead>
<tr>
<th>Days</th>
<th>Total</th>
<th>0-30</th>
<th>31-60</th>
<th>61-90</th>
<th>90-120</th>
<th>Over 120*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable</td>
<td>$23,723,625</td>
<td>$22,028,638</td>
<td>$732,371</td>
<td>$312,123</td>
<td>$176,792</td>
<td>$473,700</td>
</tr>
<tr>
<td>Period %</td>
<td>100%</td>
<td>92.9%</td>
<td>3.1%</td>
<td>1.3%</td>
<td>0.7%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

*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.
REPORT

November Meeting
The eleventh Customer Program Advisory Group (CPAG) meeting was held on November 14, 2018 at the Sunnyvale Recreation Center.

The CPAG meeting agenda and summary report are listed below.

Consent Calendar
1) Approve Minutes of the October 10, 2018, Customer Program Advisory Group Meeting

Regular Calendar
2) Draft December SVCE Board Meeting Decarbonization Strategy & Programs Roadmap (Discussion)
3) Programs Roadmap Breakout Groups (Discussion)

The meeting opened with a presentation of the draft Decarbonization Programs Roadmap by SVCE Director of Decarbonization and Grid Innovation Programs, Aimee Bailey. Aimee presented the latest draft of the roadmap to get feedback from the CPAG in advance of presenting the roadmap to the Board of Directors.

Following the presentation, the CPAG broke into discussion groups to respond to the following prompts:

1. Are there ways to further integrate CPAG work and insight into the draft roadmap?
2. Suppose SVCE resources for programs increased (decreased) significantly, what would be your recommendations for 2-3 additions (subtractions) to the programs portfolio?
3. Which other partnerships, activities, external funding, or other resources might SVCE pursue to further leverage our limited funds and staff?

Ideas from the group answering question 1 included:
- Broad-based programs a majority of homeowners are likely to participate in
- What is our ask? Why do I care about reducing greenhouse gas? Save the environment and money.
- Look at program opportunities from the lenses of our customers
- Utilize commercial customer employee base to participate in programs
The group responding to prompt 2 answered:

- **Cut:**
  - EV programs, no subsidies
  - Pilot/innovation programs, they may never scale or be operationalized
- **Add:**
  - Electrification Retrofit market because it’s harder
  - More pilots
  - Fleet electrification beyond municipalities (schools, small businesses, corporations)

The group replying to prompt question 3 offered:

- Leverage social media reach from other organizations that are aligned with SVCE, such as Acterra, other public utilities, water districts
- These organizations may also have some new funding sources we could tap into
- Trade associations in the clean energy sector, such as the California Solar & Storage Association – to introduce new state mandates and legislation
- Investigate leading practices from Santa Clara Valley Water District and Palo Alto Utilities that can be applied or leveraged for SVCE’s purposes
- Partner with other organizations and city initiatives also working on increasing GHG reduction customer engagement
- Identify community groups to help spread the word in neighborhoods, need to go beyond the environmental groups

The next and final CPAG meeting will take place on December 12 from 11 a.m. – 1 p.m., at the Sunnyvale Recreation Center, Neighborhood Room. Discussion for this meeting will include the future role and nature of a customer group similar to CPAG, and feedback from members on their experience serving in the group.
To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

**Item 1d: Adopt Resolution Amending the Authority’s Conflict of Interest Code to Amend Four Position Titles and Add Four Positions**

Date: 12/12/2018

---

**RECOMMENDATION**

Adopt Resolution 2018-19 amending the SVCEA conflict of interest code to amend four position titles and add four positions as approved at the September 12, 2018 Board of Directors meeting.

**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 September 12, 2018 SVCE Board of Directors meeting, Resolution 2018-10 was adopted by the Board to amend SVCE’s organizational chart. The updated organizational chart was amended to allow broadbanding and included 30 total positions, though the full-time employee headcount would remain at 25. Changes for the organization chart for positions identified as needing to file Form 700s included:

**Reclassifications**

1. “Community Outreach Manager” to “Communications Manager”
2. “Director of Customer Care” to “Director of Account Services and Community Relations”
3. “Manager of Regulatory & Legislative Effectiveness” to “Manager of Regulatory & Legislative Affairs”
4. “Power Contracts & Compliance Manager” to “Power Resources Manager”

**Additions**

1. Administrative Services Manager
2. Management Analyst
3. Manager of Decarbonization and Grid Innovation Programs
4. Power Resources Planner

Staff recommends amending the Conflict of Interest Code to reflect the new organizational chart. The amended Code will include the reclassified titles and the new the positions of Administrative Services Manager, Management Analyst, Manager of Decarbonization and Grid Innovation Programs, and Power Resources Planner.
ANALYSIS & DISCUSSION
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 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 reclassifications of the four position titles listed above, as well as the additions of the positions of Administrative Services Manager, Management Analyst, Manager of Decarbonization and Grid Innovation Programs, and Power Resources Planner.

STRATEGIC PLAN
Not applicable.

ALTERNATIVES
Should the Board not approve moving forward, Staff is open to suggestions to amendments to the Conflict of Interest Code.

FISCAL IMPACT
There is no fiscal impact as a result of these changes.

ATTACHMENTS
1. Resolution 2018-19 Amending the Authority’s Conflict of Interest Code to Amend Four Position Titles and Add Four Positions
2. Resolution 2018-10 Amending the Organization Chart, Job Classifications and Salary Schedule, adopted at the September 12, 2018 Board of Directors Meeting
RESOLUTION NO. 2018-19

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY AMENDING THE AUTHORITY’S CONFLICT OF INTEREST CODE TO AMEND FOUR POSITION TITLES AND ADD FOUR POSITIONS

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 2018-07; 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 changing the titles of four existing positions and adding four positions.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Authority rescinds Resolution No. 2018-07 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.
ADOPTED AND APPROVED this 12th day of December, 2018.

Chair

ATTEST:

Clerk
The Political Reform Act (Government Code § 81000, \textit{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”).


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.
## DESIGNATED POSITIONS

<table>
<thead>
<tr>
<th>Designated Position</th>
<th>Assigned Disclosure Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member of Board of Directors</td>
<td>1</td>
</tr>
<tr>
<td>Alternate Member of Board of Directors</td>
<td>1</td>
</tr>
<tr>
<td>Chief Executive Officer</td>
<td>1</td>
</tr>
<tr>
<td>General Counsel</td>
<td>1</td>
</tr>
<tr>
<td>Account Services Manager</td>
<td>2</td>
</tr>
<tr>
<td>Administrative Services Manager</td>
<td>2</td>
</tr>
<tr>
<td>Communications Manager</td>
<td>2</td>
</tr>
<tr>
<td>Director of Account Services &amp; Community Relations</td>
<td>2</td>
</tr>
<tr>
<td>Director of Decarbonization &amp; Grid Innovation Programs</td>
<td>2</td>
</tr>
<tr>
<td>Director of Finance &amp; Administration</td>
<td>1</td>
</tr>
<tr>
<td>Director of Power Resources</td>
<td>1</td>
</tr>
<tr>
<td>Management Analyst</td>
<td>2</td>
</tr>
<tr>
<td>Manager of Decarbonization &amp; Grid Innovation Programs</td>
<td>2</td>
</tr>
<tr>
<td>Manager of Regulatory &amp; Legislative Affairs</td>
<td>2</td>
</tr>
<tr>
<td>Senior Regulatory Analyst</td>
<td>2</td>
</tr>
<tr>
<td>Power Resources Manager</td>
<td>1</td>
</tr>
<tr>
<td>Power Resources Planner</td>
<td>1</td>
</tr>
<tr>
<td>Power Settlements &amp; Compliance Analyst</td>
<td>1</td>
</tr>
<tr>
<td>Consultant</td>
<td>3</td>
</tr>
<tr>
<td>Newly Created Position</td>
<td>*</td>
</tr>
</tbody>
</table>
* 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.)
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 NO. 2018-10

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY AMENDING THE ORGANIZATION CHART, JOB CLASSIFICATIONS AND SALARY SCHEDULE

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, under Section 2.5.2 of the Joint Powers Agreement creating the Authority, the Authority has the power to employ agents and employees; and

WHEREAS, the Board of Directors adopted Resolution No. 2016-06 on August 10, 2016 establishing an Organization Chart for the Authority and salary ranges for the established positions; and

WHEREAS, the Board of Directors adopted Resolution No. 2017-07 on June 14, 2017 amending the adopted Organization Chart to delete one Community Outreach Specialist and add one additional Account Services Representative; and

WHEREAS, the Board of Directors adopted Resolution No. 2017-10 on December 13, 2017 amending the adopted Organization Chart to add the position of Manager of Regulatory & Legislative Affairs, remove the position of Regulatory/Legislative Analyst, and modify the salary ranges for all positions; and

WHEREAS, the Board of Directors adopted Resolution No. 2018-06 on April 11, 2018 amending the adopted Organization Chart to add the positions and salary ranges of Associate Legislative Analyst, Director of Decarbonization and Grid Innovation Programs, and Senior Regulatory Analyst; to modify the position titles of the Director of Administration and Finance, Director of Marketing and Public Affairs, Manager of Regulatory and Legislative Affairs, one Power Resource Planning and Programs Analyst, and one Administrative Analyst; and to eliminate the positions of Finance Manager, General Counsel and Director of Government Affairs, and one Power Resource Planning and Programs Analyst; and to modify the salary ranges for all positions; and

WHEREAS, to meet the needs of the Authority and to better represent the work being performed, the Chief Executive Officer has recommended that the Board amend the adopted Organization Chart and schedule of job classification titles and salary ranges.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. The Authority’s schedule of job classification titles and salary ranges is amended to add new positions and salary ranges, modify existing position titles, and remove existing positions, as shown below. The following schedule of job classification
titles and salary ranges shall replace and supersede the schedule shown in Resolution 2018-06:

<table>
<thead>
<tr>
<th>Title</th>
<th>Minimum Salary (Annual $)</th>
<th>Maximum Salary (Annual $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Services Manager</td>
<td>107,354</td>
<td>168,699</td>
</tr>
<tr>
<td>Administrative Services Manager</td>
<td>116,300</td>
<td>182,757</td>
</tr>
<tr>
<td>Administrative Analyst</td>
<td>80,516</td>
<td>137,912</td>
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<tr>
<td>Administrative Assistant</td>
<td>53,677</td>
<td>85,193</td>
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<tr>
<td>Analyst</td>
<td>80,516</td>
<td>126,524</td>
</tr>
<tr>
<td>Associate Analyst</td>
<td>67,096</td>
<td>105,437</td>
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<tr>
<td>Associate Data Analyst</td>
<td>79,504</td>
<td>117,845</td>
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<tr>
<td>Associate Legislative Analyst</td>
<td>69,333</td>
<td>108,952</td>
</tr>
<tr>
<td>Board Clerk / Executive Assistant</td>
<td>98,408</td>
<td>159,280</td>
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<tr>
<td>Communications Manager</td>
<td>107,354</td>
<td>168,699</td>
</tr>
<tr>
<td>Communications Specialist</td>
<td>58,150</td>
<td>95,034</td>
</tr>
<tr>
<td>Community Outreach Specialist</td>
<td>58,150</td>
<td>95,034</td>
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<tr>
<td>Data Analyst</td>
<td>92,924</td>
<td>138,932</td>
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<tr>
<td>Director of Account Services and Community Relations</td>
<td>143,139</td>
<td>224,932</td>
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<tr>
<td>Director of Decarbonization and Grid Innovation Programs</td>
<td>126,977</td>
<td>195,991</td>
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<tr>
<td>Director of Finance &amp; Administration</td>
<td>143,139</td>
<td>249,675</td>
</tr>
<tr>
<td>Director of Power Resources</td>
<td>169,977</td>
<td>267,107</td>
</tr>
<tr>
<td>Energy Associate</td>
<td>67,096</td>
<td>105,437</td>
</tr>
<tr>
<td>Energy Consultant</td>
<td>80,516</td>
<td>126,524</td>
</tr>
<tr>
<td>Management Analyst</td>
<td>98,408</td>
<td>154,641</td>
</tr>
<tr>
<td>Manager of Decarbonization and Grid Innovation Programs</td>
<td>116,300</td>
<td>182,757</td>
</tr>
<tr>
<td>Manager of Regulatory &amp; Legislative Affairs</td>
<td>119,762</td>
<td>181,107</td>
</tr>
<tr>
<td>Power Resources Manager</td>
<td>134,193</td>
<td>210,874</td>
</tr>
<tr>
<td>Power Resources Planner</td>
<td>116,300</td>
<td>182,757</td>
</tr>
<tr>
<td>Power Settlements &amp; Compliance Analyst</td>
<td>98,408</td>
<td>154,641</td>
</tr>
<tr>
<td>Senior Analyst</td>
<td>93,935</td>
<td>126,524</td>
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<tr>
<td>Senior Data Analyst</td>
<td>106,343</td>
<td>152,352</td>
</tr>
<tr>
<td>Senior Energy Consultant</td>
<td>93,935</td>
<td>126,524</td>
</tr>
<tr>
<td>Senior Regulatory Analyst</td>
<td>93,935</td>
<td>147,612</td>
</tr>
</tbody>
</table>
Section 2. The organization of positions shall be as shown in Attachment 1: SVCE Organization Chart. This new Organization Chart shall replace and supersede the Organization Chart adopted by Resolution 2018-06.

Section 3. The Chief Executive Officer shall create and maintain as needed job descriptions for each classification.

Section 4. The Chief Executive Officer is authorized to initiate recruitments and hire for all new positions.

ADOPTED AND APPROVED this 12th day of September, 2018.

ATTEST:

Attachment 1: SVCE Organization Chart
Staff Report – Item 1e

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 1e: Approve Renewal of the Legislative Ad Hoc Committee of the Board for 2019

Date: 12/12/2018

RECOMMENDATION
Staff recommends that the SVCE Board of Directors vote to renew the Legislative Ad Hoc Committee of the Board (“Committee”) for 2019 so that SVCE can continue to strengthen our legislative advocacy and improve our legislative outcomes.

BACKGROUND
The Legislative Ad Hoc Committee of the Board (“Committee”) was created by a vote of the Board at the monthly SVCE Board of Directors meeting on January 10, 2018. The purpose of the Committee was to improve SVCE’s legislative advocacy and outcomes by increasing engagement between SVCE staff and those Board members most interested in legislative matters. Since then, the Committee has met six times and spearheaded numerous legislative advocacy activities, including:

➢ Two lobby days in Sacramento
➢ Meetings with SVCE’s legislators in their district offices
➢ Direct outreach to legislators on key bills at the end of the 2018 session
➢ Planning for the 2019 session

The voices of local elected officials are regarded highly in Sacramento, and the Committee has become a key part of SVCE’s legislative infrastructure for both planning and outreach purposes. SVCE’s legislative advocacy would be significantly less effective without the Committee, but the Committee’s Board authorization is currently set to expire at the end of 2018. Staff therefore request a renewal for 2019.

ANALYSIS & DISCUSSION
The membership of the Committee for 2018 has been: Director Sinks (Chair), Director Smith, Director Abe-Koga, Director Tate, and Director Rennie. If the Committee is renewed for 2019, membership will be revisited and the 2019 members appointed at the February SVCE Board meeting. In 2019, anticipated activities of the Committee include:

➢ Review of key bills and formulation of positions in the 2019 legislative session
➢ Planning outreach to and conducting meetings with legislators
➢ Coalition-building with stakeholders who share SVCE’s legislative priorities
➢ General legislative strategy development
➢ Planning for the 2020 session

SVCE staff encourage all Board members with an interest in legislative activities to consider joining the Committee, with the understanding that Committee membership involves additional time on top of regular Board duties, especially toward the end of the legislative session in August.
STRATEGIC PLAN
By facilitating SVCE Board participation in the state legislative process and strengthening SVCE’s legislative advocacy overall, renewing the Committee directly upholds Goal 8 of the Strategic Plan: “Engage regulators and legislators in developing policy that protects CCA rights and facilitates CCA contributions to decarbonization, grid reliability, affordability, and social equity.”

ALTERNATIVE
If the Board does not renew the Committee for 2019, SVCE staff will need to a) find alternative ways of including the Board in SVCE’s legislative advocacy, or b) conduct SVCE’s 2019 legislative activities with less involvement of the Board entirely. The former is likely to be more logistically complicated than renewing the Committee, and may increase email/communications traffic for the entire Board. The latter, given the high regard for local elected voices in Sacramento, is likely to make SVCE’s legislative advocacy significantly less effective.

FISCAL IMPACT
Renewal of the Committee for 2019 is not expected to have any fiscal impact on SVCE.
Staff Report – Item 1f

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 1f: Approve Amendment to Financial Policy 6 – Purchasing to Increase the Authority of the CEO to $100,000 to Approve and Execute Contracts

Date: 12/12/2018

RECOMMENDATION
Staff recommends that the Board approve amendment to FP6 – Purchasing Policy to increase the authority of the CEO to $100,000 to approve and execute contracts.

EXECUTIVE COMMITTEE RECOMMENDATION
The Executive Committee supported unanimously to recommend the Board approve the amendment to the Purchasing Policy at the December 4, 2018 meeting. The Executive Committee discussed the increase to the CEO approval authority for contracts would not exceed the fiscal year per vendor and the increased delegation authority be limited to the purchase of goods and services.

BACKGROUND
On May 11, 2016, the Board authorized the CEO to execute agreements up to $25,000, provided that 1) the expenditures authorized by these agreements are consistent with the approved budget and 2) service agreements are reported at the Board’s next meeting.

At the March 8, 2017 Board of Directors meeting, Financial Policy #6 – Purchasing was adopted by the Board.

ANALYSIS & DISCUSSION
The business landscape for SVCE has changed. SVCE is disproportionately impacted by the passage of SB237 increasing the cap on Direct Access. Other challenges include the impending increase in the Power Cost Indifference Charge (PCIA), volatility in power supply cost and maintaining competitive rates for our customers. The recommendation to increase the authority for the CEO to execute contracts enhances flexibility for staff to respond quickly to opportunities and threats.

The following table provides a benchmark of the approval authority of CEO’s and City Managers from other CCA’s and neighboring agencies:
AGENDA ITEM: 1f

AGENDA DATE: 12/12/2018

STRATEGIC PLAN
The recommendation supports the strategic plan.

ALTERNATIVE
Staff is open to suggestions from the Board regarding the recommendation.

FISCAL IMPACT
There is no fiscal impact to the agency for adoption of the recommendation.

ATTACHMENTS
1. FP6 – Purchasing Policy

<table>
<thead>
<tr>
<th>CEO/City Manager Approval Limit</th>
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</thead>
<tbody>
<tr>
<td>CCA's</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Member Agencies (3 highest energy load)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Sunnyvale</td>
</tr>
<tr>
<td>City of Mountain View</td>
</tr>
<tr>
<td>City of Milpitas</td>
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</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Palo Alto</td>
</tr>
<tr>
<td>City of Santa Clara</td>
</tr>
<tr>
<td>City of San Jose</td>
</tr>
</tbody>
</table>
PURCHASING POLICY

1. Delegation to the Chief Executive Officer

The CEO shall have all necessary and proper authority to approve and execute:

   a. contracts for Energy Procurement for terms of less than or equal to 12 months, which the CEO shall timely report to the Board;

   b. contracts with a not-to-exceed maximum dollar amount of less than or equal to $100,000,000 per vendor for a given scope of work, per fiscal year;

   c. amendments or addenda to existing contracts, regardless of the existing contract’s price or total amount, which improves the terms of the contract to SVCE’s benefit without increasing the contract’s non-to-exceed maximum dollar amount; and

   d. in the event of an emergency situation contracts with a not-to-exceed maximum dollar amount of:

      i. $150,000 in the aggregate; or

      ii. $500,000 in the aggregate with the prior written consent of three (3) Executive Committee members

In order to avert or alleviate damage to property, to protect the health, safety and welfare of the community and SVCE’s employees, or to repair or restore damaged or destroyed property of SVCE.

An “emergency situation” for purposes hereof is a situation creating an imminent danger to life or property or other material financial loss that calls for immediate action with inadequate time for prior Board approval. The Chief Executive Officer shall within thirty (30) days of the emergency, deliver a report to the Board of Directors explaining the necessity for the action, a listing of expenditures made under these emergency powers and any recommended future actions.
Staff Report – Item 2

To: Silicon Valley Clean Energy Board of Directors
From: Girish Balachandran, CEO

Item 2: CEO Report
Date: 12/12/2018

REPORT

SVCE Staff Update
An offer has been accepted for the position of Analyst under the Decarbonization and Grid Innovation Programs group; this person will be joining us January 2, 2019.

City of Sunnyvale Study Issue
SVCE completed a comprehensive study on the technology, economics and opportunity of heat pump appliances for water and space conditioning in Santa Clara County. Staff found significant potential environmental, economic, health, safety and comfort benefits for customers adopting heat pump technologies. Programs aimed at encouraging the use of these efficient, electric appliances in the built environment are an integral part of SVCE’s efforts to assist our member cities in achieving their climate targets.

The results of the study were shared with the City of Sunnyvale for consideration as part of their 2018 Study Issue on Heat Pumps for residential and commercial buildings. SVCE staff worked closely with Sunnyvale’s Environmental Services Department staff to present recommendations to their City Council on steps the city might consider to leverage an accelerated transition to these high-efficiency, electric appliances. The study and recommendations will be shared with all member agencies within SVCE service territory. By working together, SVCE hopes to identify the most effective programs and policies for reducing emissions by transitioning to electric appliances.

Letter of Support for Grant Opportunity
SVCE provided a letter of support to Prospect Silicon Valley, Valley Transportation Authority and Lehigh University (Bethlehem, PA) for a grant proposal in response to a Department of Energy’s Solar Energy Technology Office (SETO) funding opportunity. The SETO program focus is to “strengthen the integration of solar on the electricity grid, especially at critical infrastructure sites, improve the resilience of the nation’s electricity grid, and streamline technology transfer challenges”. The SVCE-supported research proposal is a three-year project that builds on a current California Energy Commission funded effort to design solutions and algorithms to enable a fully-electric bus fleet that is both reliable and resilient and powered primarily using solar resources. Selected proposal teams will be notified in Spring 2019.

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

1) Municipal Resource Group: Human Resource services, not to exceed $7,200
2) California Interfaith Power and Light: Community engagement services, not to exceed $15,000*
3) Sound of Hope Radio Network: Community engagement services, not to exceed $7,500*
4) Sunnyvale Community Services: Community engagement services, not to exceed $15,000*
5) Vietnamese Voluntary Foundation: Community engagement services, not to exceed $15,000*
6) El Concilio: Community engagement services, not to exceed $7,500*
7) Acterra: Community engagement services, not to exceed $15,000*
8) Energy Solutions (Cohen Ventures): Reach/EV Code Consulting, not to exceed $15,000

*Community Engagement Grant Recipient

**CEO Power Supply Agreements Executed**
The following power supply agreements have been executed by the CEO, consistent with the authority delegated by the Board;

<table>
<thead>
<tr>
<th>Counterparty_Name</th>
<th>Execution Date</th>
<th>Transaction Type</th>
<th>Product</th>
<th>Start Date</th>
<th>End Date</th>
<th>Notional Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRG Power Marketing</td>
<td>10/24/2018</td>
<td>Sale</td>
<td>System Resource Adequacy Capacity</td>
<td>10/1/2019</td>
<td>10/31/2019</td>
<td>($112,500.00)</td>
</tr>
</tbody>
</table>

This agreement is attached.

**ATTACHMENTS**
1. Regulatory/Legislative Update, December 2018
2. Account Services & Community Relations Update, December 2018
3. Agenda Planning Document, December 2018 – April 2019
4. Power Supply Agreements Executed
SVCE Regulatory and Legislative Update
December, 2018
Hilary Staver, Manager of Regulatory and Legislative Affairs

Regulatory Summary

There was a burst of activity on the regulatory front this month, which clarifies our priorities for early 2019 and unfortunately adds new challenges. There were two developments on the PCIA front. First, on 11/18 CalCCA filed an Application for Rehearing of the Track 1 Decision approved by the California Public Utilities Commission (CPUC) on 10/11. This provides the Commission an opportunity to revisit the worst aspects of the Track 1 Decision, but also forms the basis for a legal challenge of the Decision in court should the Commission choose not to take remedial action. Secondly, Phase 2 of the PCIA proceeding is officially kicked off. A prehearing conference is scheduled for 12/19, and Phase 2 is expected to run through October 2019. SVCE is actively participating in the CalCCA PCIA working group, which has been preparing for the Phase 2 kickoff for the past several months.

On 11/21 we received a Proposed Decision (PD) in the Resource Adequacy (RA) proceeding (R.17-09-020) that is not what we were hoping for. The PD set up a three-year planning requirement for local RA, with the IOUs named as central buyers responsible for procuring local RA for all load-serving entities (including CCAs) in their respective service territories. Local RA resources and contracts currently held by CCAs will need to be bid into the central buyers’ solicitation in order to retain their value (i.e. no grandfathering of existing contracts), and if not selected will lose their value entirely. Comments are due on 12/11, but SVCE and CalCCA are currently considering all avenues for responding to this PD, including outside the regulatory sphere.

Finally, there has been a delay in the implementation of the ERRA proceeding, which determines the PCIA rates for 2019. Though we received the usual November update on 11/7, as of now the expected Proposed Decision with the final rates has not been released. It is therefore likely that we will see a delay in implementation of the new rates past January 1, 2019, just as we saw in 2018. SVCE staff will keep the Board updated on this timeline as it evolves.

We are expecting several other major releases from the CPUC in the upcoming month. First, the implementation proceeding for SB 237, the law passed in the 2018 session that expands nonresidential direct access by 4000 GWh, is expected to kick off in December. Second, in early January we are expecting to receive the final major document in the inaugural 2017-2018 Integrated Resource Planning cycle. The Preferred System Plan (PSP) will show the emissions trajectory that is expected for the CA electricity sector if all load-serving entities procure according to the Integrated Resource Plans they submitted in August 2018. The Commission will use the PSP as the basis for their decision about whether the electricity sector is officially on track to meet its decarbonization goals, and will make decisions about remedial mandated procurement accordingly.

Regulatory Update

<table>
<thead>
<tr>
<th>PCIA Reform Rulemaking (R. 17-06-026)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recall: On 7/10/17 the California Public Utilities Commission (CPUC) released an Order Instituting Rulemaking (OIR) “to Review, Revise, and Consider Alternatives to the Power Charge Indifference Adjustment.” The OIR dismisses the investor...</td>
</tr>
</tbody>
</table>

1
owned utilities’ (IOUs’) PAM application, and opens a new proceeding to consider reforms to the PCIA more broadly. On 4/2/18, CalCCA submitted Opening Testimony that lays out a portfolio of suggested improvements to the PCIA. These range from incremental improvements to the market price benchmark to longer-term structural changes, such as securitization of utility-owned generation and an auction of IOU RPS and GHG-free resources to more accurately assess their market value. Rebuttal testimony and briefs followed. Administrative Law Judge released a Proposed Decision on 8/1/18, and Commissioner Carla Peterman released an Alternate Proposed Decision on 8/14/18. After pushing the vote back twice from its original scheduled date, on 10/11/18 the Commission voted unanimously to accept Commissioner Carla Peterman’s Alternate Proposed Decision (APD).

➢ On 11/29, the CPUC released a Ruling opening Phase 2 of the PCIA proceeding. Prehearing conference statements commenting on the scope and schedule of the proceeding are due 12/12, and the prehearing conference is scheduled for 12/19.

### Integrated Resource Planning (IRP) (R. 16-02-007)

➢ **Recall:** This rulemaking was opened for the purpose of implementing the electricity sector’s share of CA’s GHG emissions mitigation goals as put forth in SB 350. The IRP process requires load serving entities (LSEs) to develop long-term procurement roadmaps and share them with the CPUC to facilitate sector-wide planning.

➢ On 9/19/17, the CPUC released the Proposed Reference System Plan (RSP). The RSP is a statewide study that serves as a benchmark for what the Integrated Resource Plans (IRPs) of all the LSEs need to achieve in aggregate in order to meet CA’s GHG emission reduction goals.

➢ On 12/28/17, the CPUC released a Proposed Decision (PD) containing further requirements for IRP content and compliance protocol. This PD significantly expanded CPUC authority over CCA IRPs, allowing the CPUC to review and approve them despite the language in SB 350 specifying certification only. Despite strong advocacy from the CCA community, the PD was passed unanimously at the 2/28/18 Commission meeting.

➢ On 4/3/18, the CPUC released a Ruling on the GHG accounting methodology to be used in the IRP process. The ruling adopts the Clean Net Short (“CNS”) methodology, which was originally proposed by PG&E and struck from the 2/8 IRP Decision after opposition from CalCCA and other stakeholders. CNS is based on hourly comparison between supply and demand curves for each load serving entity. On 8/1/18, SVCE and CCAs around the state submitted Integrated Resource Plans to the CPUC.

➢ The CPUC released a Ruling on 11/15 solidifying the inputs to the emissions models that will produce the Preferred System Plan in January 2019.

### CCA Rulemaking (R. 03-10-003)

➢ **Recall:** On 7/7/17, SVCE and other CCAs filed testimony through CalCCA proposing an updated methodology for calculating the Financial Security Requirement (FSR, aka bond) that new CCAs must pay as insurance against failure and dissolution. In contrast to the IOUs’ argument for including an estimated cost of emergency procurement for involuntarily returning customers, CalCCA proposed that the FSR should cover only the administrative costs of re-incorporation. Evidentiary hearings and briefs were held and filed, respectively, in fall 2017.
➢ On 4/6/18, the Commission released a Proposed Decision ("PD") in this proceeding with a methodology for the new CCA bond requirement. The Financial Security Requirement ("FSR, aka “CCA bond”") was to include both the administrative costs of customer transition back to the IOU as well as an estimate of six months of incremental procurement costs. Incremental procurement costs were be estimated as the difference between market energy rate and the IOU generation retail rate, so in low-price market conditions the net incremental procurement cost could be negative. Negative procurement costs were allowed to offset administrative costs down to a total FSR of $0. On 5/29 the CPUC released an updated Proposed Decision that, among other small changes, raised the minimum FSR to $147k. This is the same minimum used in the bond methodology for Energy Service Providers ("ESPs," aka direct access energy providers). The updated PD was approved by the Commission on 5/31.
➢ Although this proceeding is officially closed, informal collaboration between CCAs, IOUs, and Commission staff continues in order to clarify implementation details of the new FSR amounts. However, SVCE’s new, customized FSR has been confirmed at $147k, the minimum amount required by the new methodology.
➢ No New Updates: CCA staff continue to work with the IOUs and the CPUC on FSR implementation.

Resource Adequacy (R. 17-09-020)

➢ Recall: On 9/28/17, the CPUC issued an Order Instituting Rulemaking (OIR) opening a new Resource Adequacy (RA) proceeding. This proceeding is the successor to R.14-10-010, and is implementing the RA program for RA compliance years 2019 and 2020. However, in addition to conducting routine program administration, the OIR for R.17-09-020 calls for making structural improvements to the RA program and asks stakeholders to suggest such improvements.
➢ The CPUC released a Scoping Memo on 1/18/18. The Scoping Memo divides the proceeding into three tracks in order of decreasing urgency. The most urgent issues, including questions about compliance and cost allocation related to load migration (ie CCA launches and expansions) are included in Track 1. In February and March 2018, a group of Joint CCA Parties including SVCE submitted Track 1 Proposals with changes to the RA program, followed by comments and reply comments on the proposals of other parties.
➢ On 5/22, the CPUC released a Proposed Decision ("PD") in Track 1 of this proceeding. The PD addressed system, local, and flexible RA obligations for 2019 (ie, how much RA is needed system-wide in each of these three categories), and then delved into the structure of the RA program itself. The PD found that for local RA, which is used to prevent capacity shortages in transmission-constrained areas, the status quo of an annual compliance requirement was insufficient. The PD determined that there should be a multi-year local RA requirement, extending the length of local RA contracts to three to five years. It also found that local RA procurement should be done by a central buyer rather than individual LSEs, a measure designed to prevent the occurrence of sublocal RA deficiencies despite all LSEs having fulfilled their RA obligations. The PD set up the opportunity for stakeholders to propose program structures in Track 2 that meet the requirements of a three- to five-year local RA obligation procured by a central buyer.
➢ The Commission approved the Track 1 PD on 6/21/18. Given the potential impacts of this proceeding on all CCAs, CalCCA took over from the Joint CCA Parties in Track 2. CalCCA has assembled an RA Working Group tasked with participating in this proceeding on behalf of CalCCA’s entire membership. SVCE is an active contributor to the working group.
- CalCCA submitted Track 2 opening testimony on 7/10/18. As in the PCIA proceeding, CalCCA proposed a two-part solution divided into short- and long-term solutions. In the short term, CalCCA proposed a 3-year local RA requirement with CAISO playing the role of central buyer. However, CalCCA’s solution allows load serving entities (LSEs) to maintain most of their RA procurement autonomy. Rather than procuring all local RA, the central buyer would contract only with a) plants identified at the beginning of the local RA procurement process as critical to reliability regardless of the status of other plants in the region, and b) plants identified at the end of the local RA procurement process as critical to reliability given what other local RA resources LSEs have already procured in the region. In between, LSEs would continue their local RA procurement as before, with a slightly lower capacity requirement reflective of the initial round of critical procurement conducted by the central buyer. In the longer term, CalCCA’s proposes a process for identifying and developing non-wires alternatives aimed at eliminating local RA requirements altogether.

- The original schedule for this proceeding had rebuttal testimony due 8/8/18. However, after opening testimony was submitted, it quickly became apparent to both stakeholders and the Commission that the breadth of ideas represented and the extent of the changes they would make to existing market structures was too great to be adequately addressed in the original schedule for the proceeding. At a prehearing conference held on 8/1/18, the Commission suspended the existing schedule and asked that rather than producing rebuttal testimony on 8/8/18, stakeholders submit procedural comments suggesting a more appropriate scope and schedule for the proceeding.

- After submission of the procedural comments, the proceeding was functionally suspended until, on 10/5/18, the Commission issued an atypical Ruling requesting comments specifically on proposals submitted by Southern California Edison (SCE).

- On 11/21, the Commission released a Proposed Decision in this proceeding. The PD designates the IOUs as the central buyers in a three-year planning process for local RA. The central buyer will procure all local RA within its service territory (so PG&E will buy for SVCE), and the cost of this procurement will be allocated across the load-serving entities in its service territory on a pro rata basis through the existing Capacity Allocation Mechanism (CAM) charge on the delivery portion of the bill. Load-serving entities will no longer procure their own local RA, and must bid their existing local RA resources into the central buyers’ solicitations if they wish to recovery their costs.

- Comments on the PD are due 12/11, but SVCE and CalCCA are considering all avenues for responding to the PD, including outside the regulatory sphere.

### AB 1110 Implementation

- **Recall:** AB 1110 (Ting, Chapter 656, Statutes of 2016) was passed in 2016 for the purpose of augmenting the information available to electricity consumers in the annually-distributed Power Content Label (PCL). AB 1110 requires that, starting in 2020, the PCL will include the greenhouse gas emissions intensity (in lbs CO₂e/MWh) of each LSE’s portfolio (or, if it offers multiple electricity products, of each individual product) in addition to portfolio resource composition. AB 1110 also directs the California Energy Commission (CEC) to develop guidelines on how to treat unbundled RECs when calculating the power mix and GHG intensity metrics.

- On 6/27/17, the CEC released its proposed implementation plan for AB 1110. The proposal contained several provisions that would guarantee a non-zero emissions intensity for SVCE. Most importantly, the CEC proposed that for the purposes
of calculating carbon intensity, PCC2 (aka “bucket 2”) RECs would have the emissions profile of the substitute energy that firms and shapes the energy product (usually gas) rather than that of the zero-carbon resource that generates the RECs. Secondly, PCC3 (unbundled) RECs would be reported in a footnote but not included in power mix or GHG intensity calculations. MWh for which SVCE has purchased unbundled RECs would thus no longer be carbon-free either.

- On 1/17/18, the CEC issued an updated version of the AB 1110 Implementation Proposal. However, the updates did not change the treatment of PCC2 (ie “bucket 2”) renewables.
- On 10/9/18, the California Energy Commission (CEC) released an updated AB 1110 implementation plan. The new proposal assigns PCC2 resources the emissions factor of their substitute firming-and-shaping energy, so PCC2 still isn’t carbon-free unless it’s firmed and shaped with carbon-free energy such as hydro.
- CalCCA submitted comments on the 10/9/18 updated implementation proposal.

<table>
<thead>
<tr>
<th>Tree Mortality NBC (A. 16-11-005)</th>
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| **Recall:** In 2016, an emergency proclamation by Governor Brown and a bill passed by the legislature (SB 692) separately ordered the IOUs to procure extra energy from biomass in order to dispose of trees killed by the drought. SB 692 explicitly authorized the IOUs to recover the above-market cost of this procurement through a new non-bypassable charge (NBC), while Governor Brown’s proclamation did not. The IOUs advocated for combining the procurement costs of these two mandates and recovering both through a single new NBC. On 7/14/17, CalCCA submitted a Motion challenging a pre-hearing conference ruling in which the Administrative Law Judge (ALJ) erroneously determined the IOUs’ proposed combined NBC to be legal and acceptable.
| A workshop was held on 12/12/17, in which CCA and IOU representatives discussed the methodology for valuing the biomass resources that would form the basis of the new tree mortality NBC. The conversation revealed some common ground, particularly regarding the importance of consistency with the outcome of the ongoing PCIA reform proceeding. However, the workshop agenda explicitly excluded discussion of whether procurement mandated by Governor Brown’s emergency proclamation, which was not explicitly authorized for cost recovery via NBC, could be lumped in with the SB 692 procurement in the new NBC.
| On 3/14/18, the Commission responded to and denied CalCCA’s July 2017 Motion on the treatment of procurement costs associated with Governor Brown’s 2016 emergency proclamation.
| On 4/17/18, the CPUC released a ruling laying out the methodology for calculating the tree mortality NBC. The methodology was straightforward, calculating the above-market costs of the biomass procurement by subtracting energy and ancillary services revenue plus the average 2016 per-MWh RPS contract cost from the per-MWh cost of the biomass contracts.
| On 5/30/18 the CPUC released a (very late) Scoping Memo for this proceeding, including a proceeding schedule that added testimony, hearings, and briefing.
| On 6/28/18, CalCCA submitted brief testimony reiterating our position from the December workshop. CalCCA maintained that the CPUC should avoid litigating the value of similar types of resources in multiple proceedings at the same time. The biomass contracts at the center of this proceeding should be valued according to the PCIA methodology, or whatever alternative comes out of the current PCIA proceeding. |
CalCCA submitted rebuttal testimony, a closing brief, and a reply brief on 7/18/18, 8/13/18, and 8/31/18 respectively. The materials maintain CalCCA’s position that the valuation methodology adopted in the PCIA proceeding should be used to value the biomass contracts at issue in this one, including after reviewing the PCIA PD released on August 1st.

On 11/8, the Commission released a Proposed Decision in this proceeding that is largely in line with CalCCA’s arguments about how to structure the nonbypassable charge. This proceeding is expected to conclude soon, followed by implementation of the new but very small tree mortality nonbypassable charge.


**Recall:** The ERRA is the annual proceeding in which (among other features) the PCIA methodology is combined with PG&E’s cost and contract inputs to calculate the PCIA for the following year. The ERRA is generally treated as a “number crunching” proceeding, in that Commissioners seldom permit substantive policy or methodological changes to be made there. However, it’s an important proceeding because it provides the actual PCIA rates using PG&E’s confidential inputs.

SVCE is participating in this proceeding as part of the Joint CCAs, which includes seven CCAs from PG&E’s service territory. CalCCA generally does not participate in proceedings covering only one IOU’s service territory. On 11/7/18, PG&E released the final major estimate of 2019 PCIA values before the final rates are set in December.

**Parties await a Proposed Decision in this proceeding with the final PCIA numbers for 2019.** The PD would normally be released by now, so the lack indicates that implementation of the new rates will likely be delayed past 1/1/19.

### California Customer Choice Project (CCCP)

**Recall:** Starting in spring 2017, the California Public Utilities Commission (CPUC) has hosted a series of stakeholder engagement events devoted to re-opening broader retail competition in the electricity sector. This started with an En Banc Hearing on consumer and retail choice in May 2017. On 10/31/17, the CPUC held an all-day workshop in Sacramento featuring presentations from several state and countries (Texas, the UK, New York, Illinois, etc) that have at least partial competition in their retail electricity markets.

On 5/3/18, the CPUC released a white paper (the “Green Book”) on the future of customer choice in California. The paper reviewed several case studies from other states and countries that have implemented versions of retail choice in their electricity markets, and characterized California’s situation as a precarious one at risk for another energy crisis. CalCCA submitted comments on the Green Book on 6/11/18, and an en banc hearing to take public stakeholder comment was held on 6/22/18.

The final, revised version of the Green Book was released on 8/7/18. The final version did not contain significant changes and did not generate the level of media or public attention that the original did.

On 10/23/18, the CPUC released a “Gap Analysis” designed to be a follow-up to the Green Book. The Gap Analysis identifies perceived weak spots where remedial action could better protect the fundamental principles of affordability, reliability, and decarbonization. The Gap Analysis was the subject of an en banc hearing in Sacramento on 10/29/18, where the familiar major theme was the amount of centralized oversight needed to ensure achievement of state policy goals. Given that the Gap Analysis is not part of an official proceeding, there is no required action associated with this conversation. Any desired changes will need to be deliberated, approved, and implemented through the relevant proceedings.

**No new updates:** Parties await follow-up action from the Commission on the Gap Analysis.
Petition for Modification of D. 12-12-036

Recall: On January 30, the three investor-owned utilities (IOUs: PG&E, SCE, and SDG&E) filed a Petition for Modification of D.12-12-036. This Decision, passed in 2012, established a Code of Conduct and accompanying enforcement mechanisms related to IOU interactions with CCAs. D 12-12-036 was passed as part of the implementation process for SB 790, a 2011 law requiring limitations on IOU activities that was motivated by PG&E’s misuse of ratepayer resources and information while attempting to stymie the formation of MCE in 2010. The Petition for Modification (PfM) argues for removal of the limitations on both public marketing and lobbying of elected officials about CCAs, grounding the request in 1st Amendment arguments about free speech combined with the increasing popularity of the CCA model across the state. The IOUs can already do both of these things if they establish Independent Marketing Divisions (IMDs) that meet certain criteria for independence set by the CPUC (SDG&E is the only one of the three that has done this so far). However, this PfM would abolish the IMD requirement and allow the IOUs to engage directly in marketing and lobbying activities with no firewall. CalCCA submitted a response to the Petition for Modification (PfM) on 3/1/18.

No new updates: Parties continue to await the Commission’s response to the PfM.

Legislative Update

The Legislative Ad Hoc Committee met on 11/30 to continue planning for the 2019 session. SVCE requests that the Board renew the Committee for 2019, as it has become a valuable part of SVCE’s legislative advocacy and infrastructure.
Account Services & Community Relations Update
December 2018

1. Events and Presentations

Staff continues to attend community events and provide presentations about SVCE to community groups as requested. Staff continues to present at BayREN Home Energy Upgrade workshops this fall for both homeowners and multifamily property managers with expected attendance of 50-100 people each.

Completed and Upcoming Events:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 14</td>
<td>6:30 – 8 PM</td>
<td>BayREN Homeowner Energy Upgrade Workshop – presentation and tabling</td>
<td>Hillview Community Center, Los Altos</td>
</tr>
<tr>
<td>November 15</td>
<td>5 – 7 PM</td>
<td>Milpitas Chamber Mixer – new member recognition</td>
<td>Sonesta Silicon Valley, Milpitas</td>
</tr>
<tr>
<td>November 27</td>
<td>12 – 1 PM</td>
<td>Sunnyvale Rotary Club - presentation</td>
<td>Sunnyvale Elks Lodge</td>
</tr>
<tr>
<td>November 29</td>
<td>6:30 – 8 PM</td>
<td>BayREN Homeowner Energy Upgrade Workshop – presentation and tabling</td>
<td>Mountain View City Hall Council Chambers</td>
</tr>
<tr>
<td>November 30</td>
<td>6 – 8 PM</td>
<td>Los Altos Tree Lighting Ceremony – tabling</td>
<td>Downtown Los Altos</td>
</tr>
<tr>
<td>December 6</td>
<td>6:30 – 8 PM</td>
<td>BayREN Homeowner Energy Upgrade Workshop – presentation and tabling</td>
<td>Joan Pisani Community Center, Saratoga</td>
</tr>
</tbody>
</table>

2. Upgrade and Opt Out Update

Below is the number of GreenPrime Upgrades and Opt Outs as of November 25, as well as the total opt out percentage in overall accounts, and opt out percentage by load.

<table>
<thead>
<tr>
<th></th>
<th>Upgrade</th>
<th>Opt Out</th>
<th>Opt Out by Account Type</th>
<th>Total Opt Out, All Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1,087</td>
<td>8,595</td>
<td>3.44%</td>
<td>3.39%</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,996</td>
<td>839</td>
<td>2.89%</td>
<td></td>
</tr>
</tbody>
</table>
3. New Video with GreenPrime Customer – LinkedIn
SVCE staff worked with a team from LinkedIn to feature Global Sustainability Program Manager, Peggy Brannigan, in a video to discuss why the company values renewable and carbon-free electricity. The video is available on the SVCE YouTube channel: https://www.youtube.com/watch?v=3LQ0p0lBW7o.

4. Second Round of Customer Surveys
Staff sent another customer survey, this time focused on customer energy use, as opposed to preferences and attitudes for clean energy and potential SVCE program areas. This information is being added to segment customers by energy usage data, a joint project with the Decarbonization and Grid Innovation programs team.

Emails were sent to another 14,978 residential customers (originally 15,000 emails, but some get scrubbed out due to various factors). Below are the stats as of November 30.

- Opened: 5,910 or 39%
- Responded: 722 or 5%
- Email unsubscribe: 271 or 2%
- Newsletter sign-ups: 219 or 1% (but 30% of respondents!)

5. Member Agency Working Group Update
The Member Agency Working Group (MAWG) met on November 15 to discuss the following topics:

1. Decarbonization Strategy presentation
2. Reach Codes
3. Electric Vehicle Service Equipment (EVSE) Assessment and Strategy

6. Media
Press releases:

- SV Clean Energy Grants $75,000 to Nonprofits for Community Engagement, 10-19-2018

Articles:

- EDF Inks Solar Agreements With California Community Choice Aggregators, Solar Industry Mag, 11-09-2018

- Two CCAs sign up for 128 MW of solar plus storage, PV Magazine, 11-12-2018
SV Clean Energy signs contracts for large solar projects

Silicon Valley Clean Energy recently signed two long-term agreements for the largest utility-scale, solar-plus-storage projects scheduled for construction in California.

The two projects—providing 153 megawatts of solar and 47 megawatts of storage—will be developed by Electricité de France and Recurrent Energy Development Holdings LLC. The projects, slated to come online in 2021, will harness enough energy to power 39,000 homes annually.

Building storage in addition to solar turns the sun’s energy into a resource that can be used on demand, rather than only when the sun is shining. The projects will combine solar panels with large batteries to store energy the sun produces during the day so that more clean energy can be discharged onto the grid in the evening.

“We are excited to help California lead the transition to clean, reliable and flexible energy,” said Girish Balachandran, CEO of Silicon Valley Clean Energy.

The contracts are the result of a competitive bidding process that began in September 2017. SVCE’s collaboration with its neighboring Community Choice Energy agency, Monterey Bay Community Power, took advantage of economies of scale for the combined four counties, allowing for more purchasing power to invest in the long-term agreements.

The projects will support approximately 840 jobs during construction. SVCE will receive 55 percent of the output, and Monterey Bay Community Power will receive 45 percent.

For more information on Silicon Valley Clean Energy, visit svcleanenergy.org.

- California CCAs Double Renewable Energy Commitment, Adding 1 GW Capacity, in One Year, Renewable Energy World, 11-16-2018

- SVCE拨款7.5万元帮助少数族裔了解清洁能源 (SVCE allocates $75,000 to help ethnic minorities understand clean energy), Sound of Hope/BayVoice.net, 11-19-2018

- New utility launches state’s largest solar [+storage] project, Mountain View Voice, 11-26-2018

- LA tree-lighting event set for Friday, Los Altos Town Crier, 11-28-2018
<table>
<thead>
<tr>
<th>JANUARY 2019</th>
<th>FEBRUARY 2019</th>
<th>MARCH 2019</th>
<th>APRIL 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Board of Directors, Jan. 9:</strong></td>
<td><strong>Board of Directors, Feb. 13:</strong></td>
<td><strong>Board of Directors, March 13:</strong></td>
<td><strong>Board of Directors, April 10:</strong></td>
</tr>
<tr>
<td>Consent</td>
<td>Consent</td>
<td>Consent</td>
<td>Consent</td>
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<tr>
<td>Minutes</td>
<td>Minutes</td>
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<td>Minutes</td>
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<tr>
<td>Risk Management Policy Update</td>
<td>Regular Calendar</td>
<td>Regular Calendar</td>
<td>Regular Calendar</td>
</tr>
<tr>
<td>Troutman Sanders Engagement Letter</td>
<td>SVCE Mid Year Budget</td>
<td>Strategic Plan</td>
<td></td>
</tr>
<tr>
<td>Treasurer/Auditor Appointment</td>
<td>Additional Committee Selection</td>
<td>SVCE 2019 Rates</td>
<td></td>
</tr>
<tr>
<td>Regular Calendar</td>
<td>IT/Financial Audit Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair/Vice Chair Selection</td>
<td>BAAQMD Grant *tentative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Committee Selection</td>
<td>Orientation Workshop for New Board Members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of Use Rates Discussion</td>
<td></td>
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<tr>
<td><strong>Executive Committee - TBD:</strong></td>
<td><strong>Executive Committee - TBD:</strong></td>
<td><strong>Executive Committee - TBD:</strong></td>
<td><strong>Executive Committee - TBD:</strong></td>
</tr>
<tr>
<td>Executive Committee Regular Meeting Schedule</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Confirm Chair/Vice Chair</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audit Committee - Week of Jan. 14:</strong></td>
<td><strong>Audit Committee - February 4:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Auditor Overview</td>
<td>Receive Financial Audit</td>
<td></td>
<td></td>
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<tr>
<td><strong>Finance &amp; Admin Committee, TBD:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Year End Financial Results</td>
<td></td>
<td></td>
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<tr>
<td>Investment Strategy Discussion</td>
<td></td>
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</tbody>
</table>
CONFIRMATION LETTER
BETWEEN
NRG POWER MARKETING LLC
AND
SILICON VALLEY CLEAN ENERGY AUTHORITY

This confirmation letter ("Confirmation") confirms the transaction (the "Transaction") between NRG Power Marketing LLC ("Buyer") and Silicon Valley Clean Energy Authority ("Seller"), each individually a "Party" and together the "Parties", dated as of October 24, 2018 (the "Confirmation Effective Date") in which Seller agrees to provide to Buyer the right to the Product, as such term is defined in Section 1.1 of this Confirmation. This Transaction shall be deemed to have been entered into pursuant to, and shall supplement, form a part of, and be governed by the terms and conditions of the form of Master Power Purchase and Sale Agreement published by the Edison Electric Institute and the National Energy Marketers Association (version 2.1 dated 4/25/00) (the "EEI Agreement") with a Cover Sheet immediately below and ending prior to "Article I Transaction" containing the elections and other changes contained herein as if the Parties have executed the EEI Agreement (with such Cover Sheet the "Master Agreement"). The Parties agree that the only transactions to be concluded pursuant to such Master Agreement shall be the Transaction documented in this Confirmation. The Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement". Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the Master Agreement or the Tariff (defined herein). To the extent that this Confirmation is inconsistent with any provision of the Master Agreement, this Confirmation shall govern the rights and obligations of the Parties hereunder.

Name: NRG Power Marketing LLC
("Party A")

All Notices:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Contract Administration
Phone: 609-524-4543
Facsimile: 609-524-4540
Email: ContractAdmin@nrg.com
Duns: 02-825-5979
Federal Tax ID Number: 41-1910737

Invoices:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Accounting – Physical Power
Phone: 609-524-4980
Email: PhysicalSettlements@nrg.com

Scheduling:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Scheduling Desk
Phone: 609-524-4890
Facsimile: 609-524-4540
Email: Taylor.roye@nrg.com

Name: Silicon Valley Clean Energy Authority
("Party B")

All Notices:
Street: 333 W. El Camino Real, Suite 290
City: Sunnyvale, CA Zip: 94087
Attn: Girish Balachandran
Phone: 408-721-5301
Facsimile:
Email: girish@svcleanenergy.org
Duns:
Federal Tax ID Number: 81-2158638

Invoices:
Attn: Silicon Valley Clean Energy Authority
Finance
Phone: 408-721-5301

Scheduling:
Phone: 916-221-4327
Street: 604 Sutter Street, Suite 250
City: Folsom, CA Zip: 95630
Email: eric@zglobal.biz
Payments:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Accounting – Physical Power
Phone: 609-524-4980
Email: PhysicalSettlements@nrg.com

Wire Transfer:
Bank Name: Bank of New York Mellon
Bank ABA: 043000261
Account Name: NRG Power Marketing LLC
Account Number: 31850867

Confirmations:
Confirmation Specialist - Power
Phone: 609-524-4870
Facsimile: 609-524-4779
Email: Confirmations@nrg.com

Credit and Collections:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Manager, Credit Risk
Telephone: 609-524-4573
Facsimile: 609-524-4779

With additional Notices of an Event of Default or Potential Event of Default to:
NRG Power Marketing LLC
Street: 804 Carnegie Center
City: Princeton, NJ Zip: 08540
Attn: Asst. General Counsel
Email: ContractAdmin@nrg.com

The Parties hereby agree that the General Terms and Conditions set forth as Article One through Article Ten of the Master Agreement are hereby incorporated by references as if set forth in full herein and the following elections and modifications are hereby designated as the "Cover Sheet" to the Master Agreement:

Article Two
Transaction Terms and Conditions
☐ Optional provision in Section 2.4. If not checked, inapplicable.

Article Four
Remedies for Failure to Deliver or Receive
☐ Accelerated Payment of Damages. If not checked, inapplicable.
Article Five
Events of Default; Remedies

☐ Cross Default for Party A:
  □ Party A: _____________
  □ Cross Default Amount:

☐ Other Entity: _____________
  □ Cross Default Amount:

☐ Cross Default for Party B:
  □ Party B: _____________
  □ Cross Default Amount:

☐ Other Entity: _____________
  □ Cross Default Amount:

5.6 Closeout Setoff

☐ Option A (Applicable if no other selection is made.)

☐ Option B – Affiliates shall have the meaning set forth in the Agreement unless otherwise specified as follows:

☐ Option C (No Setoff)

Article Eight

8.1 Party A Credit Protection:
Credit and Collateral Requirements

(a) Financial Information:
  □ Option A
  □ Option B Specify: _____________
  ☐ Option C Specify: None

(b) Credit Assurances:
  ☐ Not Applicable
  □ Applicable

(c) Collateral Threshold:
  ☐ Not Applicable
  □ Applicable

If applicable, complete the following:

Party B Collateral Threshold: $_____; provided, however, that Party B's Collateral Threshold shall be zero if an Event of Default or Potential Event of Default with respect to Party B has occurred and is
continuing.

Party B Independent Amount: $ __________

Party B Rounding Amount: $ __________

(d) Downgrade Event:

☐ Not Applicable

☐ Applicable

If applicable, complete the following:

☐ It shall be a Downgrade Event for Party B if Party B's Credit Rating falls below _____ from S&P or _____ from Moody's or if Party B is not rated by either S&P or Moody's

☐ Other:

Specify: ____________________________

(e) Guarantor for Party B: None.

Guarantee Amount: ____________________

8.2 Party B Credit Protection:

(a) Financial Information:

☐ Option A

☐ Option B  Specify:

☐ Option C  Specify: None

(b) Credit Assurances:

☐ Not Applicable

☐ Applicable

(c) Collateral Threshold:

☐ Not Applicable

☐ Applicable

If applicable, complete the following:

Party A Collateral Threshold: $_____; provided, however, that Party B's Collateral Threshold shall be zero if an Event of Default or Potential Event of Default with respect to Party B has occurred and is
continuing.

Party A Independent Amount: $ __________
Party A Rounding Amount: $ __________

(d) Downgrade Event:

☐ Not Applicable
☐ Applicable

If applicable, complete the following: N/A

☐ It shall be a Downgrade Event for Party A if Party A’s Credit Rating falls below ________ from S&P or ________ from Moody’s or if Party A is not rated by either S&P or Moody’s

☐ Other:
Specify: ____________________________________

(e) Guarantor for Party A:

Guarantee Amount: ____________________________

Article 10

Confidentiality

☐ Option A: Confidentiality Applicable. If not checked, inapplicable.

Schedule M

☐ Party A is a Governmental Entity or Public Power System
☐ Party B is a Governmental Entity or Public Power System

☐ Add Section 3.6. If not checked, inapplicable
☐ Add Section 8.4. If not checked, inapplicable

Other Changes

1. The modifications to Section 1.12, 1.50 and 5.2 of the Master Agreement specified in that certain Errata published by the Edison Electric Institute (version 1.1, July 18, 2007) are hereby incorporated herein as if set forth in full.

2. Section 1.1 is amended by adding the following sentence at the end of the definition of “Affiliate”:

"Notwithstanding the foregoing, the public entities that are designated as "Parties" under the Joint Powers Agreement (referred to herein as "members" of Party B) shall not constitute or otherwise be deemed an “Affiliate” of Party B for the purposes of this Master Agreement or any Confirmation."

3. The following defined term is added as Section 1.26A:

...
"1.26A "Joint Powers Agreement" means the Joint Powers Agreement, effective as of March 31, 2016, as amended, providing for the formation of Party B, as such agreement may be further amended or amended and restated."

4. Section 1.60 is amended by inserting the words "in writing" immediately following the words "agreed to".

5. In Section 2.1, delete the first sentence in its entirety and replace with the following: "A Transaction, or an amendment, modification or supplement thereto, shall be entered into only upon a writing signed by both Parties."

6. Section 2.2 is amended by deleting "(including any Confirmations accepted in accordance with Section 2.3)" from the second sentence.

7. Section 2.3 is deleted in its entirety and replaced with the following:

2.3 "No Oral Agreements or Modifications. The Parties shall confirm a Transaction by a written confirmation in a form mutually agreeable to both Parties and signed by both Parties ("Confirmation"). Notwithstanding anything to the contrary in this Master Agreement, the Master Agreement and any and all Transactions may not be orally amended or modified."

8. Section 2.4 is amended by deleting "pursuant to Section 2.3" and "either orally or" in the sixth line.

9. Section 5.2 is amended by adding the following:

"If the Non-Defaulting Party's calculation of the Termination Payment results in an amount that would be due to the Defaulting Party (i.e. the Defaulting Party was in-the-money), then the Termination Payment shall be deemed to be zero dollars ($0.00)."

10. Section 5.2 is amended by deleting the following phrase from the last two lines: "under applicable law on the Early Termination Date, as soon thereafter as is reasonably practicable)." The following shall be added to the end of Section 5.2: "under applicable law on the Early Termination Date, then each such Transaction (individually, an "Excluded Transaction" and collectively, the "Excluded Transactions") shall be terminated as soon thereafter as reasonably practicable), and upon termination shall be deemed to be a Terminated Transaction and the Termination Payment payable in connection with all such Transactions shall be calculated in accordance with Section 5.3 below. The Gains and Losses for each Terminated Transaction shall be determined by calculating the amount that would be incurred or realized to replace or to provide the economic equivalent of the remaining payments or deliveries in respect of that Terminated Transaction. The Non-Defaulting Party (or its
agent) may determine its Gains and Losses by reference to information either available to it internally or supplied by one or more third parties including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets. Third parties supplying such information may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information, including, without limitation, Intercontinental Exchange, Inc. If the Non-Defaulting Party's aggregate Gains exceeds its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Settlement Amount shall be zero, notwithstanding any provision in this Section or any provision in this Agreement to the contrary."

11. Section 10.11 is amended by adding the following at the end of the last sentence:

"Party A and Party B acknowledge and agree that the Master Agreement and any Confirmations executed in connection therewith are subject to the requirements of the California Public Records Act (Government Code Section 6250 et seq.). Party B acknowledges that Party A may submit information to Party B that the other party considers confidential, proprietary, or trade secret information pursuant to the Uniform Trade Secrets Act (Cal. Civ. Code section 3426 et seq.), or otherwise protected from disclosure pursuant to an exemption to the California Public Records Act (Government Code Sections 6254 and 6255). Party A acknowledges that Party B may submit to Party A information that Party B considers confidential or proprietary or protected from disclosure pursuant to exemptions to the California Public Records Act (Government Code sections 6254 and 6255). In order to designate information as confidential, the disclosing party must clearly stamp and identify the specific portion of the material designated with the word "Confidential". The parties agree not to over-designate material as confidential. Over-designation would include stamping whole agreements, entire pages or series of pages as Confidential that clearly contain information that is not confidential. Upon request or demand of any third person or entity not a party to this Agreement ("Requestor") for production, inspection and/or copying of information designated by a Party as confidential information (such designated information, the "Confidential Information" and the disclosing Party, the "Disclosing Party"), the Party receiving such request (the "Receiving Party") as soon as practical, shall notify the Disclosing Party that such request has been made as specified in the Cover Sheet. The Disclosing Party shall be solely responsible for taking whatever legal steps are necessary to protect information deemed by it to be Confidential Information and to prevent release of information to the Requestor by the Receiving Party. If the Disclosing Party takes no such action after receiving the foregoing notice from the Receiving Party, the Receiving Party shall be permitted to comply with the
Requestor's demand and is not required to defend against it."

12. The following is added as Section 10.12:

"10.12 Joint Powers Authority.

Party A hereby acknowledges and agrees that Party B is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016 (the "Joint Powers Agreement") and is a public entity separate from its members. Party A will have no rights and will not make any claims, take any actions or assert any remedies against any of Party B's constituent members, or the officers, directors, advisors, contractors, consultants or employees of Party B or Party B's constituent members, in connection with this Agreement."

13. Section 10.2(ii) of the Master Agreement shall be modified by inserting "Except for the conditions precedent described in Section 2.2 of this Confirmation," at the beginning of the first sentence in such section.

14. Section 10.6 of the Master Agreement shall be deleted in its entirety and replaced with the following:

"THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT PERMISSIBLE UNDER APPLICABLE LAW, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT."

15. Schedule P: Products and Related Definitions shall be deleted in its entirety.
ARTICLE 1
TRANSACTION

1.1 Product
Seller shall sell and Buyer shall receive and purchase, the Capacity Attributes of the Units (collectively, the "Product"). Seller shall deliver to Buyer the Product in the amount of the Contract Quantity. Seller shall deliver the Product with Flexible RA Attributes only if selected in Section 1.1(c), below. Product does not confer to Buyer any right to dispatch or receive the energy or ancillary services from the Units. Seller retains the right to sell any Product from a Unit in excess of its Unit Contract Quantity.

(a) [Reserved.]
(b) [Reserved.]
(c) ☐ Flexible RA Attributes

If selected, Seller shall deliver Flexible RA Attributes in an amount specified in Section 1.4, Flexible RA Quantity. Seller's obligation to deliver the Flexible RA Quantity for any Showing Month may be reduced pursuant to Seller's sole discretion and determination in the event and to the extent the Unit EFC is reduced by the CAISO from the Unit EFC as specified in Appendix B. To the extent the CAISO decides to reduce the applicable Unit EFC, Seller shall not be liable for any costs or damages related to such reduction.

1.2 Delivery Period
The Delivery Period shall be: [ REDACTED ] inclusive, unless terminated earlier in accordance with the terms of this Agreement.

1.3 Contract Quantity
The Contract Quantity for each applicable Showing Month is as follows:

<table>
<thead>
<tr>
<th>Showing Month</th>
<th>Contract Quantity (MWs)</th>
</tr>
</thead>
</table>

1.4 Flexible RA Quantity
The Flexible RA Quantity for each applicable Showing Month is as follows:

<table>
<thead>
<tr>
<th>Showing Month</th>
<th>Flexible RA Quantity (MWs)</th>
</tr>
</thead>
</table>

For purposes of clarity, the Flexible RA Quantity is not in addition to the Contract Quantity, but represents the portion of Contract Quantity that currently possesses Flexible RA Attributes.
ARTICLE 2
DELIVERY OBLIGATIONS

2.1 Adjustments to Contract Quantity

(a) Seller’s obligation to deliver the applicable Contract Quantity for each Showing Month may be reduced by Seller in the event of Force Majeure. In the event Seller is unable to provide the applicable Contract Quantity for any portion of a Showing Month because of Force Majeure, Seller has the option, but not the obligation, to provide the applicable Contract Quantity for such Showing Month from Replacement Units, provided that Seller provides and identifies such Replacement Units in accordance with Section 2.2.

(b) Seller’s obligation to deliver the Contract Quantity for any Showing Month shall be reduced in the event the Unit NQC is reduced from the Unit NQC as specified in Appendix B. In such an event, the Unit Contract Quantity for such Unit may be reduced in a pro rata amount with all other Product sales calculated with reference to the difference in the Unit NQC as specified in Appendix B and the then current Unit NQC.

2.2 Alternate Capacity

If Seller is unable to deliver the full Contract Quantity for any Showing Month for any reason (including without limitation due to one of the reasons specified in Section 2.1), or if Seller desires to deliver the Contract Quantity, either in whole or in part, for any Showing Month from a different generating unit other than the Unit, then Seller may, at no cost to Buyer, provide Buyer with replacement Product from one or more Replacement Units in an amount such that the total amount of Product provided to Buyer from the Unit and Replacement Units for each Showing Month is not more than the Contract Quantity for the applicable Showing Month, provided that in each case:

(a) Seller shall notify Buyer of its intent to provide replacement Product and identify Replacement Units meeting the above requirements no later than ten (10) Business Days before the relevant deadlines for Buyer’s Compliance Showings related to such Showing Month; and

(b) the designated Replacement Unit is accepted by the CAISO as a substitute for the original Unit.

Once Seller has identified in writing any Replacement Units that meet the requirements of this Section 2.2, then any such Replacement Units shall be automatically deemed a Unit for purposes of this Confirmation for that Showing Month.

2.3 Delivery of Product

Seller shall provide Buyer with the Expected Contract Quantity of Product for each Showing Month consistent with the following:

Seller shall, on a timely basis, submit, or cause the Unit’s SC to submit, Supply Plans in accordance with the Tariff to identify and confirm the Expected Contract Quantity provided to Buyer for each Showing Month so that the total amount of Expected Contract Quantity identified and confirmed for each Showing Month equals the Expected Contract Quantity for such Showing Month. Upon satisfaction of this requirement, the Product shall be deemed delivered for such Showing Month for purposes of this Confirmation.

2.4 Damages for Failure to Provide Capacity

If Seller fails to deliver the Expected Contract Quantity of Product for any Showing Month, then the following shall apply:

34836235v2
(a) Buyer may, but shall not be required to, replace any portion of the Expected Contract Quantity not provided by Seller with capacity having equivalent Capacity Attributes as the Expected Contract Quantity not provided by Seller ("Replacement Capacity"). Buyer may enter into purchase transactions with one or more parties to replace any portion of Expected Contract Quantity not provided by Seller. Additionally, Buyer may enter into one or more arrangements to repurchase its obligation to sell and deliver capacity to another party, and such arrangements shall be considered the procurement of Replacement Capacity. Buyer shall act in a commercially reasonable manner in procuring any Replacement Capacity.

(b) Seller shall pay to Buyer at the time set forth in Section 4.1 of the Master Agreement, the following damages in lieu of damages specified in Section 4.1 of the Master Agreement: an amount equal to the positive difference, if any, between (i) the sum of (A) the actual price paid by Buyer for any Replacement Capacity times its applicable quantity, plus (B) each Capacity Replacement Price times the amount of the Expected Contract Quantity neither provided by Seller nor purchased by Buyer pursuant to Section 2.4(a) for all applicable portions of the Showing Month, and (ii) the Expected Contract Quantity not provided for all applicable portions of the Showing Month times the Contract Price for that month. If Seller fails to pay these damages, then Buyer may offset those damages owed it against any future amounts it may owe to Seller under this Confirmation pursuant to Article Six of the Master Agreement.

2.5 Indemnities for Failure to Deliver Contract Quantity

Seller agrees to indemnify, defending and holding harmless Buyer from any penalties, fines or costs assessed against Buyer by the CPUC or the CAISO, resulting from Seller's failure to deliver any portion of the Expected Contract Quantity for any portion of the Delivery Period. With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize such penalties, fines and costs. If Seller fails to pay the foregoing penalties, fines or costs, or fails to reimburse Buyer for those penalties, fines or costs, then Buyer may offset those penalties, fines or costs against any future amounts it may owe to Seller under this Confirmation. Seller will have no obligation to Buyer under this Section 2.5 in respect of the portion of the Expected Contract Quantity for which Seller has paid damages under Section 2.4 hereof.

2.6 Reserved

2.7 Buyer's Re-Sale of Product

Buyer may re-sell all or a portion of the Product acquired under this Confirmation.

ARTICLE 3
PAYMENT

3.1 Payment

In accordance with the terms of Article Six of the Master Agreement, Buyer shall make a payment to Seller, after the applicable Showing Month, as follows ("Monthly Payment"):

\[ \text{Payment} = (A \times B \times 1,000) \]

where:

\[ A = \text{applicable Contract Price for the Delivery Period (expressed as $/kW-month)} \]

\[ B = \text{Contract Quantity as specified in Section 1.3} \]

The Monthly Payment calculation shall be rounded to two decimal places.
3.2 **Monthly Contract Price**

The monthly Contract Price is as follows:

<table>
<thead>
<tr>
<th>Delivery Period</th>
<th>RA Capacity Flat Price ($/kW-month)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3 **Allocation of Other Payments and Costs**

(a) Seller shall retain any revenues it may receive from the CAISO or any other third party with respect to the Unit for (i) start-up, shutdown, and minimum load costs, (ii) capacity revenue for ancillary services, (iii) energy sales, and (iv) any revenues for black start or reactive power services.

(b) Buyer shall be entitled to receive and retain all revenues associated with the Contract Quantity (including any capacity revenues from RMR Contracts for the Unit, Capacity Procurement Mechanism, or its successor, and RUC Availability Payments, or its successor, but excluding payments described in Section 3.3(a)(i)-(iv)).

(c) In accordance with Section 3.1 of this Confirmation and Article Six of the Master Agreement,

(i) all such Buyer revenues described in this Section 3.3, but received by Seller, or a Unit's SC, owner, or operator shall be remitted to Buyer, and Seller shall pay such revenues to Buyer if the Unit's SC, owner, or operator fails to remit those revenues to Buyer. If Seller fails to pay such revenues to Buyer, Buyer may offset any amounts owing to it for such revenues pursuant to Article Six of the Master Agreement against any future amounts Buyer may owe to Seller under this Confirmation; and

(ii) all such Seller, or a Unit's SC, owner, or operator revenues described in this Section 3.3, but received by Buyer shall be remitted to Seller, and Buyer shall pay such revenues to Seller if the Unit's SC, owner, or operator fails to remit those revenues to Seller. If Buyer fails to pay such revenues to Seller, Seller may offset any amounts owing to it for such revenues pursuant to Article Six of the Master Agreement against any future amounts it may owe to Buyer under this Confirmation.

(d) If a centralized capacity market develops within the CAISO region, Buyer will have exclusive rights to offer, bid, or otherwise submit the applicable Contract Quantity of Product for each Showing Month provided to Buyer pursuant to this Confirmation for re-sale in such market, and retain and receive any and all related revenues.

(e) Seller agrees that the Unit is subject to the terms of the Availability Standards, Non-Availability Charges, and Availability Incentive Payments as contemplated under Section 40.9 of the Tariff. Furthermore, the Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges are the responsibility of the Seller and for Seller's account.
ARTICLE 4
RESERVED

ARTICLE 5
OTHER BUYER AND SELLER COVENANTS

5.1 Seller's and Buyer's Duty to Take Action to Allow the Utilization of the Product
Buyer and Seller shall, throughout the Delivery Period, take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to ensure Buyer's right to the use of the Contract Quantity for the sole benefit of Buyer's applicable Compliance Obligations; provided that such commercially reasonable actions shall not include any obligation that the owner or operator of the Unit undertake capital improvements, facility enhancements, or the construction of new facilities nor in any way limit the Parties with respect to advocacy for any regulatory policies or market changes before any entity. The Parties further agree to negotiate in good faith to make necessary amendments, if any, to this Confirmation to conform this Transaction to subsequent clarifications, revisions, or decisions rendered by the CPUC, FERC, or other Governmental Body having jurisdiction to administer Compliance Obligations, so as to maintain the benefits of the bargain struck by the Parties on the Confirmation Effective Date.

5.2 Seller's Representations, Warranties and Covenants
Seller represents, warrants and covenants to Buyer that, throughout the Delivery Period:

(a) Seller owns or has the exclusive right to the Product sold under this Confirmation from the Unit, and shall furnish Buyer, CAISO, CPUC or other Governmental Body with such evidence as may reasonably be requested to demonstrate such ownership or exclusive right;

(b) No portion of the Contract Quantity has been committed by Seller to any third party in order to satisfy Compliance Obligations or analogous obligations in any CAISO or non-CAISO markets, other than pursuant to an RMR Contract between the CAISO and either Seller or the Unit's owner or operator;

(c) The Unit is connected to the CAISO Controlled Grid, is within the CAISO Control Area, and is under the control of CAISO;

(d) Seller shall, and the Unit's SC, owner and operator is obligated to, comply with Applicable Laws, including the Tariff, relating to the Product;

(e) If Seller is the owner of the Unit, the aggregation of all amounts of Capacity Attributes that Seller has sold, assigned or transferred for any Unit does not exceed the Unit NQC for that Unit;

(f) Seller has notified the SC of the Unit that Seller has transferred the Contract Quantity with respect to each Showing Month to Buyer, and the SC is obligated to deliver the Supply Plans in accordance with the Tariff and this Confirmation;

(g) Seller has notified the Unit's SC that Buyer is entitled to the revenues set forth in Section 3.3, and such SC is obligated to promptly deliver those revenues to Buyer, along with appropriate documentation supporting the amount of those revenues; and

(h) Seller agrees that no portion of the Product will be from a coal or nuclear resource.

ARTICLE 6
CONFIDENTIALITY

Notwithstanding Section 10.11 of the Master Agreement, the Parties agree that Buyer may disclose the sale of the Contract Quantity under this Transaction to any Governmental Body, the
CPUC, the CAISO in order to support its Compliance Showings, if applicable, and Seller may disclose the transfer of the Contract Quantity and the applicable Expected Contract Quantity for each Showing Month under this Transaction to the SC of the Unit in order for such SC to timely submit accurate Supply Plans; provided, that each disclosing Party shall use reasonable efforts to limit, to the extent possible, the ability of any such applicable Governmental Body, CAISO, or SC to further disclose such information.

ARTICLE 7
COLLATERAL REQUIREMENTS

The Parties agreed that no collateral is required to be posted in connection with this Transaction by either Party.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE
REFERENCED IN THE OPENING PARAGRAPH:

NRG Power Marketing LLC
By: [Signature]
Name: Taylor W. Rose
Title: Energy Trader - West

Silicon Valley Clean Energy Authority
By: [Signature]
Name: Girish Balachandran
Title: CEO
APPENDIX A
DEFINED TERMS

"Alternate Capacity" means replacement Product which Seller has elected to provide to Buyer in accordance with the terms of Section 2.2.

"Applicable Laws" means any law, rule, regulation, order, decision, judgment, or other legal or regulatory determination by any Governmental Body having jurisdiction over one or both Parties or this Transaction, including without limitation, the Tariff.

"Availability Incentive Payments" has the meaning set forth in the Tariff.

"Availability Standards" has the meaning set forth in the Tariff.

"Buyer" has the meaning specified in the introductory paragraph of this Confirmation.

"CAISO" means the California Independent System Operator or any successor entity performing the same functions.

"Capacity Attributes" means, with respect to a Unit, any and all of the following, in each case which are attributed to or associated with the Unit at any time throughout the Delivery Period:

(a) RA Attributes,
(b) Local RA Attributes (if specified as applicable in Appendix B),
(c) Flexible RA Attributes (if elected in Section 1.1c), and
(d) other current or future defined characteristics (including the ability to generate at a given capacity level, provide ancillary services, ramp up or down at a given rate, and flexibility or dispatch-ability attributes), certificates, tags, credits, howsoever entitled, including any accounting construct or framework applied to any Compliance Obligations.

"Capacity Flat Price" means the price specified in the Capacity Flat Price Table in Section 3.2.

"Capacity Replacement Price" means the market price for the quantity of Product not provided by Seller under this Confirmation as determined in a commercially reasonable manner. For purposes of this Transaction and Confirmation, the "Capacity Replacement Price" shall be deemed to be the "Replacement Price" as defined in Section 1.51 of the Master Agreement.

"Compliance Obligations" means the RAR, Local RAR, Flexible RAR, and other resource adequacy requirements associated with the Capacity Attributes as established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction.

"Compliance Showings" means the (a) Local RAR compliance or advisory showings (or similar or successor showings), (b) RAR compliance or advisory showings (or similar or successor showings), (c) Flexible RAR compliance or advisory showings (or similar or successor showings), and (d) other Capacity Attributes compliance or advisory showings (or similar or successor showings), in each case, an LSE is required to make to the CPUC pursuant to the CPUC Decisions, or to any Governmental Body having jurisdiction.

"Confirmation Effective Date" has the meaning specified in the introductory paragraph of this Confirmation.

"Contract Price" means, for any Showing Month, the product of the Capacity Flat Price and the Price Shape for such period.

"Contract Quantity" means, with respect to any particular Showing Month of the Delivery Period, the amount of Product (in MW's) set forth in the table in Section 1.3 which Seller has agreed to provide to Buyer from the Unit for each such Showing Month.

"CPUC Decisions" means CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024,
14-06-050, 15-06-063, 16-06-045, and 17-06-027 and any other existing or subsequent decisions, resolutions, or rulings related to resource adequacy, including, without limitation, the CPUC Filing Guide, in each case as may be amended from time to time by the CPUC.

"CPUC Filing Guide" is the annual document issued by the CPUC which sets forth the guidelines, requirements and instructions for LSE's to demonstrate compliance with the CPUC's resource adequacy program.

"Delivery Period" has the meaning specified in Section 1.2.

"EEI Agreement" has the meaning specified in the introductory paragraph of this Confirmation.

"Effective Flexible Capacity" means the flexible capacity of a resource that can be counted towards an LSE's Flexible RAR requirements.

"Expected Contract Quantity" means, with respect to any particular Showing Month of the Delivery Period, the Contract Quantity of Product for such Showing Month including the amount of Contract Quantity of Product that Seller has elected to provide Alternate Capacity with respect to for such Showing Month, but less any reductions to Contract Quantity for such Showing Month specified in Section 2.1 with respect to which Seller has not elected to provide Alternate Capacity.

"Flexible RA Attributes" means any and all flexible resource adequacy attributes, as may be identified at any time during the Delivery Period by the CPUC, CAISO or other Governmental Body having jurisdiction that can be counted toward Flexible RAR, exclusive of any RA Attributes and Local RA Attributes.

"Flexible RA Quantity" means the amount of Flexible RA Attributes associated with the Product to be delivered by Seller to Buyer by each Unit as set forth in Section 1.4.

"Flexible RAR" means the flexible resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction.

"GADS" means the Generating Availability Data System, or its successor.

"Governmental Body" means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.

"Local Capacity Area" has the meaning set forth in the Tariff.

"Local RAR" means the local resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction. Local RAR may also be known as local area reliability, local resource adequacy, local resource adequacy procurement requirements, or local capacity requirement in other regulatory proceedings or legislative actions.

"LSE" means load-serving entity.

"Master Agreement" has the meaning specified in the introductory paragraph of this Confirmation.

"Monthly Payment" has the meaning specified in Section 3.1.

"NERC" means the North American Electric Reliability Corporation, or its successor.

"Net Qualifying Capacity" has the meaning set forth in the Tariff.

"Non-Availability Charges" has the meaning set forth in the Tariff.

"Planned Outage" means any outage, including Maintenance Outages, that are designated "Approved Planned" in the SLIC System.

"Price Shape" means the Price Shape specified in Section 3.2. In the absence of the specification of a Price Shape for a particular month in Section 3.2, the Price Shape shall be deemed to be 100%.
"Product" means the Capacity Attributes of the Unit, provided that:

(a) Product does not include any right to the energy or ancillary services from the Unit;

(b) any change by the CAISO, CPUC or other Governmental Body that defines new or re-defines existing Local Capacity Areas that results in a decrease or increase in the amount of Capacity Attributes related to a Local Capacity Area provided hereunder will not result in a change in payments made pursuant to this Transaction; and

(c) the Parties agree that, under this Confirmation, if the CAISO, CPUC or other Governmental Body defines new or re-defines existing Local Capacity Areas whereby the Unit subsequently qualifies for a Local Capacity Area, the Product shall include all Capacity Attributes related to such Local Capacity Area.

"RAR" means the resource adequacy requirements (other than Local RAR or Flexible RAR) established for LSEs by the CPUC pursuant to the CPUC Decisions, or by any other Governmental Body having jurisdiction.

"Replacement Capacity" has the meaning specified in Section 2.4.

"Replacement Unit" means a generating unit meeting the requirements specified in Section 2.2.

"Resource Category" shall be as described in the annual CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

"SC" has the meaning set forth in the Tariff.

"Seller" has the meaning specified in the introductory paragraph of this Confirmation.

"Showing Month" shall be the calendar month of the Delivery Period that is the subject of the Compliance Showing, as set forth in the CPUC Decisions. For illustrative purposes only, pursuant to the CPUC Decisions in effect as of the Confirmation Effective Date, the monthly Compliance Showing made in June is for the Showing Month of August.

"Supply Plan" has the meaning set forth in the Tariff.

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

"Term" shall have the following meaning: The "Term" of this Transaction shall commence upon the Confirmation Effective Date and shall continue until the later of (a) the expiration of the Delivery Period or (b) the date the Parties' obligations under this Agreement have been satisfied.

"Unit" shall mean the generation assets described in Appendix B (including any Replacement Units), from which Product is provided by Seller to Buyer.

"Unit EFC" means the Effective Flexible Capacity that is or will be set by the CAISO for the applicable Unit. As of the Confirmation Effective Date, the Unit EFC is as specified in Appendix B. If the CAISO adjusts the Effective Flexible Capacity of a Unit after the Confirmation Effective Date, then for the period in which the adjustment is effective, the Unit EFC shall be deemed the lesser of (i) the Unit EFC as of the Confirmation Effective Date as specified in Appendix B, and (ii) the CAISO-adjusted Effective Flexible Capacity. To the extent the CAISO creates new categories of flexible capacity during the term of this Transaction and a Unit can count toward such new categories of flexible capacity while operating consistent with the operational limitation and physical characteristics of such Unit, any and all such new categories of flexible capacity shall be deemed to be part of the Effective Flexible Capacity of that Unit.

"Unit NQC" means the Net Qualifying Capacity set by the CAISO for the applicable Unit.
APPENDIX B
UNIT INFORMATION

Name: Sunrise Power Project AGGREGATE II

Location: Fellows, CA

CAISO Resource ID: SUNRIS_2_PL1X3

Unit NQC (as of the Confirmation Effective Date): 586.02 MW

Unit EFC (as of the Confirmation Effective Date): 461.02 MW

Resource Type: GEN

Resource Category (1, 2, 3 or 4): 4

Current CAISO Zone (NP15, ZP26 or SP15): ZP26

Local Capacity Area (if any, as of Confirmation Effective Date): NA

Flexible Category: 1

Deliverability restrictions, if any, as described in most recent CAISO deliverability assessment: None

Run Hour Restrictions: None
Staff Report – Item 3

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 3: Appoint Representatives for Vacant Seats on the Audit Committee and Finance and Administration Committee

Date: 12/12/2018

RECOMMENDATION
Appoint two representatives to fill the forthcoming vacant seats on the Audit Committee (1) and Finance and Administration Committee (1).

AUDIT COMMITTEE RECOMMENDATION
The Audit Committee met December 5, 2018 and recommended the Board appoint a member to fill the vacant seat as a result of Director Grilli’s departure from the SVCE Board. The Finance and Administration Committee is in a similar situation with Director Craig leaving the Board in December 2018.

BACKGROUND
The Audit Committee was formed by the Board in February 2018 to oversee the accounting and financial reporting process and the audit of the Agency’s financial statements by the independent auditor. The members of this group, Chair Courtenay Corrigan, Director Jeannie Bruins, and Director Marsha Grilli, were appointed at the February 14, 2018 Board meeting.

The Finance and Administration Committee was also selected at the February Board meeting. This group, made up of Directors Craig, Gibbons, Miller, and Rennie, works with SVCE staff on budgeting, financial planning/reporting, internal controls, accountability policies, and investments.

ANALYSIS & DISCUSSION
With Director Marsha Grilli and Director Burton Craig’s departure, the Audit Committee and Finance and Administration Committee will each be losing one member.

The Audit Committee will have two active members (Chair Corrigan and Director Bruins) through the beginning of February 2019. With the annual audit being performed in January 2019, having a third member to receive and review the audit would be beneficial for SVCE.

The Finance and Administration Committee will have three of four members with Director Craig’s departure. This may pose quorum issues if one of the members is unable to attend a meeting between now and our February board meeting, which staff would like to schedule.

Eligible members to serve on both groups can be Board Directors, Alternate Board Directors, and member agency staff. This commitment would be through the February 13, 2019 Board meeting in which committee selections for 2019 will be made.

STRATEGIC PLAN
Appointing members to fill the vacant seats would support the finance and fiscal responsibility goals of our strategic plan.
ALTERNATIVE
The Board can choose to forego filling these vacancies and address them at the February 13, 2019 Board meeting.

FISCAL IMPACT
There would be no fiscal impact as a result of selecting replacement members.
Staff Report – Item 4

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 4: **Adopt Resolution to Revise the SVCE Strategic Plan to Establish 2025 and 2030 GHG Reduction Targets, Adopt the Decarbonization Strategy & Programs Roadmap, and Adopting a FY 2019 and FY 2020 Budget for the Implementation of Decarbonization Programs**

Date: 12/12/2018

**RECOMMENDATION**

Staff recommends the Board adopt Resolution No. 2018-20 taking the following four actions:

1. Adopt the revised Strategic Plan to include the proposed 2025 and 2030 greenhouse gas emissions reduction targets (Attachment 2);
2. Adopt the SVCE Decarbonization Strategy & Programs Roadmap and program briefs (Attachments 3 and 4);
3. Approve the following budget requests for the first tranche of programs, totaling $6,025,000 for FY2019 through FY2020; and,
4. Approve the form of agreements for the SVCE Decarbonization Programs set forth in Attachments 5, 6 and 7.

<table>
<thead>
<tr>
<th>Program</th>
<th>FY19-FY20 Budget Request</th>
<th>Agreements &amp; MOUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I Clean Power Offerings</td>
<td>$150k in FY2019</td>
<td></td>
</tr>
<tr>
<td>Reach Codes</td>
<td>$400k in FY2019</td>
<td>Cost-sharing agreement with Peninsula Clean Energy for third-party support (Attachment 5)</td>
</tr>
<tr>
<td>All-Electric Showcase Grants</td>
<td>$1.5M over two-year period</td>
<td></td>
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<tr>
<td>FutureFit Heat Pump Water Heater</td>
<td>$325k over two-year period</td>
<td></td>
</tr>
<tr>
<td>EV Infrastructure Strategy &amp; Plan</td>
<td>$200k in FY2019</td>
<td></td>
</tr>
<tr>
<td>EV Fast Charge Depots</td>
<td>$700k over two-year period</td>
<td></td>
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<tr>
<td>Innovation Partnerships</td>
<td>(combined with Innovation Onramp budget request)</td>
<td>MOUs with Prospect Silicon Valley and Joint Venture Silicon Valley (Attachments 8 and 9)</td>
</tr>
<tr>
<td>Innovation Onramp</td>
<td>$1.2M over two-year period</td>
<td>Two standardized partnership agreements (Attachments 6 and 7)</td>
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<tr>
<td>Virtual Power Plant</td>
<td>$1.1M over two-year period</td>
<td></td>
</tr>
<tr>
<td>Customer Resource Center</td>
<td>$350k over two-year period</td>
<td></td>
</tr>
<tr>
<td>GHG emissions inventory update</td>
<td>$100k in FY2019</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,025,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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, Strategy 5.2 of the Board-approved Strategic Plan
directed SVCE staff to establish an SVCE decarbonization strategy and programs roadmap (abbv. "Roadmap"). Figure 1 is a schematic of the key stakeholder groups, interim deliverables and milestones, and timeline of the roadmap development, as presented in prior staff reports and presentations.

As depicted in Figure 1, Staff carried out a multi-month, extensive stakeholder engagement process for the development of the programs roadmap. The following efforts were completed and brought to the SVCE staff and Board of Directors (BOD) prior to the December BOD meeting:

- Customer Program Advisory Group (CPAG) Initial Recommendations (BOD, June 2018)
- Member Agency Working Group (MAWG) Recommendations (SVCE Staff, July 2018)
- Compilation of Commercial & Industrial (C&I) Recommendations
- High-level Roadmap (BOD, September 2018)
- Facilitated Stakeholder Workshop (September 2018)

Prepared notes from the facilitated stakeholder workshop are included in Attachment 10.

In addition to carrying out the above stakeholder engagement process, Staff arranged an independent, expert review of a draft decarbonization strategy and roadmap by Rocky Mountain Institute as a part of suite of professional services included in the contract approved at the July 2018 BOD meeting. The proposed Roadmap incorporates their expert input.

**ANALYSIS & DISCUSSION**

**GHG Emissions Forecasting and Scenario Analysis**

Staff carried out a GHG emissions forecasting and scenario analysis in SVCE service territory through 2030 from energy-related emissions (i.e. electricity, natural gas and transportation). The objectives were two-fold: 1) inform the development of GHG emissions targets beyond SVCE’s current 2021 target, and 2) assess the potential impact of the proposed program portfolio to guide the Roadmap development. The analysis leveraged data from the GHG emissions inventory and clean energy asset baseline data for 2015 and 2017 carried out by DNV-GL, presented in detail at the July 2018 BOD meeting. It also incorporated input from several other sources, including individual member agency general plans, census data, regional agencies, and industry market data. This type of model requires a multitude of parameters that have significant uncertainty over the time period of interest (EV sales rate, VMT growth rates, vehicle turnover rate, housing growth, jobs growth, etc.). Therefore, a sensitivity analysis was carried out to gauge the range of potential outcomes.
Figure 1 shows the results of the business as usual (BAU) forecast (black dotted line) and uncertainty analysis (orange-shaded “high confidence” and “medium confidence” cones), which take into account established state policies and incorporates an informed range of estimates for all parameters using data and information specific to Santa Clara County. The BAU is defined as being an informed estimate of emissions prior to SVCE program development.

![Figure 2: Historical GHG emissions and business as usual (BAU) forecast through 2030](image)

Figure 2 includes the same BAU GHG forecast (dotted black line) as the prior figure, but now also includes an estimate for the emissions reductions achievable through the portfolio of proposed programs (dashed green line). The shaded cone is the result of the sensitivity analysis from adjusting parameters relating to program impacts.

![Figure 3: Projected GHG forecast with SVCE programs](image)

Figure 3 is an equivalent chart as Figure 3, except that it includes the proposed 2025 and 2030 GHG emissions reduction targets (green diamonds). The proposed target for 2025 is 40% below the 2015 baseline levels, which equates to an absolute emissions target of 2.42 MMT CO2e. The proposed target for 2030 is
50% below 2015 baseline levels, which equates to an absolute emissions target of 2.01 MMT CO2e. Several individual member agencies in SVCE’s service territory have climate action plans with their own GHG reduction targets. The proposed SVCE-wide GHG targets for 2025 and 2030 were formulated taking into account the established climate action plans. Based on the GHG emissions forecasting and scenario analysis, these proposed targets are ambitious but achievable.

Figure 4: Proposed 2025 and 2030 GHG emissions reduction targets

Figure 5 shows the BAU forecast through 2030, along with existing and proposed SVCE targets and existing California statewide targets scaled to SVCE service territory. However, the horizontal axis is now expanded out to 2050. As shown in the graph, achieving 2050 emissions reduction goals requires an unprecedented shift away from gasoline powered vehicles and natural gas appliances in buildings. The proposed 2025 and 2030 targets are in line with the trajectory SVCE needs to follow to achieve deep decarbonization.

Figure 5: Long-term view of GHG emissions reductions
Staff plan to update the GHG emissions forecasting and scenario analysis on an annual basis, in tandem with the annual GHG emissions inventory assessment. During the model update, staff will review and revise all model assumptions, as needed, given economic, market and technology change to determine an updated BAU forecast and confidence interval from the sensitivity analysis. Staff will revisit the existing and proposed GHG targets during this process to re-assess feasibility. Depending on the results of the analysis, staff may propose revisions to the targets to achieve realignment with anticipated feasibility and community ambition.

Decarbonization Strategy & Programs Roadmap

Staff carried out an extensive stakeholder engagement process to develop a decarbonization strategy and programs roadmap, as described in the “Background” section of this staff report. The result of that effort is the proposed Roadmap (Attachment 3) and program briefs (Attachment 4).

Table 1 shows the budget request for executing the first tranche of programs in the proposed Roadmap, organized by initiative and fiscal year. Please note that this table includes a request for $100k to carry out the annual GHG emissions inventory update, although this is not treated as a dedicated "program" in the Roadmap. Additional details on the programs can be found in the program briefs (Attachment 4), which include details on challenges, goals, approach. Note also that the Board approved setting aside 2% of annual revenues for programs. This works out to approximately $5 million/year and a total of approximately $10 million over FY2019 and FY2020. This initial tranche of funding commitments targets approximately 60% of planned program funds. Additional commitment of funds will be proposed in the coming quarters.

<table>
<thead>
<tr>
<th>Program</th>
<th>FY2019</th>
<th>FY2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I Clean Power Offerings</td>
<td>$150k</td>
<td>$150k</td>
<td>$150k</td>
</tr>
<tr>
<td>Reach Codes</td>
<td>$400k</td>
<td>$400k</td>
<td>$400k</td>
</tr>
<tr>
<td>All-Electric Showcase Grants</td>
<td>$1M</td>
<td>$500k</td>
<td>$1.5M</td>
</tr>
<tr>
<td>FutureFit Heat Pump Water Heater</td>
<td>$150k</td>
<td>$175k</td>
<td>$325k</td>
</tr>
<tr>
<td>EV Infrastructure Strategy &amp; Plan</td>
<td>$200k</td>
<td>$200k</td>
<td>$200k</td>
</tr>
<tr>
<td>EV Fast Charge Depots</td>
<td>$100K</td>
<td>$600k</td>
<td>$700k</td>
</tr>
<tr>
<td>Innovation Partnerships</td>
<td>(combined with Innovation Onramp budget)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation Onramp</td>
<td>$600k</td>
<td>$600k</td>
<td>$1.2M</td>
</tr>
<tr>
<td>Virtual Power Plant</td>
<td>$100k</td>
<td>$1M</td>
<td>$1.1M</td>
</tr>
<tr>
<td>Customer Resource Center</td>
<td>$150k</td>
<td>$200k</td>
<td>$350k</td>
</tr>
<tr>
<td>GHG emissions inventory update</td>
<td>$100k</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,950,000</strong></td>
<td><strong>$3,075,000</strong></td>
<td><strong>$6,025,000</strong></td>
</tr>
</tbody>
</table>

*Table 1: Budget request for first tranche of programs by program and fiscal year*

**STRATEGIC PLAN**

The overarching 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.

In the prior Strategic Plan update brought to the Board in July, staff indicated that GHG emissions goals for 2025 and 2030 were under consideration through the roadmap development process. The first component of the staff recommendation (revise Strategic Plan to include additional emissions reduction targets) is a proposal to revise Goal 5 to include the emissions reduction targets of 40% below by 2025 and 50% below by 2030.
The second component of the staff recommendation (adoption of Decarbonization Strategy and Programs Roadmap), supports Strategy 5.2, copied below. Each sub-strategy is addressed in the proposed Roadmap.

**Strategy 5.2:** Establish an SVCE decarbonization program roadmap and related processes

5.2.1.) Establish high-level evaluation criteria and weighting to assess relative program impact and value
5.2.2.) Identify and document candidate programs that promote decarbonization via improved energy efficiency and/or fuel switching to clean electricity
5.2.3.) Confirm top-ranked programs for detailed development and launch in 2019
5.2.4.) Establish process and mechanisms for ongoing stakeholder input and review

The third and fourth components of the staff recommendation (approval for the budget initial tranche of programs), support Strategy 5.3, copied below, which is to develop and conduct SVCE programs that promote decarbonization via grid innovation and fuel switching. Sub-strategy 5.3.2 was addressed in the program roadmap development process through the facilitated stakeholder workshop, which incorporated built environment trade allies. Continued, comprehensive engagement of all built environment stakeholders will take place through the end of 2019 through the "Reach Codes" program, which incorporates multiple stakeholder meetings. Sub-strategy 5.3.3 was addressed through individual meetings and SVCE’s facilitated stakeholder workshop. Continued efforts to engage industry to support decarbonization and grid innovation is embedded in two specific programs, the “Innovation Partners” and “Innovation Onramp” programs.

**Strategy 5.3:** Develop and conduct SVCE programs that promote decarbonization via grid innovation and fuel switching to clean electricity

5.3.1.) Support initial programs
5.3.2.) Engage built environment trade allies (e.g. architects, engineers, builders, developers and realtors) and member agency building officials in creating a roadmap addressing and encouraging the advancement of decarbonization technologies and measures (e.g. expediting/subsidizing building permits, adding codes and ordinances beyond existing building codes)
5.3.3.) Engage industry partners (e.g. startups, corporations, academia) in designing innovative grid technology programs that provide value to customers and help enable further grid decarbonization.

**FISCAL IMPACT**
The first, second and fourth requests of the proposed resolution have no direct fiscal impact.

The third component of the proposed resolution is a request to spend the amounts shown in the following table, organized by program.

<table>
<thead>
<tr>
<th>Program</th>
<th>FY19-FY20 Budget Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I Clean Power Offerings</td>
<td>$150k in FY2019</td>
</tr>
<tr>
<td>Reach Codes</td>
<td>$400k in FY2019</td>
</tr>
<tr>
<td>All-Electric Showcase Grants</td>
<td>$1.5M over two-year period</td>
</tr>
<tr>
<td>FutureFit Heat Pump Water Heater</td>
<td>$325k over two-year period</td>
</tr>
<tr>
<td>EV Infrastructure Strategy &amp; Plan</td>
<td>$200k in FY2019</td>
</tr>
<tr>
<td>EV Fast Charge Depots</td>
<td>$700k over two-year period</td>
</tr>
<tr>
<td>Innovation Partnerships (combined with Innovation Onramp)</td>
<td></td>
</tr>
<tr>
<td>Innovation Onramp</td>
<td>$1.2M over two-year period</td>
</tr>
<tr>
<td>Virtual Power Plant</td>
<td>$1.1M over two-year period</td>
</tr>
<tr>
<td>Customer Resource Center</td>
<td>$350k over two-year period</td>
</tr>
</tbody>
</table>
### Agenda Item: 4

<table>
<thead>
<tr>
<th>GHG emissions inventory update</th>
<th>$100k in FY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,025,000</strong></td>
</tr>
</tbody>
</table>

Funding for SVCE program activities is currently 2% of operating revenues. The FY2019 budget included approximately $5.2 million for program activities. The budget request shown in the table above spans FY2019 and FY2020, which collectively is expected to be well within the anticipated program budget across the two fiscal years, if the funding rate of 2% of operating revenues is continued in FY2020.

The second tranche of programs for post-2019 launch and associated budget requests and agreements will be brought forward before in the 2019 calendar year.

### ATTACHMENTS

1. Resolution 2018-20, Approving Revisions to the SVCE Strategic Plan to Establish 2025 and 2030 Greenhouse Gas Reduction Targets, Adopting the Decarbonization Strategy & Programs Roadmap and Adopting a Fiscal Year 2019 and Fiscal Year 2020 Budget for the Implementation of Decarbonization Programs
2. Strategic Plan revised to include 2025 and 2030 emissions reduction targets
3. Decarbonization Strategy & Programs Roadmap
4. Program Briefs
5. Cost-sharing agreement with Peninsula Clean Energy for “Reach Codes”
6. Standardized agreement for projects involving hardware equipment for “Innovation Onramp”
7. Standardized agreement for general projects for “Innovation Onramp”
8. MOU with Prospect Silicon Valley for “Innovation Partnerships”
9. MOU with Joint Venture Silicon Valley for “Innovation Partnerships”
10. Final notes from SVCE’s September 2018 facilitated stakeholder workshop
RESOLUTION NO. 2018-20


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 desires to adopt 2025 and 2030 greenhouse gas emissions reduction targets; and

WHEREAS, Section 5.2 of the SVCE Strategic Plan calls for the establishment of a decarbonization strategy and programs roadmap which has been prepared by staff; and

WHEREAS, the Board desires to adopt the proposed Decarbonization Strategy and Programs Roadmap; and

WHEREAS, the Board desires to establish a budget for the implementation of decarbonization programs pursuant to an adopted Decarbonization Strategy and Programs Roadmap; and

WHEREAS, SVCE also will be entering into nonbinding MOUs with Prospect Silicon Valley and Joint Venture Silicon Valley and other strategic partners to promote decarbonization programs and activities consistent with the SVCE Strategic Plan.

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

Section 1. The SVCE Strategic Plan is revised to include 2025 and 2030 greenhouse gas emissions reduction targets as shown in Attachment 2, attached hereto.
Section 2. The SVCE Decarbonization Strategy & Programs Roadmap and program briefs, attached hereto as Attachments 3 and 4, is hereby adopted.

Section 3. The following budget for decarbonization programs is hereby adopted for Fiscal Year 2019 and Fiscal Year 2020:

<table>
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Section 4. The form of agreements, attached hereto as Attachments 5, 6 and 7, are hereby approved. These form of agreements may be modified to conform to the specific types of services negotiated for each future agreement with the approval of the Chief Executive Officer and General Counsel provided that no agreements shall be executed or amended in an amount exceeding the budget approved by Section 3 above or later amended by the Board.

PASSED AND ADOPTED this 12th day of December, 2018.

______________________________________________
Chair

ATTEST:

______________________________________________
Andrea Pizano, Board Secretary

Attachments
Workplace

Human capital is a successful organization’s greatest asset, and at SVCE we strive to build a highly talented and dedicated team that will ensure the success and prosperity of our organization. Valuing this team and nurturing its talent will require a start-up culture that supports creativity, open communication, and the free flow of ideas to spur innovation. We will provide an infrastructure within SVCE that supports and cultivates our employees through professional and personal development, recognizes and rewards their contributions to achieving our mission, and offers opportunities that position our people, as well as SVCE, for success. In attracting and maintaining skilled employees, SVCE will continue to provide a rewarding workplace experience.

Goal 1: Build a high-performing team

**Strategy 1.1:** Build an environment that encourages creativity and innovation

1.1.1) Support professional development by paying for memberships, conferences and other continuing education opportunities
1.1.2) Encourage staff to attend conferences and networking events

**Strategy 1.2:** Support employee health and wellness

1.2.1) Promote healthy habits
1.2.2) Provide flexible schedules to accommodate family needs

**Strategy 1.3:** Build an inclusive and fulfilling company culture

1.3.1) Monthly, arrange opportunities for staff to socialize in or outside of the office
1.3.2) Annually, sponsor family events (e.g. holiday celebration, summer picnic, etc.)
1.3.3) Promote team building through volunteer work
1.3.4) Maintain an open-door policy for CEO and directors

**Strategy 1.4:** Provide effective and safe feedback processes

1.4.1) Research and develop an annual feedback process, promoting an open and safe performance assessment
1.4.2) Conduct an annual survey to measure employee engagement
Strategy 1.5: Provide opportunities for cross-team interaction and collaboration

1.5.1) Establish a monthly all-hands meeting

Strategy 1.6: Reward staff to keep them engaged

1.6.1) Annually, update compensation schedule to account for cost of living adjustment. Conduct a biennial compensation study and make necessary adjustments to ensure wage competitiveness
1.6.2) Continue to provide competitive benefits
1.6.3) Ensure that staff has the tools necessary to effectively do the job

CUSTOMER AND COMMUNITY

SVCE will use various channels and platforms to cultivate relationships with and bring customer value to all segments of the communities we serve. These channels include leveraging existing outlets established by our member agencies, partnering with commercial customers to enhance their community presence, and re-engaging with those who have opted out.

Partnerships with commercial customers are particularly important to building SVCE’s brand in a region known for innovation. Communicating our competitive rates and superior product in clear and accessible ways will strengthen customer loyalty and enhance our financial standing, enabling us to better serve our communities.

Aligning customer programs to the SVCE mission is paramount to the design and execution of these programs. Decarbonization and electrification are front and center in developing strategic programs to lower greenhouse gases and curbing climate change.

Goal 2: Maintain competitive rates to acquire and retain customers

Strategy 2.1: Provide carbon-free electricity to additional customers in the SVCE service area and increase market share

2.1.1) Communicate competitive rates to all customers
2.1.2) Annually, communicate rates and power content mix of the SVCE electric supply in a joint rate comparison mailer with PG&E
2.1.3) On an on-going basis, engage with selected prospective customers not currently served by SVCE to review options and benefits of service from SVCE
2.1.4) Examine customized rate options for large customers while meeting SVCE’s carbon and financial goals
**Goal 3:** Benchmark customer awareness in 2019 and establish goals

**Strategy 3.1:** Update baseline customer awareness measure and build a trusted brand

- 3.1.1) Conduct customer survey in 2019
- 3.1.2) Develop customer segmentation model and personas
- 3.1.3) Establish ongoing goals and communications plan for awareness

**Strategy 3.2:** Build awareness and trust through continuous interaction with the SVCE community

- 3.2.1) Annually, provide SVCE update to member agency councils or state of the city events highlighting SVCE and community activity related to electrification and decarbonization.
- 3.2.2) Annually, place booth/table at six regional events that emphasize energy efficiency, sustainability, and efficient use of natural resources
- 3.2.3) Sponsor community and industry events that align with SVCE’s sponsorship guidelines
- 3.2.4) Create a Speakers Bureau to present to community groups, environmental organizations, trade allies, commercial customers, chambers, and neighborhood associations at their respective meetings

**Strategy 3.3:** Share SVCE and customer stories to build goodwill and awareness

- 3.3.1) Submit quarterly news features to all local papers
- 3.3.2) Write and promote customer profiles for related work and recognition already in the community

**Strategy 3.4:** Leverage the SVCE member agencies’ sustainability and communication staff to disseminate information to the communities in the SVCE service area

- 3.4.1) Organize and conduct monthly meetings of the Member Agency Working Group for SVCE member agency sustainability and communication staff
- 3.4.2) Organize quarterly meetings between commercial and industrial customers and various interest groups to promote renewable resources, decarbonization, and advanced technologies for energy storage
Strategy 3.5: Leverage partnerships with other Community Choice Aggregators (CCAs) to increase general CCA “brand recognition” among consumers

3.5.1) Promote the undertaking of joint marketing campaigns with Peninsula Clean Energy and other regional CCAs
3.5.2) Co-brand publicly visible energy service infrastructure

Goal 4: Benchmark customer service satisfaction

Strategy 4.1: Establish measurement methodology and baseline

4.1.1) Develop methodology in 2019
4.1.2) Establish baseline in 2019

Strategy 4.2: Create a customer-centric culture

4.2.1) Ensure that customer contact center reps are trained and deliver pleasant and effective customer experiences
4.2.2) Randomly monitor and listen to calls, live or recorded, each quarter
4.2.3) Monitor customer service statistics to ensure adherence to Service Level Agreements
4.2.4) Offer a post-transaction survey to customers

Strategy 4.3: Recognize GreenPrime customers’ added contribution to SVCE’s mission

4.3.1) Recognize customers participating in the GreenPrime program
4.3.2) Maintain third party validation and marketplace recognition

Goal 5: Work with the community to achieve energy and transportation GHG reductions of 30% from the 2015 baseline; by 2021, 40% by 2025, and 50% by 2030

Strategy 5.1: Utilize local GHG data and key ‘clean electric’ operating measures to guide SVCE program activities

5.1.1) Document 2015 baseline GHG inventory data related to energy and transportation for the SVCE service territory, by July 2018
5.1.2) Identify and document common Climate Action Plan (CAP) goals and measurement methods relevant to SVCE, and quantify penetration of related ‘clean electric’ infrastructure by July 2018
5.1.3) Establish and document an initial set of SVCE ‘clean electric’ operating metrics and targets, where related to an SVCE program by July 2018
5.1.4) Support local GHG accounting efforts and customer GHG accounting (e.g. Power Content Label, emissions intensity, recognized certifications, etc.)

**Strategy 5.2:** Establish an SVCE decarbonization program roadmap and related processes

5.2.1) Establish high-level evaluation criteria and weighting to assess relative program impact and value
5.2.2) Identify and document candidate programs that promote decarbonization via improved energy efficiency and/or fuel switching to clean electricity
5.2.3) Confirm top-ranked programs for detailed development and launch in 2019
5.2.4) Establish process and mechanisms for ongoing stakeholder input and review

**Strategy 5.3:** Develop and conduct SVCE programs that promote decarbonization via grid innovation and fuel switching to clean electricity

5.3.1) Support initial programs
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5.3.3) Engage industry partners (e.g. startups, corporations, academia) in designing innovative grid technology programs that provide value to customers and help enable further grid decarbonization.

**Strategy 5.4:** Establish SVCE customer resource center

5.4.1) Develop initial requirements for SVCE web based knowledge center to support customer awareness, education and action with respect to electrification and decarbonization
5.4.2) Develop pilot implementation

**Strategy 5.5:** Establish SVCE customer interval data analytics platform

5.5.1) Develop initial requirements for SVCE customer data to support future program activity, e.g. TOU incentives and targeted outreach
5.5.2) Develop pilot implementation
FINANCE AND FISCAL RESPONSIBILITY

A respected financial ranking requires disciplined fiscal strategies and financially sound policies. SVCE is committed to managing its financial resources responsibly and setting a standard of transparency and accountability, ensuring efficiency and strong stewardship of the agency’s financial resources. At SVCE, our commitment to fiscal and operational excellence will ensure that all processes and operations are clearly defined and efficiently designed to align people, systems, and policies to maximize productivity and improve efficiency. Adhering to these policies and actively examining and assessing risk will earn us a high credit rating and a healthy position in delivering customer value.

Goal 6: Achieve an investment grade credit rating by 2021

**Strategy 6.1:** Develop and maintain comprehensive policies for the governance of SVCE financials

- 6.1.1) Develop and report on SVCE dashboards that include key financial metrics
- 6.1.2) Develop an annual budget and update mid-fiscal year
- 6.1.3) Bi-Annually, develop 5-year financial forecasts to predict rate adjustments or financial risks
- 6.1.4) Frequently monitor discretionary expenses (non-power supply) to ensure that they remain within 5% of budget

**Strategy 6.2:** Establish a Cash Reserves Policy to hedge unexpected variation in power supply costs, provide capital during economic downturns and mitigate against rate increases

- 6.2.1) Update Cash Reserves Policy by July 2019
- 6.2.2) Establish retail rates a minimum of 1% below PG&E’s rates
  - Establish a range of 90 to 270 expense coverage days with a reserves target of 180 expense coverage days
- 6.2.3) Maintain a debt-to-equity ratio of 0.5 or less

Goal 7: Target rates at 1-3%, or more, below the surrounding investor owned utility

**Strategy 7.1:** Ensure ongoing price competitiveness

- 7.1.1) Annually, identify major shifts in key cost components and recommend an approach to minimize risks associated with those shifts
**REGULATORY & LEGISLATIVE**

The regulatory and legislative processes wield critical influence over SVCE’s ability to serve our customers and fulfill our core goals and mission. SVCE will actively engage with the regulatory and legislative communities in order to protect the interests of our customers, enhance our ability to mitigate greenhouse gas emissions, and help build a regulatory framework that supports innovation and customer choice in an equitable and cost-effective manner while preserving reliability and universal access.

**Goal 8: Engage regulators and legislators in developing policy that protects CCA rights and facilitates CCA contributions to decarbonization, grid reliability, affordability, and social equity.**

**Strategy 8.1:** Use strategic lobbying to foster a regulatory and legislative environment that supports SVCE’s existence and GHG mitigation efforts

8.1.1) Coordinate with CalCCA lobbyists to maximize legislators’ awareness of CCA issues
8.1.2) Leverage the voices of SVCE’s Board of Directors and other community leaders within SVCE’s territory by arranging for them to contact and meet with their legislators to discuss CCA issues
8.1.3) Ensure that climate and CCA stewardship are part of the conversation during local elections for municipal and state legislative positions

**Strategy 8.2:** Build the California Community Choice Association (CalCCA) into a stable, resilient institution and a respected political brand that can advocate for SVCE values statewide

8.2.1) Identify opportunities for CalCCA to grow or improve its operations, and help develop CalCCA’s institutional goals and vision.
8.2.2) Support CalCCA staff in facilitating and hosting CalCCA conference calls and meetings
8.2.3) Contribute to the development of protocols and procedures governing CalCCA’s activities
8.2.4) Contribute to orientation, mentoring, and knowledge transfer for new CalCCA members
8.2.5) Author comments, testimony, articles for the media, and other documents under the CalCCA name as needed until CalCCA staff can take over this function
8.2.6) Facilitate SVCE Board participation in CalCCA advocacy activities in order to maximize advocacy efficiency and effectiveness
**Strategy 8.3:** Develop relationships with community stakeholder organizations that foster support for SVCE and decarbonization

8.3.1) Attend or cohost relevant community meetings and events to engage individual community leaders and groups
8.3.2) Encourage members of local stakeholder organizations to assist in SVCE’s advocacy efforts by contacting policymakers

**Strategy 8.4:** Conduct research that quantifies CCA contributions to decarbonization and other core policy goals, and documents the benefits CCA members receive under CCA operation

8.4.1) Annually, use data collected during SVCE operations to provide quantitative evidence of the qualitative benefits of CCA membership (e.g. rate stability, carbon savings, community engagement, etc.)
8.4.2) Publish results in peer-reviewed journals or industry publications where they can be seen and shared
8.4.3) Share results with other CCAs and encourage them to do the same in order to identify best practices and opportunities for improvement

**POWER SUPPLY**

Navigating the world of power markets and state-mandated power mix requirements while fulfilling our commitment to sourcing 100% carbon free electricity requires a constant search for the right resources. SVCE is committed to providing carbon free electricity through a balanced approach and competitive acquisition, while supporting regionalization and expanding the California Independent System Operator (CAISO) to improve access to more carbon free resources.

**Goal 9:** Annually, acquire sufficient bundled energy and renewable type 1 resources (PCC1) to meet 100% of California’s Renewable Portfolio Standard (RPS) regardless of the allowance that the state makes for type 2 or type 3 renewables

**Strategy 9.1:** Stagger acquisitions to accommodate regulatory uncertainty, changes in load and supply price risks

9.1.1) For the upcoming calendar year, procure 100% of RPS through PCC1
9.1.2) Achieve 65% of RPS through power purchase agreements for terms no less than ten years starting in 2021

**Strategy 9.2:** Diversify the use of technologies to meet RPS needs
9.2.1) Assess the value of diversifying resource technology, location and terms as part of the selection process
9.2.2) Invest in storage capacity to meet California’s mandated energy storage requirement of 1% of SVCE’s 2020 peak load forecast by 2021

**Strategy 9.3:** Identify and pursue cost effective, local distributed energy resources to meet RPS needs

9.3.1) Assess technical, economic and market potential
9.3.2) Determine value of local distributed energy resources
9.3.3) Evaluate the use of feed-in-tariffs and/or other mechanisms to contribute towards local economic development.
9.3.4) Issue a distributed energy resource RFO for locally-sited renewable resources

**Goal 10:** Acquire sufficient resources to ensure that 100% of SVCE’s energy needs are from carbon free resources

**Strategy 10.1:** Strike a balance between large hydro and renewable resources when considering cost to meet 100% of SVCE’s load with carbon-free resources

**Strategy 10.2:** Promote regionalization to enhance the value of out-of-state renewable resources and speed the timeline for achieving carbon neutrality

- 10.2.1) Support the CAISO’s effort to establish a western-wide balancing authority and promote the development of renewable resources throughout the western interconnected grid
- 10.2.2) Conduct a study to compare the value of investing in-state versus out-of-state for renewable resources by March 2018

**Goal 11:** Manage power supply resources and risks to financial and rate objectives

**Strategy 11.1:** Optimize existing resources to increase value to SVCE customers and evaluate opportunities to minimize cost of procuring and scheduling electricity and related products

- 11.1.1) Assess core procurement, scheduling, settlements and reporting functions and determine best use of in-house versus outsourced resources
- 11.1.2) Consider joint procurement for electricity and related services with other CCAs through the formation of a joint power agency and/or other arrangements
- 11.1.3) Explore opportunities to partner/procure energy and related services with publicly owned utilities
**Strategy 11.2:** Manage market price, credit, load and supplier volume risk to meet rate and financial objectives

11.2.1) Implement an energy risk management program consistent with the Board-approved Energy Risk Management Policy
11.2.2) Develop internal models to measure, monitor and report portfolio and net revenue risks
11.2.3) Evaluate hedging strategy and use of hedging products

**INFORMATION TECHNOLOGY**

At SVCE, we take customer information, privacy, and security seriously. Our systems and processes follow best practices and industry standards. Performance metrics are in place to ensure resiliency and high system availability on standard and mobile platforms. Periodic upgrades to IT resources will ensure continued adherence to these high standards. This strategic plan provides the approach that SVCE is taking to address the challenges of delivering IT services in a dynamic environment with new regulations and continuous advancements in science and technology.

**Goal 12:** SVCE’s Information Technology infrastructure must be secure, reliable, and disaster resilient to provide 24/7/365 online access

**Strategy 12.1:** Deliver advanced capabilities to foster collaboration, knowledge management, and analytics

12.1.1) Enhance collaboration across departments through digital solutions to inform and engage internal and external audiences
12.1.2) Ensure the availability of and access to information that enables departments to make timely, informed decisions by strengthening data and knowledge management approaches
12.1.3) Implement quality management processes to baseline, and begin routine reporting on the performance of projects, key metrics
12.1.4) Develop metrics and communicate to management via a monthly Information Technology report to gauge the overall performance of the system

**Strategy 12.2:** Provide a robust and secure IT infrastructure that supports on-demand access to information

12.2.1) Deploy a modernized IT infrastructure that enables seamless access to information resources
12.2.2) Protect the integrity of the department’s information and IT assets by strengthening our cybersecurity posture
12.2.3) (Cloud Computing) Drive centralized and streamlined cloud adoption to meet the business needs of the department

12.2.4) SVCE will administer an internal security audit of the system on a monthly basis. SVCE will conduct an annual audit with an independent third party to determine the security of the system and correct any findings and consider implementing recommendations

12.2.5) Provide 24/7/365 continuous support, 100% system reliability and 0% data breaches by third parties

**Strategy 12.3:** Advance business management practices to transform service delivery

12.3.1) (IT Policy and Governance) Establish and employ streamlined policy and governance processes that align IT solutions with customer expectations and mission requirements

12.3.2) (IT Human Capital Management) Build, develop, and retain a talented, diverse IT workforce

12.3.3) (IT Business Systems) Ensure efficient and effective performance of core business functions and enterprise services

**Strategy 12.4:** Improve mandates & IT audit compliance

12.4.1) Develop a strategy that includes a disaster recovery solution that provides business continuity for critical applications and vital records

12.4.2) SVCE will conduct an annual audit with an independent third party to determine the security of the system and correct any findings and consider implementing recommendations

**Strategy 12.5:** Improve asset management

12.5.1) Leverage enterprise architecture and asset management tools to collect a complete inventory of assets and applications to enhance asset management

12.5.2) Evaluate available industry standard IT service frameworks and develop and implement a strategy in support of managing, maintaining, and applying IT governance over applications and technologies

**Strategy 12.6:** Reduce redundancy and promote consolidation

12.6.1) Streamline the procurement portfolio by performing strategic sourcing and category management.

12.6.2) Leverage enterprise architecture (EA) and business capability model to reduce infrastructure footprint

12.6.3) Perform application rationalization to identify unused, redundant and out of date applications, and trim down the portfolio through application modernization and decommissioning
**Strategy 12.7: Enhance cybersecurity compliance and operations**

12.7.1) Enhance and strengthen the Cybersecurity program to conduct highly effective incident response, insider threat detection, operational situational awareness, compliance, and to decrease the overall security risks to sensitive information and IT infrastructure

12.7.2) Implement data loss prevention, multi-factor authentication, security incident/event management tools, and encryption at rest

12.7.3) Implement continuous diagnostics and mitigation capabilities to identify cybersecurity risks on an ongoing basis and prioritize these risks based upon potential impacts
Decarbonization Strategy & Programs Roadmap
Draft Proposal - Not Yet Adopted

Goals
Reduce greenhouse gas emissions from 2015 baseline levels by 30% by 2021, 40% by 2025 and 50% by 2030.

Strategic Framework
In addition to the overarching greenhouse gas emissions reduction goals and decarb strategies, the following, three-part strategic framework was developed through the stakeholder engagement process and used to guide development of Decarb Strategy and Programs Roadmap.

What will we do?

- **Retail Products & Services**: Develop and support innovative new products and services to meet customer needs and decarbonize
- **Education & Outreach**: Increase public awareness and education on electrification and actions to reduce emissions
- **Public Policy**: Expand state and local policy activity on decarbonization, while strengthening local and regional agency coordination
- **Market Transformation**: Catalyze market transformation through coalitions and partnerships with actors in industry and the innovation ecosystem

How will we leverage?

- **Innovation**: Harness innovation to continuously improve service to our customers and community, and to accelerate “bending the carbon curve”
- **Data**: Unlock the tremendous value of utility and other data to guide development, implementation, measurement and evaluation of all program activities
- **Partnerships**: Form and leverage partnerships to support activities addressing our decarbonization mission
Which priorities will guide us?

- **Customer & Community Value**: Deliver value to our customers and larger community through program offerings and ongoing initiatives
- **Emissions Impact**: Prioritize activities with greatest emissions reduction potential to achieve alignment with our mission
- **Scalable and Transferable**: Pursue solutions that can be expanded and adapted by others, to ensure impact both within and beyond our borders
- **Equity in Service**: Balance activities to reflect the diversity of our customer base and geography
- **Core Role for SVCE**: Recognize activities where we can and must play a key role given our unique position of community-owned electricity provider

**Decarbonization Strategy**

SVCE is guided by the following overarching strategy to achieve deep decarbonization.

- Procure & maintain a sustainable, affordable and carbon-free power supply
- Electrify the built environment and mobility
- Promote energy efficiency & successful grid integration
SVCE will pursue the following specific strategies, organized by sector or cross-sector initiatives.

1. Achieve a sustainable, affordable and carbon-free power supply. (*Power Supply*)
   a. Seek Board input for an updated, comprehensive integrated resource plan evaluating key policy options (RPS level versus carbon-free resources, types of RPS resources, diversification of resources, location and price structures, hourly matching of load to carbon-free resources, amount of supply in long-term contracts, local renewables carve-out, distributed energy resources, etc.) and considering all trade-offs.
   b. Research the availability and costs of supply resources sited within SVCE service territory to inform prospective policies and procurement.

2. Align our clean power pricing with economic and environmental costs to encourage smart investments that support decarbonization and the grid. (*Power Supply*)
   a. Develop new retail rate products (e.g. terms-based, dedicated supply, load-following renewable supply option) for large commercial and industrial customers to be responsive to their unique needs and encourage customer retention.
   b. Carry out a retail rates assessment and develop and execute an implementation plan to address barriers and opportunities in rate design to facilitate electrification and guide smart infrastructure investments. Incorporate the statewide move to default time-of-use rates for residential customers in 2020.
   c. Evaluate and revise policies, price signals and rates for distributed generation – specifically the net energy metering successor program – to ensure consistency with SVCE decarbonization strategy and other organizational objectives.

3. Accelerate high-efficiency, all-electric new construction and retrofits. (*Built Environment*)
   a. Assess current building stock, appliance technologies, adoption rate of all-electric new construction, and other market trends/barriers to inform all building electrification activities.
   b. Promote education and awareness to encourage adoption of efficient electric technologies as replacements for natural gas appliances in retrofit and new construction.
   c. Provide support to member agencies in their consideration of all-electric building codes.
   d. Expand state policy activity to accelerate statewide baseline building codes toward all-electric, to mitigate barriers for local agencies exercising leadership, and to align other state policies and regulations (e.g. CPUC’s “three-prong test”) with California’s ambitious climate goals.
   e. Develop a program to provide incentives and/or technical and design support for new construction, all-electric showcase projects in the community, including potential decarbonized district energy approaches such as Stanford’s energy system design.
   f. Design and launch a program to provide incentives to fuel-switch from natural gas to heat pump water heaters using the BAAQMD grant and SVCE match funds.
   g. Facilitate coordination across member agencies to share best practices, policies, processes, and programs supporting all-electric buildings & promote advancements to the community, developers, and other practitioners operating in the service territory.
h. Pursue actions with member agencies to decarbonize their own municipal buildings.

i. Consider opportunities to support schools, community colleges and other educational institutions in their efforts to decarbonize their facilities.

j. Support workforce development and allied suppliers and providers necessary for the massive fuel switching required for decarbonization, for both retrofit and new construction.

4. Accelerate the electrification and transformation of mobility in our community to reduce emissions and provide other benefits such as reduced congestion. (Mobility)
   a. Work with member agencies and all other relevant stakeholders to develop and implement a strategy and plan for community-wide build-out of EV charging infrastructure; including plan to jointly pursue/leverage external funding opportunities (e.g. BAAQMD, California Energy Commission, PG&E).
   b. Develop one or more EV fast charging pilots (e.g. to support EV use in transportation network company operations, to pilot real-time pricing structures, to address “last mile” solutions, and to accelerate adoption of electric autonomous vehicles)
   c. Study barriers and pursue activities to support EV use by low-income customers.
   d. Study barriers and pursue activities to support EV use for customers living in multi-unit dwellings.
   e. Provide support to member agencies and C&I customers in electrifying their vehicle fleets and pursuing other decarbonized mobility solutions (e.g. autonomous electric shuttles as a “last mile” solution, e-bikes, e-scooters).
   f. Participate in relevant regional, state and national advocacy groups and coalitions to accelerate transportation electrification.

5. Educate the community on the benefits of conservation and energy efficiency. (Energy Efficiency & Grid Integration)
   a. Promote energy efficiency programs already available to SVCE customers through PG&E and third-party providers.

6. Promote successful grid integration of existing and newly electrified loads to support high penetration renewables integration. (Energy Efficiency & Grid Integration)
   a. Include recommendations and/or requirements for connectivity and control in all SVCE programs that result in newly electrified loads.
   b. 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 and manage the anticipated load growth resulting from electrification.
   c. Explore opportunities to partner with PG&E and other third parties on activities that leverage DERs to provide additional customer and distribution system value.

7. Educate and engage customers and our community in understanding their overall energy usage, opportunities associated with building and vehicle electrification, and specific actions they can take. (Cross-Sector - Education & Outreach)
a. Develop and launch an SVCE-branded customer resource center to enable engagement and awareness-building, education and action related to vehicle and building electrification.

b. Partner with local organizations in under-represented customer segments to promote SVCE accomplishments and programs.

c. Develop engaging content for the customer resource center, social media and other channels to broaden interest in energy and electrification.

8. Accelerate innovation needed to achieve SVCE’s decarbonization mission. (Cross-Sector - Innovation)

   a. Identify key strategic partners and enter into MOUs and other types of partnership agreements to efficiently and effectively engage the innovation ecosystem.

   b. Develop a program with standardized agreements, evaluation criteria, and processes to allow SVCE to rapidly and nimbly identify and pursue promising pilot opportunities with external partners.

   c. Engage with universities, national labs, and other research institutions to support relevant academic research.

   d. Evaluate and implement (or replicate) programs leveraging advancements in fintech and innovative business models (e.g. “as a service”, potential leverage of SVCE capital) that remove barriers to accessing needed capital, particularly in low-income and disadvantaged communities.

   e. Pursue novel mechanisms to spur innovation, such as aggregating market demand across the service territory and beyond to reduce costs, influence product development and shape the supply chain. (e.g. “golden carrot”)

   f. Establish an open data portal to provide transparency where appropriate to improve the ability for market actors to support SVCE’s missions and spur private sector innovation.

   g. Pursue external funding opportunities (e.g. DOE, CEC, BAAQMD) with partners.

9. Leverage data-driven, strategic analyses to inform programs and cross-functional activities. (Cross-Sector – Other)

   a. Establish a viable data analytics platform that integrates disparate data sets (customer usage, weather, wholesale market prices, etc.) and enables efficient, high-impact analysis.

   b. Assess technical, economic and market potential of distributed energy resources and electrification across the service territory to inform program development, load forecasting, long-term planning, and rate design.

   c. Carry out a customer segmentation analysis to better understand the diversity and relevant characteristics of the SVCE customer base to inform targeted program activities.

10. Measure and monitor progress toward meeting SVCE’s decarbonization goals. (Cross-Sector – Other)
a. Carry out an annual GHG emissions and clean energy asset baseline assessment and update the GHG forecasting and scenario analysis.

b. Evaluate developing sector-specific objectives or targets (e.g. “25% of new construction all-electric by 2020).”

c. Evaluate how methane leakage should be reflected in SVCE’s emissions accounting and decarbonization policies, and propose revised policies, as needed.

**Programs Roadmap**

The following programs comprise the programs roadmap, organized by sector and cross-sector initiatives. Initiatives shown in **bold** are prioritized in the first tranche of programs for detailed development and launch in 2019.

**Power Supply (PS)**

- **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
- **PS2.** Retail Rates Assessment: Carry out comprehensive assessment of retail rates to develop multi-phase plan for improvements and developments of pilot rates
- **PS3.** Integrated Resource Plan: Develop comprehensive strategy for supply portfolio (e.g. %RPS, short- vs. long-term contracts, local resource carve-out, etc.)
- **PS4.** Local Renewables: Research the availability and price for local resources, and evaluate costs/benefits of procurement

**Built Environment (BE)**

- **BE1.** Reach Codes: Hire technical consultant to support SVCE and PCE member agencies in the development, review, adoption and implementation of reach codes supporting building electrification and EV charging infrastructure
- **BE2.** All-Electric Showcase Grants: Incentivize near-term development of showcase all-electric commercial and residential building projects, including potential decarbonized district energy
- **BE3.** FutureFit Heat Pump Water Heater: Provide rebates to fuel-switch natural gas water heaters to heat pump electric water heaters (BAAQMD grant)
- **BE4.** Streamlining Community-Wide Electrification: Survey and review local city policies (codes, permitting, inspection, incentives, etc.) and develop model policies/processes

**Mobility (MO)**

- **MO1.** EV Charging Infrastructure Strategy and Plan: Develop directional strategy(ies), priorities, and action plan with SVCE member communities to guide ongoing build-out of EVSE infrastructure
MO2. EV Fast Charging Pilot Depots: Build pilot high-volume DC Fast Charge facilities to support commercial/public transit fleets, TNC drivers, MUD and DAC residents

MO3. EV Incentives for Low Income: Provide rebates for used EVs for low-income qualified customers in collaboration with Peninsula Clean Energy

MO4. EV Charging for Multi-Unit Dwellings: Provide flexible grant offerings to address market gaps with multi-unit dwelling and small and medium business workplace charging

MO5. Fleet Electrification: Support member cities and commercial customers in evaluating options to electrify their vehicle fleets

Energy Efficiency & Grid Integration (GI)

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

GI2. Non-SVCE Programs: Promote existing, non-SVCE led energy programs through the Customer Resource Center and other channels.

Education & Outreach (EO)

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

EO2. Community Engagement Grants: Partner with local organizations in under-reached customer segments to promote SVCE accomplishments and programs

Innovation (IN)

IN1. Innovation Partners: Engage with key strategic partners to participate in the local innovation ecosystem to prototype novel program ideas and provide a voice for SVCE customers and the decarbonization mission

IN2. Innovation Onramp: Provide small grants to support innovation through pilot projects with external partners

Reporting & Review

Updates on Roadmap implementation will be provided on an approximately quarterly basis, coinciding with existing review processes, including the budget cycle and annual strategic plan update.

The Roadmap will be brought forward to stakeholder groups, the Executive Committee, and the Board for a comprehensive review and update on an annual basis, starting in January 2020.
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

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<tr>
<th>Sector(s)</th>
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<tr>
<td>Power Supply</td>
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<td>Retail Products &amp; Services</td>
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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)
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 including 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
- Q3-Q4 FY2019 Deliver Reach Code(s) for CEC approval

Program Sector & Activity Type

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<td>Mobility</td>
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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**

- **Customer & Community Value**: All-electric buildings and transportation electrification provide a lower cost, simpler, healthier, and safer alternative to their fossil fuel counterparts.

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

- **Scalable and Transferable**: 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.

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

- **Core Role for SVCE**: Aligns well with SVCE’s role as a facilitator of improvements within and between our member agencies.
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
- $1,000,000 in FY2019; $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

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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

<table>
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<tr>
<th>Criteria</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Customer &amp; Community Value</strong></td>
<td>Cost and operational savings, health and safety improvements of all-electric designs benefit the designers, owners, operators and residents of all-electric buildings. Varies per building type.</td>
</tr>
<tr>
<td><strong>Emissions Impact</strong></td>
<td>The promotion of all-electric design guidelines is durable within our community beyond initiative timeline and usable outside our service area.</td>
</tr>
<tr>
<td><strong>Scalable and Transferable</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Equity in Service</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Core Role for SVCE</strong></td>
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SVCE Program Brief – Heat Pump Water Heaters (BE2)
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 non-economic 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
  - 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 = $150,000 in FY2019
- SVCE = $175,000 in FY2020
- 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

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Leverage
- BAAQMD (Air District) funding. Discussing partnerships with providers of energy efficiency within 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

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

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

- **Scalable and Transferable**: 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.

- **Equity in Service**: 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.

- **Core Role for SVCE**: 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 – EV Infrastructure Strategy and Plan (EV1)
November 30, 2018

Summary
Aggregate and integrate existing EVSE planning resources relevant to SVCE service area; 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.

Key Challenges
- No clear strategy or plan across SVCE service area for community-wide build-out of EV charging infrastructure; including commercial and residential requirements, 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.

Program Approach
General
- Work with Member Agency Working Group and other key stakeholders to develop scope of work for focused strategy and planning effort; develop RFP and contract for consultant support; identify EVSE needs, status and priorities across SVCE service territory spanning single-family residential, MUD, commercial, workplace, fleets and corridor; identify associated development opportunities - including education, local policy, incentives and deployment programs, locational requirements, external funding sources and associated process/timelines for application; 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
- TBD.

Program Evaluation, Measurement & Verification Plan
- TBD.

Third-Party Support
- TBD.

Resources
- $200,000 in FY2019.
Staff Support
- 1 FTE for 6 months

Timeline
- Q2/Q3 FY2019 Strategy and Plan

Program Sector & Activity Type

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Leverage

- Coordinated approach spanning member agencies; seek to obtain and leverage available external funding

- 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 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 – EV Fast Charge Depot Pilots (EV2)
November 30, 2018

Summary
Develop pilot program to deploy high-volume Direct Current Fast Charging (DCFC) depots to support unique requirements associated with electrification of local transit fleets and 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 DC Fast Charging facilities
- DC Fast Chargers are expensive and difficult to site, often requiring expanded electric service capacity, driver amenities, etc.
- Deployment of EV charging in multi-unit developments is often complex, expensive and time-consuming; current access to EV charging in MUD is very limited, making it difficult for MUD residents to own an electric vehicle
- Very limited number of DCFC facilities in place; in general they are over-subscribed, and not capable of supporting high-volume fleet needs

Goals
- Build 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), 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
- $600,000 FY 2020

Staff Support

- 1 FTE

Timeline

- Q4 2019 Pilot Planning/Grant Development
- Q1–Q4 2020 Ongoing Pilot Development and Launch

Program Sector & Activity Type

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Leverage

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

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

- **Data**
  - 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 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 – Innovation Partners (IN1)
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. 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.

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.

Target Participants
- N/A

Participation Criteria
- N/A

Program Evaluation, Measurement & Verification Plan
- MOUs 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 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

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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.

**Customer & Community Value**

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

**Emissions Impact**

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

**Scalable and Transferable**

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

**Equity in Service**

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)
November 17, 2018

Summary
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
- 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, for instance, anticipated staff resource impact, overlap in existing/planned program activities, and potential to inform future program activities upon successful completion of the pilot.

Program Evaluation, Measurement & Verification Plan
- 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.

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 – Launch program.
- Q3 FY2019-Q4 FY2021 – 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

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Leverage

- **Partnerships**
  - Primary goal is identifying and engaging with external partners to efficiently engage and influence the innovation ecosystem

- **Innovation**
  - (same as above) Primary goal is identifying and engaging with external partners to efficiently engage and influence the innovation ecosystem

- **Data**
  - 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.

- **Customer & Community Value**: Member agencies and customers are prospective participants, and receive direct and indirect value from the program.

- **Emissions Impact**: Achieving deep decarbonization requires significant incremental innovation, which is the focus of this program.

- **Scalable and Transferable**: Proposed program could be scaled to the broader CCA community and beyond.

- **Equity in Service**: Creating an open solicitation for innovation pilots will attract applicants serving all parts of the customer base.

- **Core Role for SVCE**: 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.
SVCE Program Brief – Virtual Power Plant (GI1)
November 30, 2018

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.

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
- Monetize the value DERs can provide
- Promote additional DER deployment, specifically 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)\(^1\). 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.

Target Participants
- TBD

Participation Criteria
- TBD

Program Evaluation, Measurement & Verification Plan
- TBD

Third-Party Support

\(^1\) See for instance PG&E’s website for their 2019 DRAM: https://www.pge.com/DRAM/
- 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, research, RFI
- Q3-Q4 FY2019: RFP
- Q1 FY2020: Third-party partners identified; remaining program design complete
- Q2 FY2020: Delivery

**Program Sector & Activity Type**

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**Leverage**

- **Partnerships**: Supports formation of partnerships with key vendors; may be carried out in collaboration with other CCAs and municipal utilities
- **Innovation**: Innovative, emerging concept critical for achieving a high penetration renewables grid
- **Data**: Relies on VPP providers’ sophisticated data analytics to create a cloud-based, 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 compensated on a performance basis

SVCE has obligation to procure capacity and therefore option to support capacity specifically from VPPs
SVCE Program Brief - Customer Resource Center (EO1)
November 17, 2018

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

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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 (E02)
December 3, 2018

**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

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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**

- **Customer & Community Value**: Helps expand awareness and enable customer action by providing useful information on the benefits of key products and services offered by SVCE.

- **Emissions Impact**: Customer awareness and education identified as critical first steps for acting on electrification and decarbonization.

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

- **Equity in Service**: All customers will have access to SVCE offerings in their preferred communication methods and language.

- **Core Role for SVCE**: 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.
REIMBURSEMENT AGREEMENT BETWEEN
THE SILICON VALLEY CLEAN ENERGY AUTHORITY
AND THE PENINSULA CLEAN ENERGY AUTHORITY
FOR PROFESSIONAL SERVICES COST REIMBURSEMENT

This REIMBURSEMENT AGREEMENT ("Agreement") is made and entered into on December ___, 2018, by and between the Silicon Valley Clean Energy Authority ("SVCE") and the Peninsula Clean Energy Authority ("PCE") for the reimbursement of costs incurred by PCE in connection with the performance of professional services for the development, review, adoption and implementation of reach ordinances as more fully described below. SVCE and PCE are individually referred to herein as “Party” and collectively referred to as “the Parties.”

RECITALS

A. SVCE and PCE are joint powers authorities organized for the purpose of conducting community choice aggregation programs and other energy-related climate change programs.

B. Staff at SVCE and PCE have worked together to develop a scope of work for consultant services to be obtained from a Request for Proposals process that will be administered by PCE. The scope of services provides for the selected qualified consultant to research and prepare model reach codes related to building electrification and electric vehicle ("EV") infrastructure and to work with SVCE and PCE and their member agencies in the adoption of such codes by the member agencies. A more detailed description of the consultant’s scope of services is set forth in the “2018 Request for Proposals for Building and EV Reach Code Consultant” attached hereto as Exhibit A and hereinafter referred to as the “Reach Codes RFP.”

C. SVCE and PCE have agreed to share the costs of the selected Building and EV Reach Code consultant whose services will benefit both Parties as provided in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, SVCE and PCE mutually agree to the following:

1. **Recitals.** The Recitals stated above are true and correct and are incorporated by this reference into this Agreement.

2. **Responsibilities of PCE.** PCE shall be responsible for the following:
   a. PCE shall issue and administer the Reach Codes RFP.
   b. PCE shall jointly select with SVCE the consultant to perform the scope of services described in the Reach Codes RFP.
c. PCE shall enter into a written professional services contract (“Contract”) with the consultant jointly selected by SVCE and PCE upon the completion of the Reach Codes RFP process. The terms of the Contract shall be mutually agreed upon by SVCE and PCE.

d. PCE shall make timely payments to the selected consultant under the terms of the Contract and administer and manage the Contract.

e. PCE shall directly supervise the professional services provided by the selected consultant for the EV reach code work and for any services provided by the consultant that exclusively benefit PCE or its member agencies.

f. PCE shall work cooperatively with SVCE in the development, review, adoption, and implementation of the model reach codes provided by the selected consultant pursuant to the Contract.

3. Responsibilities of SVCE. SVCE shall be responsible for the following:

a. SVCE shall assist PCE in reviewing and evaluating the proposals received by PCE in response to the Reach Code RFP.

b. SVCE shall jointly select with PCE the consultant to perform the scope of services described in the Reach Codes RFP.

c. SVCE shall reimburse PCE for 50% of the payments made by PCE to the selected consultant pursuant to the Contract for services benefiting both Parties. SVCE shall reimburse PCE for 100% of the payments made by PCE to the selected consultant pursuant to the Contract for services exclusively benefiting SVCE or its member agencies. Prior to the execution of the Contract, SVCE and PCE shall prepare a written list of the selected consultant’s services that benefit both Parties and the services that exclusively benefit one Party or the other. All amounts owed by SVCE to PCE shall be paid within 30 days after SVCE receives the selected consultant’s detailed invoice paid by PCE.

d. SVCE shall directly supervise the professional services provided by the selected consultant for the building electrification reach code work and for any services provided by the consultant that exclusively benefit SVCE or its member agencies.

e. SVCE shall work cooperatively with PCE in the development, review, adoption and implementation of the model reach codes provided by the selected consultant pursuant to the Contract.

4. Term and Termination. The term of this Agreement shall commence on the date first written above and terminate on the date that SVCE makes its final payment under the provisions of
this Agreement. Either party may terminate this Agreement without cause upon 30 days written notice. Either Party also may terminate this Agreement by written notice of a default by the other Party ("Defaulting Party") of a material term of this Agreement, provided that the terminating Party has given written notice of default to the Defaulting Party and has given the Defaulting Party a reasonable period of time to cure the default, which in no case shall be less than 15 days. Upon termination of this Agreement, SVCE shall reimburse PCE for any unpaid consultant fees incurred prior to the date of termination that PCE is obligated to pay under the Contract.

5. **Hold Harmless and Indemnification.** The indemnification obligations of the Parties shall be as follows:

   a. PCE shall defend, hold harmless and indemnify SVCE, and its directors, officers, agents and employees from any and all claims for injuries or damage to persons and/or property which arise out of the terms and conditions of this Agreement and which result from the negligent acts or omissions or other wrongful conduct of PCE, its directors, officers, agents and/or employees.

   b. SVCE shall defend, save harmless, and indemnify the PCE, and its directors, officers, agents and employees from any and all claims for injuries or damage to persons and/or property which arise out of the terms and conditions of this Agreement and which result from the negligent acts or omissions or other wrongful conduct of SVCE, its directors, officers, agents and/or employees.

   c. In the event of concurrent negligence of PCE, its directors, officers, agents and/or employees, and SVCE, its directors, officers, agents and/or employees, then the liability for any and all claims for injuries or damage to persons and/or property which arise out of terms and conditions of this Agreement shall be apportioned according to the California theory of comparative negligence.

   d. This provision shall survive expiration or termination of this Agreement.

6. **Amendment and Waiver.** No change or modification of this Agreement shall be valid unless the same is in writing and signed by both Parties, and no verbal understanding or agreement not incorporated herein shall be binding on either Party hereto.

7. **Governing Law.** This Agreement shall be construed and governed by the laws of the State of California, and any suit or action initiated by either Party shall be brought in the Superior Court for the County of San Mateo, California, or the United States District Court for the Northern District of California.

8. **Time of Essence.** Time is of the essence for every provision hereof in which time is a factor.

9. **Benefit of Parties.** The terms of this Agreement shall be binding and inure to the benefit of the Parties hereto and their successors and assigns. Neither Party shall assign this Agreement or any portion thereof to a third party without the prior written consent of the other Party.
Any such assignment without prior written consent by one Party shall give the other Party the right to automatically and immediately terminate this Agreement without penalty or advance notice.

10. **Entire Agreement of the Parties.** This Agreement supersedes any and all agreements, either oral or written, between the Parties with respect to the subject matter of this Agreement and contains all of the representations, covenants, and agreements between the Parties with respect to the subject matter of this Agreement. Each Party to this Agreement acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made by any Party, or anyone acting on behalf of any Party, which are not contained in this Agreement.

11. **Independent Counsel.** Each Party has had the opportunity to consult with its own attorney with respect to this Agreement, and in the event that any language contained herein is construed to be vague or ambiguous, this Agreement shall not be strictly construed against any Party.

12. **Notice.** Notice given under or regarding this Agreement shall be deemed given upon delivery into the United States Mail if delivery is by postage paid certified mail (return receipt requested), or reputable overnight commercial delivery service. Notice shall be sent to the respective Party at the address indicated below or to any other address as a Party may designate from time to time by a notice given in accordance with this paragraph.

If to SVCE:  
Aimee Bailey, PhD  
Director of Decarbonization & Grid Innovation  
Silicon Valley Clean Energy  
333 W. El Camino Road #290  
Sunnyvale, California 94087

If to PCE:  
Rafael Reyes  
Director of Energy Programs  
Peninsula Clean Energy  
2075 Woodside Road  
Redwood City, California 94061

13. **Invalid Provision.** The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision were omitted.

14. **Headings and Captions.** The headings and captions used in this Agreement are for convenience only and shall in no way define, limit, or describe the scope or intent of the Agreement or any part thereof.

15. **Counterparts.** This Agreement may be executed in counterpart originals, each of which is deemed to be an original for all purposes.

IN WITNESS WHEREOF, the Parties have executed this Agreement below on the date first written above.
Silicon Valley Clean Energy Authority

By: ____________________________

Peninsula Clean Energy Authority

By: ____________________________
EXHIBIT A

2018 Request for Proposals for Building and EV Reach Code Consultant
2018 Request for Proposals for Building and EV Reach Code Consultant

Peninsula Clean Energy is San Mateo County’s locally-controlled electricity provider. We are reducing greenhouse gas emissions and offering customer choice at competitive rates.

Offers due Thursday, January 3rd at 5:00 pm Pacific Time

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2 RFP Overview

Peninsula Clean Energy (PCE) programs include advancing the adoption of electric vehicles and transitioning building fossil fuel uses to low-carbon electricity. With this request for proposals (RFP), PCE requests information about the experience and qualifications your company may have relating to the development of model building “reach” codes to address electric vehicle infrastructure and building electrification needs as described in this RFP scope of work.

This RFP is being executed in collaboration with Silicon Valley Clean Energy (SVCE) as a prospective joint project. SVCE’s participation is subject to SVCE Board of Directors’ review and approval.

This RFP
• Provides general background on PCE
• Describes the service sought by PCE (scope of work)
• Provides an opportunity for Proposers to describe their qualifications and assets, and to explain how they could contribute to the program

By participating in PCE’s RFP process, a Proposer acknowledges that it has read, understands, and agrees to the terms and conditions set forth in these RFP Instructions. PCE reserves the right to reject any offer that does not comply with the requirements identified herein. Furthermore, PCE may, in its sole discretion and without notice, modify, suspend, or terminate the RFP without liability to any organization or individual. The RFP does not constitute an offer to buy or create an obligation for PCE to enter into an agreement with any party, and PCE shall not be bound by the terms of any offer until PCE has entered into a fully executed agreement.

3 Peninsula Clean Energy Overview

Peninsula Clean Energy (PCE), a community choice energy (CCE) program, is San Mateo County’s official electricity provider. PCE is a joint powers agency, formed in February, 2016, consisting of the County of San Mateo and all twenty of its cities. PCE provides cleaner and greener electricity, and at lower rates, than the incumbent investor-owned utility (IOU), Pacific Gas & Electric Company (PG&E). PCE plans for and secures commitments from a diverse portfolio of energy-generating resources to reliably serve the electric energy requirements of its customers over the near-, mid-, and long-term planning horizons. For more information on PCE, please go to www.peninsulacleanenergy.com.

PCE’s Strategic Goals:

1 SVCE staff anticipates taking the request to their Board at the meeting on December 12, 2018.
1. Design a diverse power portfolio that is greenhouse gas free.
   a. 100% GHG free by 2021
   b. sourced by 100% CA RPS eligible renewable energy by 2025
   c. create a minimum of 20 MWs of new local power by 2025
2. Continually strive to offer ECOPlus at rates that are at parity or lower than PG&E rates.
3. Stimulate development of new renewable energy projects and clean-tech innovation in San Mateo County and California through PCE’s procurement activities.
4. Demonstrate quantifiable economic benefits to the County/region and place a priority on local hiring and workforce development practices and environmental justice.
5. Implement programs to further reduce greenhouse gas emissions by investing in programs such as local clean power production, electric vehicles, energy efficiency, and demand response, and partnering effectively with local business, schools, and nonprofit organizations.
6. Maximize and maintain customer participation in PCE.
7. Provide a superior customer experience
8. Build a financially sustainable organization.
9. Foster a work environment that espouses sustainable business practices and cultivates a culture of innovation, diversity, transparency, integrity, and commitment to the organization’s mission and the communities it serves.

4 RFP Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, November 26, 2018</td>
<td>PCE launches RFP: publishes RFP Instructions.</td>
</tr>
<tr>
<td>Friday, December 7, 2018</td>
<td>Deadline for Proposers to submit questions (see below)</td>
</tr>
<tr>
<td>Friday, December 14, 2018</td>
<td>PCE provides responses to questions on PCE’s website.</td>
</tr>
<tr>
<td>Thursday, January 3, 2019, 5:00 pm PT</td>
<td>Deadline for Proposers to submit proposals</td>
</tr>
<tr>
<td>Thursday, January 10, 2019 and Friday, January 11, 2019</td>
<td>Possible in-person interviews of top proposers</td>
</tr>
<tr>
<td>Wednesday, January 16, 2019, 5:00 pm PT</td>
<td>Anticipated date PCE will notify awardee</td>
</tr>
<tr>
<td>Thursday, January 24, 2019</td>
<td>Anticipated date for Board execution of contract</td>
</tr>
</tbody>
</table>

Questions:

- **Question & Answer:** Proposers may submit questions concerning the RFP at programs@peninsulacleanenergy.com. All questions and answers will be shared with all Proposers and will be posted on PCE’s website.
• **Proposal Review:** PCE may request clarifications by email or phone January 3, 2019, through January 7, 2019. Prompt responses will be requested.

• **Proposer Interviews:** PCE may conduct in-person interviews of the top proposers on January 10 and January 11, 2019.

5 **Proposal Submittal**

Proposals must be received on or before the above deadline and submittal must be by email to programs@peninsulacleanenergy.com with the subject “Proposal - <Organization> - Reach Codes Consultant”.

Only electronic submittals will be accepted.

Proposals must include:

1. Organization qualifications (4 pg. max)
2. Considerations and approach for development of model codes (4 pg. max)
3. Stakeholder engagement process (3 pg. max)
4. Schedule (table or chart, 1 pg. max)
5. Cost proposal (2 pg. max, include rate schedule)
6. Confirmation of acceptance of contract terms or explanation of proposed contract modifications (see Agreement Terms)
7. Project staff credentials (no limit)

6 **Review and Selection Process**

PCE staff will evaluate the proposals provided based on the following criteria:

1. Completeness of Proposal
2. Qualifications of the firm and staff
3. Proposed approach to implement project
4. Past experience
5. Cost structure
6. Exceptions to PCE’s contract template

7 **Agreement Terms**

Awardees will be required to enter into a contract using PCE’s standard contract terms. Modification of the contract terms may be proposed by the Proposer for consideration by PCE but are not guaranteed to be accepted. Rejection of the final terms from PCE is grounds for disqualification.

PCE’s standard contract terms are available for review here:
8 Inclusion of Non-Participating Agencies

PCE is asking all responding vendors to indicate their willingness to extend the terms of resulting contracts, inclusive of price, to other interested California-based municipalities, municipally-owned utilities and community choice energy programs. While this clause in no way commits these agencies to contract with PCE’s awarded consultant, nor does it guarantee any additional orders will result, it does allow other agencies, at their discretion, to make use of PCE’s competitive process (provided said process satisfies their own procurement guidelines) and purchase directly from the awarded contractor. All purchases made by other agencies shall be understood to be transactions between that agency and the awarded vendor; PCE shall not be responsible for any such purchases.

9 PCE Legal Obligations

PCE is not obligated to respond to any offer submitted as part of the RFP. All parties acknowledge that PCE is a public agency subject to the requirements of the California Public Records Act, Cal. Gov. Code section 6250 et seq. PCE acknowledges that another party may submit information to PCE that the other party considers confidential, proprietary, or trade secret information pursuant the Uniform Trade Secrets Act (Cal. Civ. Code section 3426 et seq.), or otherwise protected from disclosure pursuant to an exemption to the California Public Records Act (Government Code sections 6254 and 6255) (“Confidential Information”). Any such other party acknowledges that PCE may submit to the other party Confidential Information. Upon request or demand of any third person or entity not a party to this RFP (“Requestor”) for production, inspection and/or copying of information designated as Confidential Information by a party disclosing such information (“Disclosing Party”), the party receiving such information (“Receiving Party”), as soon as practical but within three (3) business days of receipt of the request, shall notify the Disclosing Party that such request has been made, by telephone call, letter sent via email and/or by US Mail to the address or email address listed on the cover page of the RFP. The Disclosing Party shall be solely responsible for taking whatever legal steps are necessary to protect information deemed by it to be Confidential Information and to prevent release of information to the Requestor by the Receiving Party. If the Disclosing Party takes no such action, after receiving the foregoing notice from the Receiving Party, the Receiving Party shall be permitted to comply with the Requestor’s demand and is not required to defend against it.

10 Scope of Work

See following page.
1 **Program Overview**

Peninsula Clean Energy’s and Silicon Valley Clean Energy’s (SVCE) missions are to reduce greenhouse gas (GHG) emissions in San Mateo County and Santa Clara County (in the cities that SVCE covers), respectively. Emissions from transportation and building natural gas use comprise the largest sources of GHGs within the territories. This program aims to develop and advance Building Electrification and Electric Vehicle (EV) Infrastructure “reach” codes with member municipalities to update local building codes for new residential and commercial construction and major remodels. These codes are to be developed in alignment with and build on the 2019 California statewide building code updates. Codes for new buildings and major modifications are the most cost-effective points at which to install Electric Vehicle charging infrastructure and electric appliances (such as heat pump water heaters) compared to retrofitting existing buildings.

2 **Consultant Responsibilities**

2.1 **Research Existing State and Local Codes**

Consultant will research relevant state and local building codes to be developed related to building electrification and EV infrastructure. These codes may serve as models or foundations for the local model reach codes. This research must include both mandate- and incentive-based codes. The key features will be summarized in format easy to review for stakeholders.

2.2 **Lead Development of Model Reach Codes**

Consultant will work with PCE, the San Mateo County Office of Sustainability (OOS), and SVCE to provide key education to, and take input from, municipalities and other identified stakeholders to draft model reach codes to achieve program objectives. OOS and SVCE will provide facilitation support for their respective territories. The model reach code options must extend and be compliant with California’s 2019 Building Code and are expected to leverage the cost-effectiveness analysis results from the 2019 Statewide Codes & Standards Program, as needed.

Stakeholders to include in the reach code development process will be jointly determined but are anticipated to include elected officials, municipal staff, developers, electric vehicle experts, building electrification experts, Pacific Gas & Electric, building trades, and other members of the community. The facilitated processes for EV infrastructure and for building electrification may be handled separately as deemed appropriate.

The process will include a minimum of one revision and one charette per reach code focus area (i.e. EV and building electrification) and per service territory (PCE and SVCE). It is also anticipated that the final product may include two to four versions of each model reach code with varying levels of stringency. For example, this may include prescriptive or performance-based options for building electrification. The process and schedule will be refined in consultation with the Consultant.

2.3 **Identify Tools and Processes for Adoption and Implementation**

This task includes identifying tools and process improvements to consider for 2.5 and 2.6. This may include but is not limited to:
a. Adoption tools: This includes template staff reports, findings for local governments to use when submitting Building codes to the California Building Standards Commission for acceptance, and/or other tools needed to move forward with the code adoption process at the local government and State level.

b. Implementation tools: This includes building department training, permit and inspection processes streamlining (including documenting all process efficiencies and benefits enabled by a suite of proposed streamlined permitting processes), educating builder community, and/or other tools needed to move forward with the code implementation process.

Any recommendations and deliverables will be developed with and vetted by the interested municipalities, development community, and other key stakeholders.

2.4 Develop EV Cost-Benefit Analysis

For the EV model codes, Consultant will also carry out an analysis including all costs and benefits – monetary and non-monetary (e.g. emissions impacts) – of the measures included. This will include the incremental construction costs resulting from the reach code (“first costs”). The EV cost-benefit analysis will be developed in a manner consistent with State and industry standards.

Municipalities will be encouraged to utilize the Statewide Codes & Standards program cost-benefit analysis for evaluating the efficacy of the Building Electrification model codes. The Consultant may be requested to provide additional enhanced analysis to supplement the Statewide cost-benefit analysis. If so, this will be treated as technical assistance under item 2.5.

2.5 Provide Technical Assistance to Municipalities for Adoption

For each territory (PCE and SVCE), the Consultant will provide technical assistance to interested municipalities for the adoption process, including developing the tools mutually agreed to in 2.3, and which may include presentations or answering technical questions at Commissions and Councils. PCE and SVCE have a total of thirty-four jurisdictions (21 and 13, respectively). The Consultant should assume that all municipalities will participate, however, only a subset of municipalities may participate in the reach code development and adoption process.

2.6 Provide Technical Assistance to Municipalities for Code Implementation

For each territory (PCE and SVCE), the Consultant will provide technical assistance to municipalities for the implementation process, including developing the tools mutually agreed to in 2.3, and which may include staff training sessions as requested.

3 Timing

All work must be completed with sufficient time for municipalities to execute ordinances in 2019 that will go into effect on January 1st, 2020.

4 Budgeting

The budget should include fixed costs for tasks 2.1 through 2.4. Tasks 2.5 and 2.6 should be provided as a variable cost (e.g. on a costs per-municipality basis).
AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND
Click to enter participant’s name FOR
Click to enter pilot project name

THIS AGREEMENT, is entered into this Click here to enter DAY day of ENTER MONTH, ENTER YEAR, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Click here to enter Participant’s name, a Click here to enter entity type (California corporation, partnership, etc.). whose address is Click here to enter address (hereinafter referred to as "Participant") (collectively referred to as the “Parties”).

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) (“Act”) with the power to conduct its business and enter into agreements.

B. Authority has launched an innovation pilot partnership program called Innovation Onramp in order to facilitate and support innovative research and the evaluation, testing, and implementation of innovative, emerging technologies and ideas, with the goal of accelerating decarbonization.

C. Participant has submitted a pilot project proposal to the Innovation Onramp program, pursuant to which Participant proposes to install Name or describe hardware or systems in general terms (the “Equipment”) at Describe location in general terms, in order to evaluate the merits of the Equipment to promote decarbonization and associated benefits on a wider scale (the “Project”).

D. Participant possesses the skill, experience, ability, background, training and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

E. Authority and Participant desire to enter into an agreement to carry out the Project upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**
The term of this Agreement shall commence on Click here to enter beginning of term, and shall terminate on Click here to enter end of term. (“Term”), unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**
Participant shall perform the services and provide the equipment set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO PARTICIPANT**
Participant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed Click here to enter amount of compensation in words. dollars ($Click here to enter
amount of compensation in numerals, .00) based on the terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**
   Participant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**
   Participant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area and agrees that all services shall be performed by qualified and experienced personnel.

6. **INDEPENDENT PARTIES**
   Authority and Participant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Participant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Participant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers’ compensation plans, vacation and sick leave are available from Authority to Participant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Participant. Payments of the above items, if required, are the responsibility of Participant.

7. **NO RECURSCHOOL AGAINST CONSTITUENT MEMBERS OF AUTHORITY**
   Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Contractor shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority’s constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**
   Participant agrees that it shall not harass or discriminate against a job applicant, an Authority employee, or Participant’s employee or subcontractor on the basis of race, religious creed, color, national origin, ancestry, handicap, disability, marital status, pregnancy, sex, age, sexual orientation, or any other protected class. Participant agrees that any and all violations of this provision shall constitute a material breach of this Agreement.

9. **HOLD HARMLESS AND INDEMNIFICATION**
   A. General Indemnification. Participant shall, to the fullest extent allowed by law and without limitation of the provisions of this Agreement related to insurance, with respect to all services performed in connection with the Agreement, indemnify, defend, and hold harmless the Authority and its members, officers, officials, agents, employees and volunteers from and against any and all liability, claims, actions, causes of action, demands, damages, losses, costs, and expenses of any nature whatsoever (“Claims”), including any injury to or death of any person or damage to property or other liability of any nature, whether physical, emotional, consequential or otherwise, arising out of, pertaining to, or related
to the performance of this Agreement by Participant or Participant’s employees, officers, officials, agents or independent contractors. Such costs and expenses shall include reasonable attorneys’ fees of counsel of Authority’s choice, expert fees and all other costs and fees of litigation.

B. Intellectual Property Indemnification. Participant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the Project and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as “IP Rights”), except as otherwise expressly provided by this Agreement. Participant warrants that the Equipment, the Project, and any related services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Participant shall indemnify, defend, and hold Authority, its members, officers, employees, and volunteers, harmless from and against any Claims by a third party that the Equipment, the Project, or any related services to be provided pursuant to this Agreement infringe or violate any third-part’s IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys’ fees of counsel of Authority’s choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of the rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Claim.

D. The provisions of this Section shall survive the completion of the Project or termination of this Agreement.

10. INSURANCE

A. General Requirements. On or before the commencement of the Term of this Agreement, Participant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Participant’s indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days’ advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Participant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Participant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Participant shall look solely to his/her/its insurance for recovery. Participant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Participant or Authority with respect to the services of Participant herein, a waiver of any right to subrogation which any such insurer of Participant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to secure or maintain insurance. If Participant at any time during the Term should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Participant's name or as an agent of the Participant and shall be compensated by the Participant for
the costs of the insurance premiums at the maximum rate permitted by law and computed from the date
written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be
named as additional insureds under all insurance coverages, except any professional liability insurance,
required by this Agreement. The naming of an additional insured shall not affect any recovery to which
such additional insured would be entitled under this policy if not named as such additional insured. An
additional insured named herein shall not be held liable for any premium, deductible portion of any loss,
or expense of any nature on this policy or any extension thereof. Any other insurance held by an
additional insured shall not be required to contribute anything toward any loss or expense covered by the
insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented
as being sufficient to protect Participant. Participant is advised to confer with Participant's insurance
broker to determine adequate coverage for Participant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any
available insurance proceeds broader than or in excess of the specified minimum Insurance coverage
requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements
for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the
broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the
named insured, whichever is greater.

G. Subcontractors. Participant shall require all subcontractors to procure and maintain
insurance policies subject to the requirements of Exhibit “D.” Failure of Participant to verify existence
of subcontractor’s insurance shall not relieve Participant from any claim arising from subcontractor’s
work on behalf of Participant.

11. CONFLICT OF INTEREST
Participant warrants that it presently has no interest, and will not acquire any interest, direct or
indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement,
and that it will not employ any person having such an interest. Participant agrees to advise Authority
immediately if any conflict arises and understands that it may be required to fill out a conflict of interest
form if the services provided under this Agreement require Participant to make certain governmental
decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California
Code of Regulations.

12. PROHIBITION AGAINST TRANSFERS
The Parties agree that the expertise and experience of Participant are material considerations for
this Agreement. Participant shall not assign, sublease, hypothecate, or transfer this Agreement, or any
interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of
Authority. Any attempt to do so without such consent shall be null and void, and any assignee,
sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted
assignment, hypothecation or transfer. Consent to one assignment will not be deemed to be consent to
any subsequent assignment. However, claims for money by Participant from Authority under this
Agreement may be assigned to a bank, trust company or other financial institution without prior written
consent. Written notice of such assignment shall be promptly furnished to Authority by Participant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital
stock of Participant, or of the interest of any general partner or joint venturer or syndicate member or
cotenant, if Participant is a partnership or joint venture or syndicate or cotenancy, which shall result in
changing the control of Participant, shall be construed as an assignment of this Agreement. Control
means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

   Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

   In the event that Participant employs subcontractors, such subcontractors shall be required to furnish proof of workers’ compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Participant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

   Participant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor’s work. Subcontractors hired by Participant shall agree to be bound to Participant and Authority in the same manner and to the same extent as Participant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Participant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Participant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

   A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Participant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Participant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Participant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

   B. All Reports prepared by Participant may be used by Authority in execution or implementation of: (1) The original Project for which Participant was hired; (2) Completion of the original Project by others; (3) Subsequent additions to the original Project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

   C. Participant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

   D. All Reports required to be provided by this Agreement shall be printed on recycled paper. All Reports shall be copied on both sides of the paper except for one original, which shall be single sided. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

   E. No Report, information or other data given to or prepared or assembled by Participant pursuant to this Agreement shall be made available to any individual or organization by Participant without prior approval by Authority.

15. **RECORDS**

   Participant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall
be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Participant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Participant receives final payment from Authority for all services required under this agreement.

If supplemental examination or audit of the records is necessary due to concerns raised by Authority's preliminary examination or audit of records, and the Authority's supplemental examination or audit of the records discloses a failure to adhere to appropriate internal financial controls, or other breach of contract or failure to act in good faith, then Participant shall reimburse Authority for all reasonable costs and expenses associated with the supplemental examination or audit.

16. **PARTY REPRESENTATIVES**
   The [Click here to enter the title of the SVCE representative] shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. [Click here to enter the name of Participant representative] shall represent Participant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION**
   A. Participant shall maintain in confidence and not disclose to any third party or use in any manner not required or authorized under this Agreement any and all Confidential Information held by Authority or provided to Participant by Authority.
   B. The term “Confidential Information” includes all information, documents, and materials owned by Authority or Participant, including technical, financial, business, or utility customers’ personal information which is not available to the general public, as well as information derived from such information, which is furnished or made available to Participant. Information received by Participant shall not be considered Confidential Information if: (i) it is or becomes available to the public through no wrongful act of Participant; (ii) it is already in the possession of Participant and not subject to any confidentiality agreement between the Parties; (iii) it is received from a third party without restriction for the benefit of Authority and without breach of this Agreement; (iv) it is independently developed by Participant; or (v) it is disclosed pursuant to a requirement of law, a duly empowered government agency, or a court of competent jurisdiction after due notice and an adequate opportunity to intervene is given to Authority, unless such notice is prohibited.
   C. As practicable, Authority shall mark Confidential Information with the words “Confidential” or “Confidential Material” or with words of similar import, or, if that is not possible, Authority shall notify the Participant (for example, by cover e-mail transmitting an electronic document) that the material is Confidential Information. Authority’s failure, for whatever reason, to mark or notify Participant at the time the material is produced shall not take the material out of the coverage of this Agreement.
   D. Participant will direct its employees, contractors, consultants, and representatives who have access to any Confidential Information to comply with the terms of this Section.
   E. Upon termination or expiration of this Agreement, Participant shall, at Authority’s direction, either return or destroy all such Confidential Information and shall so certify in writing, provided, however, any Confidential Information (i) found in drafts, notes, studies, and other documents prepared by or for Authority or its representatives, or (ii) found in electronic format as part of Participant’s off-site or on-site data storage/archival process system, will be held by Participant and kept
subject to the terms of this provision or destroyed at Participant’s option. The obligations of this provision will survive termination or expiration of this Agreement.

18. **DATA SECURITY**

If, pursuant to this Agreement, Authority shares with Participant personal information as defined in California Civil Code Section 1798.81.5(d) about a California resident (“Personal Information”), Participant shall maintain reasonable and appropriate security procedures to protect that Personal Information, and shall inform Authority immediately upon learning that there has been a breach in the security of the system or in the security of the Personal Information. Participant shall not use Personal Information for direct marketing purposes without Authority’s express written consent. For purposes of this provision, security procedures are “reasonable and appropriate” when they (i) adequately address all reasonable foreseeable threats to Personal Information, (ii) are appropriate to the quantity, sensitivity, and type of Personal Information accessed and the way that information will be accessed, and (iii) comply with all laws, regulations, and government rules or directives applicable to the Participant in connection with its access of Personal Information.

19. **NOTICES**

All notices, demands, requests or approvals to be given under this Agreement shall be given in writing and conclusively shall be deemed served when delivered personally or on the second business day after the deposit thereof in the United States Mail, postage prepaid, registered or certified, addressed as hereinafter provided.

All notices, demands, requests, or approvals shall be addressed as follows:

**TO AUTHORITY:**
505 W. Olive Avenue
Suite 130
Sunnyvale CA 94086
Attention:  Click here to enter the title of the SVCE representative

**TO PARTICIPANT:**
Click here to enter name of Participant’s representative.
Click here to enter company name.
Click here to enter street number and street name.
Click here to enter city, state, and zip code.

20. **TERMINATION**

In the event Participant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Participant shall be deemed in default in the performance of this Agreement. If Participant fails to cure the default within the time specified and according to the requirements set forth in Authority’s written notice of default, and in addition to any other remedy available to the Authority by law, the Authority’s Chief Executive Officer may terminate the Agreement by giving Participant written notice thereof, which shall be effective immediately. The Chief Executive Officer shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Participant as provided herein. Upon receipt of any notice of termination, Participant shall immediately discontinue performance.
Authority shall pay Participant for services satisfactorily performed up to the effective date of termination. If the termination is for cause, Authority may deduct from such payment the amount of actual damage, if any, sustained by Authority due to Participant's failure to perform its material obligations under this Agreement. Upon termination, Participant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Participant or given to Participant, in connection with this Agreement. Such materials shall become the property of Authority.

21. **COMPLIANCE**
    Participant shall keep informed of and comply with all applicable local, state and federal laws. Participant shall procure all applicable permits and licenses, pay all applicable charges and fees, and give all notices as may be required by law in the performance of services under this Agreement.

22. **CONFLICT OF LAW**
    This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

23. **ADVERTISEMENT**
    Participant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters, cards, news releases, annual reports, product packaging, print literature, websites, or other media of any kind pertaining to the services performed under this Agreement or using the name, trade name, trademarks, or service marks of or owned by Authority, unless prior written approval has been secured from Authority to do otherwise. Participant shall not represent, directly or indirectly, that any product or service has been approved or endorsed by Authority without prior written consent.

24. **WAIVER**
    A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

25. **INTEGRATED CONTRACT**
    This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Participant. In the event of a conflict between the terms of this Agreement and the exhibits hereto or Participant’s proposal (if any), the Agreement shall control. In the case of any conflict between the exhibits hereto and Participant’s proposal, the exhibits shall control.

26. **AUTHORITY**
    The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.
27. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either party.

28. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

IN WITNESS WHEREOF, the parties have caused the Agreement to be executed as of the date set forth above.

**PARTICIPANT**

Name of Participant

By ___________________

Title ___________________

Date ___________________

**SILICON VALLEY CLEAN ENERGY AUTHORITY**

A Joint Powers Authority

By ___________________

Title ___________________

Date ___________________

APPROVED AS TO FORM:

_________________________

Counsel for Authority

**RECOMMENDED FOR APPROVAL**

ATTEST:

_________________________

Authority Secretary
Exhibit A
Scope of Services

Pursuant to the terms and conditions of this Agreement, Participant will install the Equipment for an evaluation period of Insert length of evaluation period in days or months, with the following features and specifications and at the location identified below:

1. **Evaluation site locations.**
   List address(es) or describe areas where Equipment will be installed.

2. **Equipment to be installed.**
   Insert list of Equipment.

3. **Delivery, Installation, Inspection, and Maintenance of Equipment.**
   Insert delivery, installation, maintenance, and replacement terms.

4. **Equipment Warranty.**
   All Equipment and labor shall be covered under a full warranty for the Term of this Agreement.

5. **Ownership of Equipment.**
   *Choose one of the following:* Participant shall retain full title and ownership of the Equipment. Upon termination of this Agreement, Participant shall remove all Equipment at its sole expense. **OR** Upon completion of the Term, full title and ownership of the Equipment shall transfer from Participant to the Authority customer having ownership or legal possession of the premises upon which the Equipment has been installed. Participant shall execute such documents as may be necessary to transfer ownership to the Authority customer.

6. **Local Agency Approvals.**
   Participant shall work with the staff, boards, and commissions of the City / Cities of Insert name(s) of city / cities in which evaluation cites are located as necessary to get any required approvals for the Project in a timely manner.

7. **Additional Services.**
   Identify and describe any other services to be provided such as a final report, etc.
Exhibit B
Schedule of Performance

Participant shall perform the services so as to complete each Project Deliverable according to the schedule set forth below. The time to complete each Deliverable may be increased or decreased by mutual written agreement of the Project Representatives for both Participant and Authority, so long as all work is completed within the Term of the Agreement.

<table>
<thead>
<tr>
<th>Project Deliverables</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable 1: name/describe deliverable</td>
<td>insert date</td>
</tr>
<tr>
<td>Deliverable 2: name/describe deliverable</td>
<td>insert date</td>
</tr>
<tr>
<td>Deliverable 3: name/describe deliverable</td>
<td>insert date</td>
</tr>
</tbody>
</table>
Exhibit C
Compensation

The compensation to be paid to Participant under this Agreement for all services described in Exhibit “A” shall not exceed a total of $Click here to enter dollar amount in words., dollars ($Click here to enter dollar amount in numerals.), as set forth below. Any work performed for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority. No reimbursable expenses are contemplated as a part of this Agreement.

Participant shall perform the categories of work and complete the Deliverables as outlined and budgeted below. Authority’s Party Representative may approve in writing the transfer of budget amounts between any of the Deliverables below, provided that the total does not exceed the not-to-exceed amount above.

<table>
<thead>
<tr>
<th>Project Deliverables</th>
<th>Completion Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable 1: name/describe deliverable</td>
<td>$Click to enter amount</td>
</tr>
<tr>
<td>Deliverable 2: name/describe deliverable</td>
<td>$Click to enter amount</td>
</tr>
<tr>
<td>Deliverable 3: name/describe deliverable</td>
<td>$Click to enter amount</td>
</tr>
</tbody>
</table>

Total $Click to enter amount in numerals.

Invoicing
In order to request payment, Participant shall submit invoices to the Authority upon completion of each Deliverable, describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed).

Advances
Upon written request by Participant, the Authority may, in its sole discretion, distribute to Participant an advance or advances meeting the following requirements:
1. Participant demonstrates that such advance(s) is required up front in order to undertake the Deliverable.
2. Participant submits invoices and receipts supporting the expenditures of an advance within 60 days of the payment by Authority. If complete invoices and receipts are not provided within 60 days, no further advances will be given.
3. At no time shall the total of all advances exceed 25% of the total amount of compensation.
4. No advance shall be provided for the final 10% of the total amount of compensation.

Additional Services
Participant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority’s Chief Executive Officer prior to commencement of any additional services. Participant shall submit, at the Chief Executive Officer’s request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation.
Exhibit D
Insurance Requirements and Proof of Insurance

Proof of insurance coverage described below is attached to this Exhibit, with Authority named as additional insured.

Participant shall maintain the following minimum insurance coverage:

A. **COVERAGE:**

   (1) **Workers' Compensation:** Statutory coverage as required by the State of California.

   (2) **Commercial General Liability:** Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

   (3) **Automotive:** Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

   (4) **Professional Liability:** Professional liability insurance which includes coverage for the professional acts, errors and omissions of Participant in the amount of at least $1,000,000.

B. **ACCEPTABILITY OF INSURER:** All insurance coverage shall be provided through carriers with AM Best’s Key Rating Guide ratings of A-VII or higher which are licensed or authorized to transact insurance business in the State of California. Any and all subcontractors of the Participant retained to perform the services under this Agreement will obtain and maintain, in full force and effect during the Term of this Agreement, identical insurance coverage.
AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND
Click to enter participant’s name FOR
Click to enter pilot project name

THIS AGREEMENT, is entered into this Click here to enter DAY day of ENTER MONTH, ENTER YEAR, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Click here to enter Participant’s name, a Click here to enter entity type (California corporation, partnership, etc.). whose address is Click here to enter address (hereinafter referred to as "Participant") (collectively referred to as the “Parties”).

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) (“Act”) with the power to conduct its business and enter into agreements.

B. Authority has launched an innovation pilot partnership program called Innovation Onramp in order to facilitate and support innovative research and the evaluation, testing, and implementation of innovative, emerging technologies and ideas, with the goal of accelerating decarbonization.

C. Participant has submitted a pilot project proposal to the Innovation Onramp program, pursuant to which Participant proposes to briefly describe proposal, ie., “Participant proposes to utilize anonymized SVCE data to evaluate the effects of XYZ” (the “Project”).

D. Participant possesses the skill, experience, ability, background, training and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

E. Authority and Participant desire to enter into an agreement to carry out the Project upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. TERM
   The term of this Agreement shall commence on Click here to enter beginning of term, and shall terminate on Click here to enter end of term (“Term”), unless terminated earlier as set forth herein.

2. SERVICES TO BE PERFORMED
   Participant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. COMPENSATION TO PARTICIPANT
   Participant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed Click here to enter amount of compensation in words dollars ($Click here to enter amount of compensation in numerals.00) based on the rates and terms set forth in Exhibit "C," which is
attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**
   Participant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**
   Participant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area and agrees that all services shall be performed by qualified and experienced personnel.

6. **INDEPENDENT PARTIES**
   Authority and Participant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Participant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Participant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers’ compensation plans, vacation and sick leave are available from Authority to Participant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Participant. Payments of the above items, if required, are the responsibility of Participant.

7. **NO RECOUPMENT AGAINST CONSTITUENT MEMBERS OF AUTHORITY**
   Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Contractor shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority’s constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**
   Participant agrees that it shall not harass or discriminate against a job applicant, an Authority employee, or Participant’s employee or subcontractor on the basis of race, religious creed, color, national origin, ancestry, handicap, disability, marital status, pregnancy, sex, age, sexual orientation, or any other protected class. Participant agrees that any and all violations of this provision shall constitute a material breach of this Agreement.

9. **HOLD HARMLESS AND INDEMNIFICATION**
   A. **General Indemnification**. Participant shall, to the fullest extent allowed by law and without limitation of the provisions of this Agreement related to insurance, with respect to all services performed in connection with the Agreement, indemnify, defend, and hold harmless the Authority and its members, officers, officials, agents, employees and volunteers from and against any and all liability, claims, actions, causes of action, demands, damages, losses, costs, and expenses of any nature whatsoever (“Claims”), including any injury to or death of any person or damage to property or other liability of any nature, whether physical, emotional, consequential or otherwise, arising out of, pertaining to, or related to the performance of this Agreement by Participant or Participant’s employees, officers, officials,
agents or independent contractors. Such costs and expenses shall include reasonable attorneys’ fees of counsel of Authority’s choice, expert fees and all other costs and fees of litigation.

B. Intellectual Property Indemnification. Participant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the Project and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as “IP Rights”), except as otherwise expressly provided by this Agreement. Participant warrants that the Equipment, the Project, and any related services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Participant shall indemnify, defend, and hold Authority, its members, officers, employees, and volunteers, harmless from and against any Claims by a third party that the Equipment, the Project, or any related services to be provided pursuant to this Agreement infringe or violate any third-part’s IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys’ fees of counsel of Authority’s choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of the rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Claim.

D. The provisions of this Section shall survive the completion of the Project or termination of this Agreement.

10. INSURANCE:

A. General Requirements. On or before the commencement of the Term of this Agreement, Participant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Participant’s indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days’ advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Participant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Participant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Participant shall look solely to his/her/its insurance for recovery. Participant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Participant or Authority with respect to the services of Participant herein, a waiver of any right to subrogation which any such insurer of Participant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to secure or maintain insurance. If Participant at any time during the Term should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Participant’s name or as an agent of the Participant and shall be compensated by the Participant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date
written notice is received that the premiums have not been paid.

D. **Additional Insured.** Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. **Sufficiency of Insurance.** The insurance limits required by Authority are not represented as being sufficient to protect Participant. Participant is advised to confer with Participant's insurance broker to determine adequate coverage for Participant.

F. **Maximum Coverage and Limits.** It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

G. **Subcontractors.** Participant shall require all subcontractors to procure and maintain insurance policies subject to the requirements of Exhibit “D.” Failure of Participant to verify existence of subcontractor’s insurance shall not relieve Participant from any claim arising from subcontractor’s work on behalf of Participant.

11. **CONFLICT OF INTEREST**

Participant warrants that it presently has no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it will not employ any person having such an interest. Participant agrees to advise Authority immediately if any conflict arises and understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Participant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

The Parties agree that the expertise and experience of Participant are material considerations for this Agreement. Participant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. Consent to one assignment will not be deemed to be consent to any subsequent assignment. However, claims for money by Participant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Participant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Participant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Participant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Participant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.
13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Participant employs subcontractors, such subcontractors shall be required to furnish proof of workers’ compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Participant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Participant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor’s work. Subcontractors hired by Participant shall agree to be bound to Participant and Authority in the same manner and to the same extent as Participant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Participant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Participant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Participant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Participant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Participant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Participant may be used by Authority in execution or implementation of: (1) The original Project for which Participant was hired; (2) Completion of the original Project by others; (3) Subsequent additions to the original Project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Participant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports required to be provided by this Agreement shall be printed on recycled paper. All Reports shall be copied on both sides of the paper except for one original, which shall be single sided. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Participant pursuant to this Agreement shall be made available to any individual or organization by Participant without prior approval by Authority.

15. **RECORDS**

Participant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly...
identified and readily accessible. Participant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Participant receives final payment from Authority for all services required under this agreement.

If supplemental examination or audit of the records is necessary due to concerns raised by Authority's preliminary examination or audit of records, and the Authority's supplemental examination or audit of the records discloses a failure to adhere to appropriate internal financial controls, or other breach of contract or failure to act in good faith, then Participant shall reimburse Authority for all reasonable costs and expenses associated with the supplemental examination or audit.

16. **PARTY REPRESENTATIVES**

The Click here to enter the title of the SVCE representative shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Click here to enter the name of Participant representative shall represent Participant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION**

A. Participant shall maintain in confidence and not disclose to any third party or use in any manner not required or authorized under this Agreement any and all Confidential Information held by Authority or provided to Participant by Authority.

B. The term “Confidential Information” includes all information, documents, and materials owned by Authority or Participant, including technical, financial, business, or utility customers’ personal information which is not available to the general public, as well as information derived from such information, which is furnished or made available to Participant. Information received by Participant shall not be considered Confidential Information if: (i) it is or becomes available to the public through no wrongful act of Participant; (ii) it is already in the possession of Participant and not subject to any confidentiality agreement between the Parties; (iii) it is received from a third party without restriction for the benefit of Authority and without breach of this Agreement; (iv) it is independently developed by Participant; or (v) it is disclosed pursuant to a requirement of law, a duly empowered government agency, or a court of competent jurisdiction after due notice and an adequate opportunity to intervene is given to Authority, unless such notice is prohibited.

C. As practicable, Authority shall mark Confidential Information with the words “Confidential” or “Confidential Material” or with words of similar import, or, if that is not possible, Authority shall notify the Participant (for example, by cover e-mail transmitting an electronic document) that the material is Confidential Information. Authority’s failure, for whatever reason, to mark or notify Participant at the time the material is produced shall not take the material out of the coverage of this Agreement.

D. Participant will direct its employees, contractors, consultants, and representatives who have access to any Confidential Information to comply with the terms of this Section.

E. Upon termination or expiration of this Agreement, Participant shall, at Authority’s direction, either return or destroy all such Confidential Information and shall so certify in writing, provided, however, any Confidential Information (i) found in drafts, notes, studies, and other documents prepared by or for Authority or its representatives, or (ii) found in electronic format as part of Participant’s off-site or on-site data storage/archival process system, will be held by Participant and kept subject to the terms of this provision or destroyed at Participant’s option. The obligations of this
provision will survive termination or expiration of this Agreement.

18. **DATA SECURITY**
   If, pursuant to this Agreement, Authority shares with Participant personal information as defined in California Civil Code Section 1798.81.5(d) about a California resident (“Personal Information”), Participant shall maintain reasonable and appropriate security procedures to protect that Personal Information, and shall inform Authority immediately upon learning that there has been a breach in the security of the system or in the security of the Personal Information. Participant shall not use Personal Information for direct marketing purposes without Authority’s express written consent. For purposes of this provision, security procedures are “reasonable and appropriate” when they (i) adequately address all reasonable foreseeable threats to Personal Information, (ii) are appropriate to the quantity, sensitivity, and type of Personal Information accessed and the way that information will be accessed, and (iii) comply with all laws, regulations, and government rules or directives applicable to the Participant in connection with its access of Personal Information.

19. **NOTICES**
All notices, demands, requests or approvals to be given under this Agreement shall be given in writing and conclusively shall be deemed served when delivered personally or on the second business day after the deposit thereof in the United States Mail, postage prepaid, registered or certified, addressed as hereinafter provided.

All notices, demands, requests, or approvals shall be addressed as follows:

**TO AUTHORITY:**
505 W. Olive Avenue
Suite 130
Sunnyvale CA 94086
Attention:  Click here to enter the title of the SVCE representative

**TO PARTICIPANT:**
Click here to enter participant’s name.
Click here to enter company name.
Click here to enter street number and street name.
Click here to enter city, state, and zip code.

20. **TERMINATION**
In the event Participant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Participant shall be deemed in default in the performance of this Agreement. If Participant fails to cure the default within the time specified and according to the requirements set forth in Authority’s written notice of default, and in addition to any other remedy available to the Authority by law, the Authority’s Chief Executive Officer may terminate the Agreement by giving Participant written notice thereof, which shall be effective immediately. The Chief Executive Officer shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Participant as provided herein. Upon receipt of any notice of termination, Participant shall immediately discontinue performance. Authority shall pay Participant for services satisfactorily performed up to the effective date of termination. If the termination is for cause, Authority may deduct from such payment the amount of
actual damage, if any, sustained by Authority due to Participant’s failure to perform its material obligations under this Agreement. Upon termination, Participant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Participant or given to Participant, in connection with this Agreement. Such materials shall become the property of Authority.

21. **COMPLIANCE**
   Participant shall keep informed of and comply with all applicable local, state and federal laws. Participant shall procure all applicable permits and licenses, pay all applicable charges and fees, and give all notices as may be required by law in the performance of services under this Agreement.

22. **CONFLICT OF LAW**
   This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

23. **ADVERTISEMENT**
   Participant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters, cards, news releases, annual reports, product packaging, print literature, websites, or other media of any kind pertaining to the services performed under this Agreement or using the name, trade name, trademarks, or service marks of or owned by Authority, unless prior written approval has been secured from Authority to do otherwise. Participant shall not represent, directly or indirectly, that any product or service has been approved or endorsed by Authority without prior written consent.

24. **WAIVER**
   A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

25. **INTEGRATED CONTRACT**
   This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Participant. In the event of a conflict between the terms of this Agreement and the exhibits hereto or Participant’s proposal (if any), the Agreement shall control. In the case of any conflict between the exhibits hereto and Participant’s proposal, the exhibits shall control.

26. **AUTHORITY**
   The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

27. **INSERTED PROVISIONS**
   Each provision and clause required by law to be inserted into the Agreement shall be deemed to
be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either party.

28. **CAPTIONS AND TERMS**
   The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

   IN WITNESS WHEREOF, the parties have caused the Agreement to be executed as of the date set forth above.

PARTICIPANT
Name of Participant

By _____________________
Title _____________________
Date _____________________

SILICON VALLEY CLEAN ENERGY
AUTHORITY
A Joint Powers Authority

By _____________________
Title _____________________
Date _____________________

APPROVED AS TO FORM:
_________________________
Counsel for Authority

RECOMMENDED FOR APPROVAL
ATTEST:

_________________________
Name, Title

_________________________
Authority Secretary
Exhibit A
Scope of Services

Click here to enter text.
Exhibit B
Schedule of Performance

Participant shall perform the services so as to complete each Project Deliverable according to the schedule set forth below. The time to complete each Deliverable may be increased or decreased by mutual written agreement of the Project Representatives for both Participant and Authority, so long as all work is completed within the Term of the Agreement.

<table>
<thead>
<tr>
<th>Project Deliverables</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable 1: name/describe deliverable</td>
<td>insert date</td>
</tr>
<tr>
<td>Deliverable 2: name/describe deliverable</td>
<td>insert date</td>
</tr>
<tr>
<td>Deliverable 3: name/describe deliverable</td>
<td>insert date</td>
</tr>
</tbody>
</table>
Exhibit C
Compensation

The compensation to be paid to Participant under this Agreement for all services described in Exhibit “A” shall not exceed a total of $Click here to enter dollar amount in words., dollars ($Click here to enter dollar amount in numerals.), as set forth below. Any work performed for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority. No reimbursable expenses are contemplated as a part of this Agreement.

Participant shall perform the categories of work and complete the Deliverables as outlined and budgeted below. Authority’s Party Representative may approve in writing the transfer of budget amounts between any of the Deliverables below, provided that the total does not exceed the not-to-exceed amount above.

<table>
<thead>
<tr>
<th>Project Deliverables</th>
<th>Completion Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable 1: name/describe deliverable</td>
<td>$Click to enter amount</td>
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<tr>
<td>Deliverable 2: name/describe deliverable</td>
<td>$Click to enter amount</td>
</tr>
<tr>
<td>Deliverable 3: name/describe deliverable</td>
<td>$Click to enter amount</td>
</tr>
</tbody>
</table>

Total $Click to enter amount in numerals.

Invoicing
In order to request payment, Participant shall submit invoices to the Authority upon completion of each Deliverable, describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed).

Advances
Upon written request by Participant, the Authority may, in its sole discretion, distribute to Participant an advance or advances meeting the following requirements:

1. Participant demonstrates that such advance(s) is required up front in order to undertake the Deliverable.
2. Participant submits invoices and receipts supporting the expenditures of an advance within 60 days of the payment by Authority. If complete invoices and receipts are not provided within 60 days, no further advances will be given.
3. At no time shall the total of all advances exceed 25% of the total amount of compensation.
4. No advance shall be provided for the final 10% of the total amount of compensation.

Additional Services
Participant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority’s Chief Executive Officer prior to commencement of any additional services. Participant shall submit, at the Chief Executive Officer’s request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation.
Exhibit D
Insurance Requirements and Proof of Insurance

Proof of insurance coverage described below is attached to this Exhibit, with Authority named as additional insured.

Participant shall maintain the following minimum insurance coverage:

A. **COVERAGE:**

   (1) **Workers’ Compensation:** Statutory coverage as required by the State of California.

   (2) **Commercial General Liability:** Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

   (3) **Automotive:** Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

   (4) **Professional Liability:** Professional liability insurance which includes coverage for the professional acts, errors and omissions of Participant in the amount of at least $1,000,000.

B. **ACCEPTABILITY OF INSURER:** All insurance coverage shall be provided through carriers with AM Best’s Key Rating Guide ratings of A-:VII or higher which are licensed or authorized to transact insurance business in the State of California. Any and all subcontractors of the Participant retained to perform the services under this Agreement will obtain and maintain, in full force and effect during the Term of this Agreement, identical insurance coverage.
This Memorandum of Understanding (MOU) is between Prospect Silicon Valley (ProspectSV), a 501(c)3 nonprofit corporation, and Silicon Valley Clean Energy (SVCE), a not-for-profit, community-owned electricity provider, collectively referred to as “Parties” or separately as “Party.” In support of mutual interests between ProspectSV and SVCE, this MOU establishes a framework for cooperation, missions, collaboration with Industry, and to enable access to certain resources and capabilities that may complement the resources already established by each Party.

About Prospect Silicon Valley

Prospect Silicon Valley (ProspectSV) is a nonprofit cleantech innovation hub focused on solutions for smarter, more sustainable cities. They bring government, corporations and academia together with startups, product teams and expert staff to accelerate innovations in transportation, energy and the built environment. ProspectSV provides a full spectrum of commercialization support including market and technical insight, connections to partners and investors, pilot opportunities as well as access to a $12 million, 23,000 sq. ft. Technology Demonstration Center with working and industrial space, lab facilities and specialized equipment. In partnership with state and local governments, ProspectSV demonstrates and scales leading edge solutions, with successes resulting in the avoidance of nearly 150 million lbs. of CO2 in the coming decade. With projects in over 50 cities, leveraging over $50 million in funding and financing and with more than 25 corporate sponsors, ProspectSV is the only organization with the ability to both prove and apply solutions for next generation cities. For more information visit prospectsv.org.

Silicon Valley Clean Energy

Silicon Valley Clean Energy (SVCE) is a community-owned electricity provider serving the majority of Santa Clara County communities, acquiring clean, carbon-free electricity on behalf of more than 270,000 residential and commercial customers. Member jurisdictions include Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and unincorporated Santa Clara County. SVCE was formed in March 2016, inspired by a common interest in taking bold and effective climate action. Since launching, SVCE has exceeded the state mandate to procure 50% renewable energy by 2030, more than a decade ahead of schedule. In 2017, SVCE’s power supply had an emissions rate of less than one pound of carbon dioxide per megawatt hour, a 99% decrease in electricity emissions.

I. Mission

ProspectSV and SVCE share a vision and objectives for accelerating innovation in sustainable, smart cities to address major challenges facing the region. The primary shared challenge between the Parties is decarbonizing the economy to address climate change.
SVCE's mission is to reduce dependence on fossil fuels by providing carbon free, affordable and reliable electricity and innovative programs for the SVCE community. SVCE's goal is to reduce emissions from 4.03 million metric tons (MMT) of CO\textsubscript{2}e in 2015 to 2.82 MMT by 2021. Emissions targets for 2025 and 2030 are currently under development. SVCE is launching a series of initiatives aimed at achieving its emissions targets, including the development and support of retail products and services, education and outreach programs, public policy initiatives and a focus on market transformation. SVCE’s core focus areas include the procurement and maintenance of a sustainable, affordable and carbon-free power supply; driving electrification in the transportation and building sectors; and, promoting energy efficiency and grid integration.

As a core partner to SVCE, ProspectSV can bring together an ecosystem of corporate and startup partners and help SVCE’s staff consider new technical and business model approaches. ProspectSV can engage startups and corporate product teams as critical stakeholders in SVCE’s efforts. ProspectSV can bring an energized, engaged and experienced staff, research partners, access to test bed resources, as well as collaborative thinking, support and leadership to help drive important new solutions forward.

II. Scope of Cooperation

Silicon Valley, being a global center of clean technology and innovation, can leverage SVCE as a natural environment for early adoption of sustainable solutions throughout its infrastructure and operations. SVCE can serve as an incubator and proving ground for sustainable solutions in mobility, energy and the built environment; build partnerships with a focus on community engagement; and leverage its position in Silicon Valley to drive early adoption and broad scale commercial deployment. Applications can include, for instance:

- Pilots – e.g. applications and use cases for Autonomous, Connected, Electric and Shared (ACES) transportation offerings, energy efficiency solutions and grid integration efforts
- Policy – framework for assuring technology supports the public good
- Business Models – how the technology will produce economic productivity

In order to achieve emissions targets and other organizational objectives, SVCE has begun and will continue to pursue the following actions:

- Identify and define community needs and interests
- Form a series of advisory and working groups to continually inform this effort and engage the community
- Seek out and engage potential new technologies and employ creative new business models

ProspectSV can add value to these efforts in the following ways.

A) Identify and define industry needs and interests to inform SVCE program development

- Leverage ProspectSV’s ecosystem to validate assumptions and broaden insights into commercial and industrial (C&I) sustainability requirements in the mobility, energy and built environment
- Conduct small industry focus groups/interviews, where applicable, to further define how best to engage with the community in the deployment of SVCE solutions
B) Give visibility to SVCE and its programs in the context of ProspectSV’s ACES Bay Area Network Working Group, Innovation and Impact Symposium and other ecosystem events

- Provide a platform for SVCE to promote its initiatives
- Invite Industry participants with interest in SVCE offerings to engage in defining levels of collaboration that will support SVCE goals and objectives
- Participate in joint media events to highlight SVCE achievements

C) Seek out and engage potential collaborators to help define, plan and deploy SVCE programs

- Seek potential collaborators in ProspectSV’s routine Industry contacts
- Share information and promote the ProspectSV-SVCE partnership
- Refer prospective collaborators with SVCE

D) Provide direct support to SVCE in the creation and deployment of sustainability programs to effect market transformation

- Design and execute novel program mechanisms to activate the private sector, such as a “prize”
- Engage with SVCE to design a community-wide EV readiness and infrastructure plan
- Provide resources extending SVCE staff capabilities to validate emerging technologies and deploy and manage sustainability initiatives
- Provide support in data analytics to measure the impact of these programs on SVCE goals and objectives
- Conduct awareness and education programs as requested
- Pursue relevant grant funding opportunities to defray the costs associated with SVCE programs

SVCE Prospective Role
SVCE intends to play a pivotal role in shaping solutions that can bring benefits to their customer base and influence the CCA market across the State of California. For its contribution to the partnership with ProspectSV, SVCE can:

- Articulate a regionally significant vision, and a commitment to decarbonization goals. Work toward identifying challenges it wishes to engage with ProspectSV, and provide critical steering input on execution.
- Define challenges it wants to address with a broad set of potential solutions, dedicate staff to act as a stakeholder in the work with ProspectSV, and help translate into this effort into specific application deployment projects. Set goals, and limits on what approaches or assets are appropriate.
- Work with its executives to streamline project activity and pilot project implementations on behalf of SVCE’s decarbonization strategy. Set and drive an efficient process that is informed by interaction with SVCE’s various advisory and working groups.
- Support ProspectSV with its engagement program for stakeholders (startups, product teams, researchers, C&I customers, etc.) and exhibit thought leadership on issues such as advanced mobility, energy, the built environment and other future-looking aspects of smart, sustainable cities.

ProspectSV Prospective Role
ProspectSV can help SVCE mount a regionally significant effort around civic innovation and decarbonization. ProspectSV brings an impressive set of private, public, academic and non-profit sector partners to bear, as well as deep domain expertise and project management experience, which can support SVCE’s leading role in the region in the following ways:

- Support and promote SVCE as a regional innovation leader through our Network Meetings, forums, regional leadership events, as well as PR/Community Relations. SVCE would receive special acknowledgement and input on its Annual Symposium with a spotlight on activity within and resulting from the partnership.
- Make the ProspectSV Technology Demonstration Center, ITS Lab, Data Lab, meeting rooms, and other resources available to SVCE and its advisory or working groups where appropriate so that the Center serves as a focal point of innovation project activity.
- Partner on funding pursuits (e.g., State and Federal grants) to help build momentum and real progress – build a funding base that allows programs to be launched and sustained.
- Provide technology insights and advisory services, project management and knowledge transfer capabilities in support of SVCE programs.

The Parties will work together in good faith in the coming months to explore collaboration opportunities in light of the articulated joint interests, complementary capabilities, and partnership examples described above.

III. Term
A. This MOU shall remain in effect for three (3) years from the date of final signature and is renewable thereafter by written, mutual agreement of the Parties.
B. This MOU may be amended in writing by mutual agreement of the Parties or terminated by either Party upon thirty (30) days advance written notice.

IV. Exchange of Information
A. The Parties do not expect or anticipate that participation in this MOU will necessitate sharing or sending any information that is considered confidential or proprietary and agree that no such information will be exchanged. If this expectation changes, the Parties shall enter into a separate written non-disclosure agreement.
B. The Parties agree that nothing in this MOU will be interpreted to restrict their rights to make public any information or results of their collaboration and cooperation hereunder.

V. Future Collaboration
A. This MOU does not create any legally binding obligations between the Parties. It serves only as a record of the intentions of the Parties to identify areas of joint interest, complementary capabilities, and possible future cooperation.
B. If the Parties later agree to undertake specific joint projects, they will develop separate written agreements for each project as needed, setting out each Party’s contribution, deliverables, responsibilities, schedule, budgets and any other items necessary for the efficient and effective achievement of such projects.

VI. Designated Representatives
A. To administer the implementation of this MOU, each Party shall designate one
principal coordinator in charge of the collaboration, through whom all requests and plans of that Participant are to be made. For purposes of this MOU, the designated representative for ProspectSV is Ruth Cox. The designated representative for SVCE will be Aimee Bailey, SVCE’s Director of Decarbonization & Grid Innovation.

VII. General Terms
A. Each Party should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including, without limitation, export control laws.
B. The Parties to this MOU shall not be liable to each other for any actual or consequential damages, injunctive relief, specific performance, or other legal remedies resulting from this MOU.
C. The Parties agree that if any of the terms herein are subject to questions of intent or interpretation, or if the Parties identify other issues that are not addressed in this MOU, they will enter into good faith negotiations to resolve such issues, and the resolution will be incorporated, as appropriate, as written amendments to this MOU.

The Parties to this Memorandum of Understanding hereby confirm their agreement to its terms by the following signatures:

PROSPECT SILICON VALLEY

By: ________________________________ By: ________________________________

Name: Ruth Cox

Title: Chief Executive Officer

Date ________________________________

SILICON VALLEY CLEAN ENERGY

By: ________________________________

Name: Girish Balachandran

Title: Chief Executive Officer

Date ________________________________
DRAFT MEMORANDUM OF UNDERSTANDING
BETWEEN
SILICON VALLEY CLEAN ENERGY
AND
JOINT VENTURE SILICON VALLEY

This Memorandum of Understanding (MOU) is between Silicon Valley Clean Energy (SVCE) and Joint Venture Silicon Valley (JVSV), collectively referred to as “Parties” or separately as “Party.”

This document outlines areas of joint interest and potential future collaboration between SVCE and JVSV, two organizations with the mutual goal of accelerating innovation in the areas of energy and sustainability.

I. About the Parties

About Silicon Valley Clean Energy

Silicon Valley Clean Energy (SVCE) is a not for profit joint powers authority serving the majority of Santa Clara County communities, acquiring clean, carbon-free electricity on behalf of more than 270,000 residential and commercial customers. Member jurisdictions include Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Saratoga, Sunnyvale and unincorporated Santa Clara County. SVCE was formed in March 2016, inspired by a common interest in taking bold and effective climate action. Since launching, SVCE has exceeded the state mandate to procure 50% renewable energy by 2030, more than a decade ahead of schedule. In 2017, SVCE’s power supply had an emissions rate of less than one pound of carbon dioxide per megawatt hour, a 99% decrease in electricity emissions.

About Joint Venture Silicon Valley

Joint Venture Silicon Valley (JVSV), established in 1993, provides analysis and action on issues affecting our region’s economy and quality of life. The organization brings together leaders from business, government, academia, labor and the broader community to spotlight issues and work toward innovative solutions. Along with providing data and guidance on our region’s economic and community challenges, Joint Venture takes action on the most pressing issues by launching initiatives. One such initiative is the Public Sector Climate Task Force, comprised of representatives from cities, towns and counties in Silicon Valley, as well as special districts and other agencies. Its charter is to develop effective collaborative solutions for the reduction of greenhouse gas emissions from public agency operations and to provide a neutral forum for city and county government agencies and special districts to learn from each other and from others about climate protection programs. Its goals include: accelerating the reduction of greenhouse gas emissions by public agencies, using demand aggregation to conserve scarce public resources, encouraging and supporting the growth of the clean technology industry, and providing leadership for the region and the world.

II. Scope of Cooperation

SVCE and JVSV have the mutual goal of accelerating innovation in the areas of energy and sustainability.
SVCE’s mission is to reduce dependence on fossil fuels by providing carbon free, affordable and reliable electricity and innovative programs for the SVCE community. SVCE is launching a series of initiatives aimed at increasing renewable generation of the power supply, ensuring successful grid integration, and driving energy efficiency and electrification in the built environment and the transportation sectors. This will be achieved with the development of retail products and services, education and outreach programs, public policy initiatives and a focus on market transformation. Specifically, there will be programs to introduce innovative business models and financing options, to aggregate power purchases to drive market pricing, to shape the start-up innovation ecosystem and to partner with academia and the national labs.

Joint Venture is actively involved in Silicon Valley's regional response to climate change. The organization is engaged with dozens of regional and local public and private agencies, municipalities, businesses and other stakeholders in programs and activities designed to reduce greenhouse gas emissions, promote sustainable energy and improve the quality of life for all. The Climate Task Force seeks to accomplish these aims by identifying and analyzing specific opportunities to reduce emissions, forming procurement pools to obtain the best prices on new technologies, exploring financing options, piloting solutions, and measuring progress toward our goals.

In line with the aforementioned mission and activities, the Parties have identified the following non-exhaustive list of draft topical areas.

1. **Partnerships:** as a regional, multi-sectoral organization, JVSV will help build and leverage relationships with public and private actors, including local governments and other community choice energy providers, to advance SVCE’s mission through collaborative programs, projects, and activities to benefit shared stakeholders

2. **Built Environment:** the development and adoption of policies, incentives, and programs that support movement towards all-electric and energy efficient residential and commercial buildings, with an emphasis on replicability and commonality across the region

3. **Mobility:** the development and implementation of electric vehicle infrastructure to support an inclusive, all-electric mobility future for residents and businesses of Silicon Valley

The Parties have further identified the following non-exhaustive list of activities.

- Co-organizing and marketing public and private events that support SVCE’s core mission to decarbonize electricity, mobility and the built environment. Example events include:
  - Panel discussions
  - Speaker series
  - Climate Task Force meetings and events
- Partnering on the development and adoption of local government policies, delivery mechanisms, and implementation strategies that support SVCE’s core mission.
- Enhancing cross-regional communication for SVCE with other community-owned electricity providers, member governments, regional agencies, and other collaborators, including JVSV member companies
III. Term
   A. This MOU shall remain in effect for three (3) years from the date of final signature and is renewable thereafter by written, mutual agreement of the Parties.
   B. This MOU may be amended in writing by mutual agreement of the Parties or terminated by either Party upon thirty (30) days advance written notice.

IV. Exchange of Information
   A. The Parties do not expect or anticipate that participation in this MOU will necessitate sharing or sending any information that is considered confidential or proprietary and agree that no such information will be exchanged. If this expectation changes, the Parties shall enter into a separate written non-disclosure agreement.
   B. The Parties agree that nothing in this MOU will be interpreted to restrict their rights to make public any information or results of their collaboration and cooperation hereunder.

V. Future Collaboration
   A. This MOU does not create any legally binding obligations between the Parties. It serves only as a record of the intentions of the Parties to identify areas of joint interest and possible future cooperation.
   B. If the Parties later agree to undertake specific joint projects, they will develop separate written agreements for each project as needed, setting out each Party’s contribution, deliverables, responsibilities, schedule, budgets and any other items necessary for the efficient and effective achievement of such projects.

VI. Designated Representatives
   A. To administer the implementation of this MOU, each Party shall designate one principal coordinator in charge of the collaboration, through whom all requests and plans of that Participant are to be made. For purposes of this MOU, the designated representative for SVCE is TBD. The designated representative for JVSV is Kara Gross.

VII. General Terms
   A. Each Party should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including, without limitation, export control laws.
   B. The Parties to this MOU shall not be liable to each other for any actual or consequential damages, injunctive relief, specific performance, or other legal remedies resulting from this MOU.
   C. The Parties agree that if any of the terms herein are subject to questions of intent or interpretation, or if the Parties identify other issues that are not addressed in this MOU, they will enter into good faith negotiations to resolve such issues, and the resolution will be incorporated, as appropriate, as written amendments to this MOU.

The Parties to this Memorandum of Understanding hereby confirm their agreement to its terms by the following signatures:

SILICON VALLEY CLEAN ENERGY JOINT VENTURE SILICON VALLEY

By: ___________________________ By: ___________________________
Table of Contents

3  Meeting Information
9  Roadmap Feedback
25  Key Trends
31  Program Recommendations
56  Other Insights
58  Report Contact Information
Section 1: Meeting Information

“Governments are afraid to fail. Let's not innovate needlessly – sometimes old ideas help us move forward, and there's no better place to do this than in Silicon Valley.”
About e-Lab

The *Electricity Innovation Lab* (e-Lab) is an initiative within RMI’s electricity practice. e-Lab brings thought leaders and decision-makers together to address the most critical challenges requiring collective action in the sector today. We do this through multi-stakeholder workshops, targeted on-the-ground convenings, and practitioner trainings.

About SVCE

*Silicon Valley Clean Energy* (SVCE) has a mission to reduce dependence on fossil fuels by providing carbon free, affordable and reliable electricity and innovative programs for the SVCE community. SVCE has achieved a carbon-free supply portfolio, and as such, is dedicating increasing efforts on programmatic development.
Meeting Objectives

The meeting was an all-day, hands-on rapid prototyping workshop with a select group of academics, industry thought leaders, entrepreneurs, community stakeholders, regional agencies, and clean energy practitioners.

Participants engaged in productive problem-solving and ideation to design potential flagship programs to realize SVCE’s bold vision of a decarbonized electric future.

1. Receive coaching and feedback on the draft decarbonization roadmap
2. Create the conceptual design of several flagship programs
3. Develop a working relationship with a diverse group of stakeholders
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>8:30 AM</td>
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<td></td>
<td>Decarbonization roadmap coaching</td>
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<td></td>
<td>Trends analysis</td>
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<td></td>
<td>Break</td>
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<tr>
<td></td>
<td>Program design session #1</td>
</tr>
<tr>
<td>12:10 PM</td>
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<tr>
<td></td>
<td>Program design session #3</td>
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<td></td>
<td>Reporting and synthesis</td>
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<tr>
<td></td>
<td>Check-out</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Adjourn</td>
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</tbody>
</table>
Ground Rules

e²Lab meetings use cutting-edge group process and facilitation techniques to engage stakeholders across different sectors and hierarchies, and to support change at the individual, team, organization, and system levels. The Ground Rules established for this meeting were:

1. **Be present** – Refrain from taking phone calls or checking email in the meeting space.
2. **Practice democracy of time** – Provide space for all participants to share their perspectives.
3. **Bring a coaching mindset** – Rather than jumping to solutions, think through the problem in a constructive manner as a group.
4. **Keep confidences** – You can say who was here, and what was said, but you can’t say who said what unless you get permission for attribution.
5. **Challenge assumptions** – yours and others’
Participants

- Kevin Bates, Owner, Sharper Development Company
- Peggy Brannigan, Global Program Manager Sustainability, LinkedIn
- Austin Brown, Executive Director, UC Davis Policy Institute
- Michael Bruner, Senior VP, Heritage Bank of Commerce
- Ranyee Chiang, Technology Implementation Officer, Bay Area Air Quality Management District
- Barry Cinnamon, CEO, Cinnamon Energy Systems
- Ruth Cox, CEO, Prospect Silicon Valley
- Anthony Eulo, Program Administrator, City of Morgan Hill
- Peter Evans, President, New Power Technologies
- Russell Hancock, Joint Venture Silicon Valley
- Tom Kabat, Board Member, Carbon Free Silicon Valley
- David Kaneda, Principal and Thought Leader, Integral Group
- Bruce Karney, Chair, Carbon Free Mountain View
- Hiromi Kelty, Utilities Program Manager, City of Palo Alto Utilities
- Rachel Kuykendall, Programs Manager, Sonoma Clean Power
- Bruce Ledesma, EVP Corporate Development, Mosaic
- Trieu Mai, Senior Researcher, NREL
- Tom McCallmont, CEO, Paired Power, Inc.
- Misty Mersich, Sustainability Manager, City of Cupertino
- Sudeshna Pabi, Senior Scientist, Electric Power Institute

- Steve Schmidt, Founder & COO, Home Energy Analytics, Inc.
- Rolf Schreiber, Energy Systems Program Manager, Google
- Asim Tahir, District & Renewable Energy Lead, Google
- Melody Tovar, Regulatory Programs Division Manager, City of Sunnyvale
- Reuben Veek, Executive and Operations Director, SunWork Renewable Energy Projects
- Seth Wilson, Director, Energy & Economic Development, Cutting Edge Capital

Silicon Valley Clean Energy

- Aimee Bailey, Director of Decarbonization & Grid Innovation
- Girish Balachandran, CEO
- Don Bray, Director of Account Service and Community Relations
- Pamela Leonard, Community Outreach Manager
- Monica Padilla, Director of Power Resources
- John Supp, Account Services Manager

Rocky Mountain Institute

- E.J. Klock-McCook, Manager, Mobility
- Michael Liebman, Senior Associate, Mobility
- Jason Meyer, Manager, eLab
- Chris Nelder, Manager, EV-Grid Integration
- Mark Silberg, Associate, eLab
“People in Silicon Valley are world leaders when it comes to thinking big, but all that innovation has been focused on the private sector. We are coming here to come up with bold, expansive solutions for the public sector.”
Participants began the workshop by learning about SVCE’s current decarbonization roadmap. The roadmap was then divided into 5 “galleries” in which participants provided written feedback (through sticky notes). Participants also indicated key points that were particularly resonant or critical with “+1” voting dots.
Decarbonization Strategy

- Procure & maintain a sustainable, affordable and carbon-free **power supply**
- Electrify the **built environment** and **mobility**
- Promote **energy efficiency** & ensure successful **grid integration**
Questions and Feedback: Decarbonization Strategy

MARKETS & PRICING
- Participate actively in market transformation
- Embrace hourly carbon content (rather than ignoring)

BUILDINGS & PLANNING
- Electrified buildings also need new capabilities in the building sector. Suggest training and education programs.
- Have code address the embedded energy in building materials (concrete) and motivate builders to use responsible materials.
- Buildings as active and intelligent resources for DS & DR.
- Does urban planning fit in this strategy?

MOBILITY
- Regarding mobility: what is SVCE’s best role?
- New electrified mobility needs a new workforce and awareness. Suggest considering education programs.
- Include commuter shuttles & ride hail, car share.

GOALS, PRIORITIES, & STRATEGIES
- Are these prioritized?
- Is energy efficiency really a SVCE priority?
- How can SVCE demonstrate additionality for RE and/or CO₂ emissions reductions?
- Is goal to move from carbon-free to renewable?
- How to tackle shaping? RA?
- Pilot innovative strategies and implement known EE.
- Potential biggest "system" value is reducing infrastructure needs. Using demand-side resources to demonstrate this could be productive.
Power Supply

Carbon-free electricity is the cornerstone of a decarbonized economy, and SVCE’s core product.

- Ensure power supply is sustainable, affordable and carbon-free
- Provide innovative rate products to better serve customers and support a high-penetration of renewables on the grid

FEEDBACK:
- Easier said than done! WattTime
- Generation must match load hour by hour ASAP
- Consider equity not just innovative rate product
- Decoupling and recoupling carbon & energy strategies
- How can this be communicated easily to “laymen” customers?
Mobility

Transportation is the single largest category of SVCE’s emissions and must be substantially reduced to achieve climate policy goals.

- Electrify transportation, including both passenger and commercial vehicles
- Support electric vehicle charging infrastructure planning and development

FEEDBACK:
- Support/collaborate with transit
- More electric bikes and scooters
- Think beyond EVs, consider hydrogen cars
- Ensure data is open
- Need more coordination between charging & grid
- Especially important to help with large-scale electrification - especially corporate shuttles, etc.
Built Environment

Buildings are the second largest contributor of emissions, and present a significant challenge given their long life.

- Switch existing fossil fuel powered appliances to efficient electric technologies powered by SVCE’s carbon-free electricity
- Promote high-efficiency, all-electric new construction

FEEDBACK:
- Consider leveraging/promoting state programs for upgrading appliances - community challenge?
- Promote heat-recovery technologies to offset gas use
- Leverage partnerships to promote *for* SVCE (contractor network, finance partners, etc.)
- Mandate all new construction to be all-electric
- New construction electrification is critical first! Retrofit will follow
Energy Efficiency & Grid Integration

Successfully achieving deep decarbonization relies on continued progress harnessing energy efficiency and ensuring successful grid integration.

• Make all newly electrified loads connected and controllable to enhance demand-side flexibility

• Use newly electrified loads to support integrating high penetrations of renewables and minimizing potential distribution system impacts

FEEDBACK:
• Consider energy management software
• How will SVCE engage w/ PG&E on grid integrations?
• SVCE cannot “ensure”
• How do you convince your customers to be comfortable with being “controlled”?
• You need more focus on storage to do this!
• Consider leveraging value of capacity / transmission constraints
• Road & Grid constraints - electrify
  Encourage demand load control to mitigate duck curve
• Help C&S customers with managing controlable loads such as HVAC & lighting
What will we do?

**Retail Products & Services**
Develop and support innovative new products and services to meet customer needs and decarbonize

**Education & Outreach**
Increase public awareness and education on electrification and actions to reduce emissions

**Public Policy**
Expand state and local policy activity on decarbonization, while strengthening local and regional agency coordination

**Market Transformation**
Catalyze market transformation through coalitions to influence market development and partnerships with actors in the innovation ecosystem
Questions and Feedback: What will we do?

OVERALL:
- What will “SVCE” do for the last two?
- Are you advocating say so?
- Can we pledge to reduce rates long term?
- More than “coalitions” to catalyze eg. incentives
- Ensure customers have financing options which are simple & transparent
- Consider empowerment in education & outreach
- Have you considered education opportunities for contractors and installers for electric techs? “Especially” heat pumps
- Rate schedules are confusing to customers, especially TOU rates. Finding good ways to communicate the need for TOU’s that keep consumers engaged will be important
- The most “engaged” customers are those that opted out! (they chose)
- How will you achieve mass adoption? (Customers are opted in)
- It’s important to match generation to load daily/hourly not just annually
- Have a special focus on making “new buildings” all-electric

EDUCATION & OUTREACH <-> PUBLIC POLICY:
- Consider experimental local policy
- Streamline policy at different government levels
- Have private sector get a seat at the table when code and policy is written
- Much of the public will not try new technologies without this
- Can “public policy” be made more specific? Will SVCE be an intervenor or propose model legislation or what??
- Take opportunity to build a community (around decarb) something lacking in Bay Area
- Innovate on building code
- Harmonize local building code market eg. SVCE easy electrification
- Consider gutting red tape - local red tape. Don’t just expand
- Need homogenization to ensure broad scale deployment across municipal boundaries
- Also get cities to streamline permitting

MARKET TRANSFORMATION:
- Can direct/indirect impacts be transformed into products? eg. Social Determinants of Health
- This one is confusing. Suggest your clarify or restate
- GO BIG: Push the envelope. Go for big market transformation of not just widgets but also integrated community of residential and commercial and…
- Pilot technologies service contracts, terms, outreach models

RETAIL PRODUCTS & SERVICES:
- Instead of “develop and support” say “offer”
- There may be a conflict for a utility between “develop” and “support” (support is more important)
- What are “products” for SVCE?
- What are “products and services”
- In addition to “develop and support” you may want to think about creating value for these services that are measurable and quantifiable.
- Can products “link” electricity to other users? eg. TOU rates for EV owners with incentives
- Do we really want to limit ourselves to programs that are new & innovative?
Which priorities will guide us?

- **Customer & Community Value**: Deliver value to our customers and larger community through program offerings and ongoing initiatives.
- **Emissions Impact**: Prioritize activities with greatest emissions reduction potential to achieve alignment with our mission.
- **Scalable & Transferable**: Pursue solutions that can be expanded and adapted by others, to ensure impact both within and beyond our borders.
- **Equity in Service**: Balance activities to reflect the diversity of our customer base and geography.
- **Core Role for SVCE**: Recognize activities where we can and must play a key role given our unique position of community-owned electricity provider.
Questions and Feedback: Which priorities will guide us?

EQUITY & JUSTICE
- Equity leads to scale
- How do you plan to ensure the “underserved” benefit from SVCE programs?
- How do you balance “equity” with inducing behavior change
- Environmental justice must be incorporated from outset

COMMUNITY PARTNERSHIP
- Community-based organizations as local marketing/education
- Consider profit-sharing with community customers
- From beginning involve community stakeholders to create the solutions

STRATEGY
- High voluntary customer participation is the gateway to everything else
- On scalability, consider how to assess and maximize additionality
- Independent distribution system operator?
- Network building the “prosumer”?

ACTIVISM
- Help California refocus Title 24 on carbon instead of cost
  - Be politically active
  - yes!yes!!
- Be the change!
- How balance “stay in your lane” vs keeping focus

COST & VALUE
- What does deciding “value” mean? What kind of value? How will we measure value?
- Maintaining cost-competitiveness vs. PG&E is crucial to maintaining customer base, and thus having leverage to move the needle on other priorities
- Can we promise cheap energy?

EDUCATION
- Education should be a part of customer & consumer value
- Perhaps organize CCA peer group workshops to foster best practices and share ideas?

LONG-TERM FOCUS
- Solutions that are sustainable on a long term
- Focus on long term “wins”
- Doesn’t emissions trump all?
- What about generating profits and growth @ SVCE?
How will we do it?

**Innovation**
Harness innovation to continuously improve service to our customers and community, and to accelerate “bending the carbon curve”

**Data**
Unlock the tremendous value of utility data to guide development, implementation, measurement and evaluation of all program activities

**Partnerships**
Form and leverage partnerships to reinforce activities in support of our decarbonization mission
Questions and Feedback: How will we do it?

OVERALL:
- Think about engaging customer constantly
- Mix of small & large pilots
- Leveraging large dollar investments by lots & lots of customers is going to be key to achieving deep decarbonization.
- Too high level?
- This seems to lack clear ACTION directive. Where is DEPLOYMENT?
- This seems more about tools than “how”. Where is the tactical guidance?

INNOVATION:
- Rapid & many prototypes. Fail fast.
- Create “examples”
- Celebrate best practices/innovations
- Identify the strategically prioritized innovations - need for focus
- Identify window of risk to target
- How to overcome customer resistance to change?
- “Harness” may be wrong word… how about “unleash”
- How much funding to keep for conventional tech that can achieve decarb vs how much to leave for innovation
- Make sure “innovation” leads to real customer and environmental improvement
- Rapid prototyping with customer feedback / adoption

PARTNERSHIPS:
- Innovation through behavior modification strategies?
- What partner roles are available to non-profit and community based organizations?
- Common vision to solve policy and regulatory hurdles to innovation.
- Economics drive most decisions. How will you use this fact to overcome recidivism? or reluctance?
- Can traditional utilities be partners?
- Partnerships “reinforce activities” or “collaborate” with partners? Engagement with partners
- Work regionally - collaborate
- Financing partnerships key!
- “Reinforce”? Too limited a word “Catapult”
- Reinforce pursuit of “interests” not “activities” --? Partners to explore new methods

DATA:
- How can SVCE support innovation by unlocking data?
- Gather consumer data and surveys to inform behavior
- Pilot programs will provide empirical data
- Important to be very transparent about how data is collected, stored and used to build customer trust
- Require utilities to provide anonymized customer data
- Share data with consumer to change mindset and behavior
- Are you comfortable sharing your data? How do we get our customers on board?
- Why limit to utility data? Financiers have consumer data; economic data
- What do you mean by “Utility Data”?
- Have you considered analyzing CAISO/EPA data to inform marginal emissions?
- Add learning to “data” as a utility + customer learning
- Consider how to shape innovation
- Data: Super important
  - Know your baseline (do pilots)
  - Get continuous measure to get post rebate (WORD?)
Programs Identified by Key Advisory Groups & Staff

- Develop new rate products, e.g. all-electric, C&I load-following renewable, dedicated supply
- Issue RFP for local, distributed energy resources
- Community input in development of an integrated resource plan for our electricity supply portfolio

- Review and remove barriers to electrification in existing municipal policies
- Develop model specifications, building standards, reach codes and related policies for all-electric buildings
- All-electric development incentives, showcase projects
- Launch heat pump water heater retrofit program
- Expand state policies for building decarbonization

- “Peak Day Pricing” program for C&I (existing program)
- Develop online resource center for customer education on efficiency, electrification, and available programs
- Managed EV charging incentives

Cross-Sector:
- Community engagement grants
- Innovation platform
- Flagship program(s)
Questions and Feedback: Programs ID’s by Key Advisory Board and Staff

- Ensure coordination and non-overlap with other programs focused on similar programs with same goals
- Redefine energy “efficiency” to include re-use instead of just reduction
- Prioritize programs where SVCE can have unique value-add
- Can SVCE help customers understand the available resources, technologies, infrastructure, etc
- Programs to encourage larger scale solutions. eg. district energy & energy recovery
- What about DA customers?
- Does SVCE need to do IRP/RFP work in coordination with other CCAs?
- Need an integration plan connecting mobility, built environment
- Is carbon capture from industrial stacks part of plan
- Managed DV charging incentives “and rates that support is based on grid needs”
- Suggest in-person experience centers like Forth’s and SCE garage house of the future
- Need for pilots
- Only localize what you need to. Localize efficiently, localize electricity. Let renewables fall where they want.
- Too many different tactics?
- Take deep look at future deep V to G
- Consider adding key results to these activities in time

BUILT ENVIRONMENT:
- Write code to incentivize vs penalize
- Have you considered “working landscapes”?
- State mandates/policies supporting electrification will help cities streamline “red tape”
- Break “built environment” into Existing Buildings and New Buildings
- Focus on contractors and installers for buildings
- Mandate electrification on *all* new residential and commercial buildings

POWER SUPPLY:
- Consider supporting off-grid solutions such as solar EV charging (you can tariff off-grid)
- How about using OKRs
- Encourage more daytime commercial charging infrastructure using solar
- Think beyond PV to storage

MOBILITY:
- Think about why people move, not just how
- Electric bikes
- Education is still key to accelerate EV adoption. There is still tremendous resistance to “converting” to EV
- Work with member agencies to electrify their vehicle fleets AND TRANSIT
- Consider collaborating with VTA - it’s not just about EVs but best utilization of mass transit
- Does this mobility work include building/financing EVSE? If so - make explicit!
- Can SVCE help push standardization of charging stations?

CROSS-SECTOR:
- How will you emulate programs to improve as you go?
- Alternative communication strategies and networking for CCE’s?
Section 3: Key Trends

“Status quo biases exists. We need to resist the urge to conform.”
Key Trends

During the registration process, participants were asked to identify the top three trends that will “transform the way we live and work in the 21st century.”

RMI and SVCE synthesized these responses into 10 trends that could critically inform the program design work of the meeting.

For each of these 10 trends, participants answered “When is this trend going to be critical for SVCE to consider in their planning? When will it be transformative? How will we know?”

1. Electric autonomous cars
2. Personally owned electrified vehicles
3. Service-based electrified mobility
4. Widespread rooftop solar
5. Smart city infrastructure and land-use planning
6. Smart, zero-carbon homes and office construction
7. Highly distributed behind the meter energy storage
8. Building electrification technology advancement
9. Regulatory evolution: Rate design and wholesale markets
10. Grid connectivity and interaction
# Trends Assessment

<table>
<thead>
<tr>
<th>Electric Autonomous Vehicles</th>
<th>Zero Carbon Homes &amp; Offices</th>
<th>Service-Based Electrified Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When will this trend be critical?</strong></td>
<td><strong>When will this trend be critical?</strong></td>
<td><strong>When will this trend be critical?</strong></td>
</tr>
<tr>
<td>● GRIDLOCK on our roads</td>
<td>● Critical Now - tons of construction going on</td>
<td>● NOW</td>
</tr>
<tr>
<td><strong>When will this trend be transformative?</strong></td>
<td><strong>When will this trend be transformative?</strong></td>
<td><strong>When will this trend be transformative?</strong></td>
</tr>
<tr>
<td>● Municipalities mandates &amp; adopts</td>
<td>● If you are not carbon neutral, you will be left behind. Office buildings that are not zero net energy &amp; carbon neutral will not lease. Homes will not sell well.</td>
<td>● Clear replacement of existing systems and pull from consumers of services</td>
</tr>
<tr>
<td><strong>How will we know?</strong></td>
<td><strong>How will we know?</strong></td>
<td><strong>How will we know?</strong></td>
</tr>
<tr>
<td>● Reduction of S.O.V. on the road</td>
<td>● When people become aware of economic value as well a availability of capital. Education is key.</td>
<td>● Shift in market share?</td>
</tr>
<tr>
<td></td>
<td>● Partnerships with contractors and capital providers to educate consumers will accelerate adoption</td>
<td></td>
</tr>
</tbody>
</table>

- **Rooftop Solar**

  - **When will this trend be critical?**
    - 5 years ago
  - **When will this trend be transformative?**
    - NOW - duck curve impact
  - **How will we know?**
    - ISO duck curve impact
    - Negative rates

- **Zero Carbon Homes & Offices**

  - **When will this trend be critical?**
    - Critical Now - tons of construction going on
  - **When will this trend be transformative?**
    - If you are not carbon neutral, you will be left behind. Office buildings that are not zero net energy & carbon neutral will not lease. Homes will not sell well.
  - **How will we know?**
    - When people become aware of economic value as well a availability of capital. Education is key.
    - Partnerships with contractors and capital providers to educate consumers will accelerate adoption

  ⇒ Need to know where SVCE can involve in the interconnection process
# Trends Assessment

## Building Electrification Technology Advancement

**When will this trend be critical?**
- NOW

**Solutions/Pathway**
- New construction: low hanging fruit
  - Change codes
  - Do pilots
- Then retrofit
- Find the technologies
- Prioritize self consumption
- Reduce code barrier to do peer 2 peer
- Help building
- Active building for DSM
- Code idea for rationing gas

## Smart City Infrastructure & Land Use Planning

**When will this trend be critical?**
- NOW

**How will we know this trend is transformative?**
- City resources for code innovation
- Mobility optimization
  - European city models
- Thermal energy trading
- Peer to peer (Food, waste, water)

## Regulatory Evolution

**When will this trend be critical?**
- 10 years ago - rate cases are slow and unresponsive

**When will this trend be transformative?**
- Can spur technologies by matching rates to technologies

**How will we know?**
- (Critical) We inherited pain points because of regulatory issues
- (Transformative) Pricing/rates mirror real time grid pricing
# Trends Assessment

<table>
<thead>
<tr>
<th>Grid Connectivity &amp; Interaction</th>
<th>Energy Storage</th>
<th>Personally Owned EVs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When will this trend be critical?</strong></td>
<td><strong>When will this trend be critical?</strong></td>
<td><strong>When will this trend be critical?</strong></td>
</tr>
<tr>
<td>● Demonstrate a solution that can scale</td>
<td>● Demand charges / rates drive consumers to install storage</td>
<td>● Now</td>
</tr>
<tr>
<td><strong>When will this trend be transformative?</strong></td>
<td>● Back-up power</td>
<td><strong>When will this trend be transformative?</strong></td>
</tr>
<tr>
<td>● Avoid storage of new P.P.</td>
<td>● Grid is carbon free</td>
<td>● Larger vehicles available</td>
</tr>
<tr>
<td><strong>How will we know?</strong></td>
<td>○ Challenge: winter vs. summer, community + personal</td>
<td>● Cost-competitive</td>
</tr>
<tr>
<td>● Amount of participation load</td>
<td>● Battery/ rates make cost effective</td>
<td>● Range</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>How will we know?</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>● See ‘em everywhere</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● ~10% of vehicles</td>
</tr>
</tbody>
</table>
Section 4: Program Recommendations

“Envision where you want to be in the future and start acting that way now. If you do this, you will get to the goal in the future.”
Program Recommendations

Participants spent the bulk of the day progressing through a rapid design process to develop innovative program design recommendations for SVCE to achieve its decarbonize goals.

As a starting point, SVCE presented 5 “snapshots” describing a specific future state. Participants opted into one of the snapshots, creating five small working groups. Each group then created a design scenario based on the snapshot, then worked backwards to identify policies and programs that will connect that specified future to the present.

The five SVCE snapshots were:
1. Suburban Home
2. Urban Village
3. Ride-Hailing Charging Depot
4. Mobility for the Workplace
5. EVs as Grid Resources

Of note, snapshot #5 was not selected by participants for design. Instead, a fifth snapshot was created by several participants involving shared, autonomous, electric vans and buses.
Program Executive Summaries

Suburban Home
Develop a pathway to decrease carbon emissions and improve the grid friendless of suburban homes in SVCE’s territory. Construct new ordinances, incentives, and rates, in partnership with municipalities, to increase grid-responsive homes, aligning customer electrification with the utility’s costs. Achieve all-electric new homes by 2025, and fully implement retrofit-at-resale ordinances by 2030.

Urban Village
Develop a pathway for cities to drive innovative building designs beyond current code, in particular to achieve all-electric multi-use buildings that utilize district infrastructure. Drive the adoption of self-consumption through coordinated rate design and building technology integration. Reduce costs for building owners, tenants, and SVCE. Consider net-zero energy building pilots, EV charging integration, and the development of urban villages as virtual power plants.

Ride-Hailing Charging Depot
Deploy grid-integrated TNC charging depot(s) that enables cheap rides and better mobility for underserved communities. Leverage rate design, multi-stakeholder partnerships, and strategic deployment of charging infrastructure to defer distribution system investments. Expand access to shared transportation at lower cost for low-income customers.

Mobility for the Workplace
Integrate regional transit planning and utility rate structures to enable electric first-and-last-mile commuting solutions for customers. Partner with transit agencies to make transfer tokens work across transit throughout the bay area. Reduce single occupancy vehicle traffic to and from SVCE’s territory.

Shared, autonomous EV vans and buses
Unlock new business models for shared, autonomous, electric vans and small buses to replace fixed-route buses in SVCE’s service territory. Identify new prizes and gamification, route permitting, and autonomous-vehicle specific charging rates. Do so in partnership with leading AV companies in the Bay Area.
Key Stakeholders and SVCE Role Synthesis

Major stakeholders to engage
- Financing partners
- Building developers, owners and occupants
- Renewable energy producers
- Distribution utilities
- TNCs and TNC drivers
- Municipalities
- Disadvantaged communities
- Transit agencies
- Employers
- Waymo, Lyft, Chariot, Scoop, Uber, etc.

What is unique about SVCE?
- Local and state political influence (especially CCAs collectively)
- More nimble and faster than IOUs
- Access to forward thinking and innovative customers
- Control over fuel costs or incentives for homes, businesses, and electric vehicles
- Willingness to pilot and experiment with new approaches to mobility and building design
# Recommended Interventions by Program

<table>
<thead>
<tr>
<th>Incentive Programs</th>
<th>Model Rules</th>
<th>Competitions and Prizes</th>
<th>Demos and Pilots</th>
<th>Rate Design</th>
<th>Education and Training</th>
<th>Industry Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban Home</td>
<td>⬜</td>
<td>⬜</td>
<td>⬜</td>
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<td>⬜</td>
<td>⬜</td>
</tr>
<tr>
<td>Urban Village</td>
<td>⬜</td>
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<td>⬜</td>
<td>⬜</td>
<td>⬜</td>
<td>⬜</td>
</tr>
<tr>
<td>Ride-Hailing Charging Depot</td>
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<tr>
<td>Mobility for the Workplace</td>
<td>⬜</td>
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</tr>
<tr>
<td>Shared, autonomous EV vans and buses</td>
<td>⬜</td>
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</table>
Decarbonization Goals for Design Context

**Historical**

<table>
<thead>
<tr>
<th>Year</th>
<th>GHG Emissions (MT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
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</tr>
</tbody>
</table>

**Forecast***

- **SVCE’s 2021 Target:** 30% below 2015 levels (2.82 MMT CO2e)
- **CA’s 2030 Target:** 40% below 1990 levels (Approx. 2.40 MMT CO2e scaled for SVCE)
SVCE Snapshot #1

Suburban Home

- High-efficiency and all-electric, with solar PV and level 2 EV charging
- Heat pump appliances efficiently heat water & provide space conditioning
- Battery storage system provides load management and back-up power
- Home energy hub monitors, coordinates, and optimizes all distributed energy resources
- Home receives and responds to real-time price signals
**Program Objective**
Reduce carbon footprint and increase grid friendliness of homes

**Key Interventions**
- Model ordinances for new homes and retrofit at resale
- Incentive programs
- Source innovation through RFP, contest, etc.
- Encourage or fund local demonstration homes (e.g. fire station grants)
- Rate design

**Key Stakeholders**
- Local jurisdictions
- CEC (Title 24)
- SVCE (rates and incentives)
- Customers
- Trades
- Financing partners

**Why SVCE can uniquely lead**
Local and state political power

**Immediate Next Steps**
- Focus on customer education via portal (carbon footprint, available solutions)
- Trades education, training, and incentives
- Model ordinances and staff reports
- New voluntary “pro-electrification” or “grid-friendly” rates
- Residential storage capacity acquisition through aggregation
How is the future different from today?

- Load flexibility without service compromise
- New building codes, streamlined
- Customer demand for electrification and awareness
- Heat pumps

Central elements to the scenario

- Presence of enhanced energy technology connectivity
- Engaged and supportive customer base
- Electrification technologies continue to evolve and improve

Milestones of success

2020:

- Redesign of residential rates to encourage grid-responsive loads
- Adopt retrofit at resale ordinance by 2021 with full implementation by 2030

2025:

- Require all-electric new homes

Major actions to achieve milestones

- Preferred rates to support retrofits
- Implement incentive programs to support retrofits
- Incentivize customer-controlled devices and external-controlled devices
Program Risks

- Reach code isn’t cost-effective
- Customer pushback creating political risk
- Black market

Offers of Support

- Look into virtual peaker for residential battery storage aggregation
- Munis to collaborate with CCAs to create a library of electrification-related marketing material templates
- Reach codes for new electrification
- I will work with staff to define a residential storage "service" that SVCE could procure
- Analyze utility (electric, gas, gasoline) cost impacts and communicate savings potential
SVCE Snapshot #2

Urban Village

- High-efficiency and all-electric mixed-use development with community solar
- Fast charging infrastructure serves ride-hailing fleets
- All heating & cooling needs met by an all-electric central plant, with thermal storage capability
- Electric loads managed and optimized via a central energy management system
- Central energy facility receives real-time price signals to respond to grid needs
- Battery storage system serves common areas during emergencies
**Program Objective**

- Create a path where cities can green-light innovative building designs that break the current code
- Create a streamlined process to allow all-electric innovative buildings

**Why SVCE can uniquely lead**

- Local political influence and state influence (CCAs collectively)
- More nimble and faster than IOUs
- Access to forward thinking and innovative customers

**Key Interventions**

- PR and market awareness for SVCE, perhaps through sponsoring holiday parades or banners at athletic fields
- Work with large C&I customers and tech companies to get immediate results
- Incentivize DR based on carbon on the grid (WattTime)
- Co-develop programs with PCE, STCE, SFCE, etc.
- Require buildings to do "low lying" energy efficiency improvements like insulation and LED lights
- Market terms for heat pumps and other technologies
- Mobilize cities to approve all electric building codes with a streamlined process
- Rate design changes
- Adoption of data and software to encourage building controls

**Immediate Next Steps**

- Study the issue
- Case studies
- Public outreach, especially to elected officials and developers
- Bring concept to city councils collectively
Urban Village

How is the future different from today?

● No natural gas
● Streamlined energy efficiency retrofits
● Private ownership of district-scale power, water, thermal, and waste infrastructure
● Utility rates that reflect demand

Central elements to the scenario

● All buildings are energy efficient
● Developers are motivated to invest in district infrastructure
● Electric rates and TOU rate to optimize together to reduce GHGs
● All electric building required, standard, and cost-effective
● All cooking is induction and people love it
● Change of the utility business model
● Energy self-consumption

Milestones of success

2020-2025:

● All net-zero residential
● Cities mandate all electric for new construction
● Modified electric rates to encourage all-electric operation of existing buildings
● Incentives/mandates for building owners to install EV chargers
● Application of virtual power plants to urban village
● Feed-in tariffs
● Customer incentives for over-generation and storage

Major actions to achieve milestones

● Better connection between EV chargers and grid for optimization

Key Stakeholders

● Owners and occupants
● Developers
● Tenants
● Renewable energy producers
Program Risks

● Battery costs (including red tape) do not decline fast enough
● Economic trends
● Adverse legislative or PUC decisions
● Less lobbying money than IOUs

Offers of Support

● Solar industry is about to announce a new coalition push for streamlined, online, automatic code and permitting. It includes reps from building code (national), safety, cities, industry.
● I can help connect you with a statewide effort to develop a 2019 T-24 all electric reach code
SVCE Snapshot #3

Ride-Hailing Charging Depot

- Dedicated EV fast-charging depots serve ride-hailing vehicles
- Several EV models with 200+ mile range are suitable for ride-hailing applications
- Third-party EV ownership models make EVs available to lower-income drivers
- Depots serve both human and autonomous ride-hailing drivers through transition period
- Chargers are integrated with stationary storage and local generation to manage grid impacts
- Depot is co-located with amenities
Ride-hailing Charging Depot

Program Objective
- Deploy grid-integrated TNC charging depot(s) that enables cheap rides and better mobility for underserved communities

Why SVCE can uniquely lead
- Control over fuel cost for service providers
- Able to support EVSE that the private sector currently cannot

Key Interventions
- Favorable rate design that include TOU or real-time pricing
- Lead multi-stakeholder partnership
- Demonstrate the value proposition

Immediate Next Steps
- Fund analysis to identify value proposition, including for underserved communities
- Engage with DOE, TNCs, EVSE, transit, cities, regulators, economic development organizations
- Launch a pilot

Key Stakeholders
- Distribution utilities
- TNCs and TNC drivers
- Transit agencies
- Municipalities
- EVSE providers
- Disadvantaged communities
How is the future different from today?

- Cheap EV rides
- Avoid new distribution investments
- Network decision
- Optimize use of land (e.g. schools, parking lots)
- Selling miles instead of kWh
- Better time-value decisions
- Improved community health metrics (e.g. indirect commute time)
- More low-cost, shared transport for low-income

Central elements to the scenario

- Electrification of ride hailing
- Joint holistic planning
- TOU/real-time pricing

Milestones of success

**2020:** Demonstrate charging depot
- Depot incorporated into mapping, grid planning, regional planning

**2025:** New rate product to support depot model
- $x\%$ of TNC miles are electric

Major actions to achieve milestones

- SVCE form partnership with transit, TNCs, EVSE providers, and developers
- Set electric mile goal with TNCs
- SVCE (and possibly PG&E) experiment with rate and revenue models

Program Risks

- Innovative rate products fail to be deployed
- Depot quickly becomes obsolete $\rightarrow$ stranded asset
- Multi-entity partnership is not able to form
SVCE Snapshot #4

Mobility for the Workplace

- Corporate campuses served by all-electric bus fleets
- On-site EV charging infrastructure serves corporate fleets and employee-owned EVs
- Campus EV infrastructure is managed/controlled to utilize low-cost power during peak solar hours
- Campus mobility integrated with regional transportation networks
- Autonomous electric shuttles and electric bikes address “last mile”
- Walking & cycling enjoyable and easy for short distance travel
- Shared electric bicycles help with longer trips across campus
Workplace Mobility

### Program Objective
- Seamless, multi-modal, electrified commuting system

### Why SVCE can uniquely lead
- Control over fuel cost for service providers
- Able to support EVSE that the private sector currently cannot

<table>
<thead>
<tr>
<th>Key Interventions</th>
<th>Immediate Next Steps</th>
<th>Key Stakeholders</th>
<th>Program Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Electricity rates that favor shared, electric mobility services</td>
<td>● ID service providers for first and last mile EV service</td>
<td>● Transit agencies</td>
<td>● Consumer behavior change</td>
</tr>
<tr>
<td>● Instigate and lead regional planning around infrastructure AND transit</td>
<td>● Issue an RFI to gather information on cost and interest</td>
<td>● Mobility service providers</td>
<td>● The system of services has a weak link</td>
</tr>
<tr>
<td>● Enable electric 1st/last mile commuting solutions</td>
<td>● Solicit employer participation</td>
<td>● Employers</td>
<td>● Poor cooperation and data sharing among CCA’s, municipalities, transit agencies, and the private sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Stakeholders</th>
<th>Program Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Transit agencies</td>
<td>● Mobility services don’t electrify</td>
</tr>
<tr>
<td>● Mobility service providers</td>
<td></td>
</tr>
<tr>
<td>● Employers</td>
<td></td>
</tr>
<tr>
<td>● Municipalities</td>
<td></td>
</tr>
</tbody>
</table>

**Immediate Next Steps**
- ID service providers for first and last mile EV service
- Issue an RFI to gather information on cost and interest
- Solicit employer participation
- Choose partners, set up partnerships and contracts
How is the future different from today?

- Seamless, electric, no congestion ways for everyone to get to work regardless of the manner of transport
- Electricity is provided with minimal negative impacts/managed charging/solar charging
- Pathways for walking/cycling and non-vehicle transport are widely accessible and usable
- All Bay Area transit agencies are linked and make trips seamless and “easy” to plan
- Effective “last mile” solutions encourage commuters to consider/use alternative transport vs private cars
- Linkages to the Urban Village allow work, play & shopping and transit to be co-located and linked

Central elements to the scenario

- Linkages (see above)
- Transfer tokens work across transit throughout entire Bay Area
- Government & transit agencies actually find the will to work together, making regional solutions practical
- SOV use has declined significantly
- We have addressed our affordable housing crisis
- Frustration with horrible traffic is a key trend

Milestones of success

**2020**: EV-Specific TOU rates
- Zoning updated to facilitate EVSE
- Financial and other support in place for L2 and L3 workplace and MDU charging

**2025**: Dynamic, hourly rates
- Regional transit authority to coordinate all transit agencies
- Building urban villages that link home, work, play, retail, and transit

Major actions to achieve milestones

- JPA process to form regional transit authority lead by SVCE, JSVS, SVLG and others
- SVCE provides variable rates to encourage transit villages and electrified transit
- SVCE deploys financial incentives for workplace and multi-dwelling L2 and public L3 where needed
EVs as Grid Resources

- EVs serve as behind-the-meter storage resources at home and workplace.
- EVs serve local load, providing vehicle to building (V2B) capabilities.
- EVs charge when power is less expensive, and serve local load when power is more expensive.
- At the workplace, vehicles help reduce/manage peaks in return for free or low-cost charging.
- State of charge needs/rules established by vehicle owner.
Participant-Developed Snapshot

Shared, autonomous, electric vans and small buses
## Program Objective
- Transforming the way people get from place to place by replacing fixed route buses

## Why SVCE can uniquely lead
- SVCE can be a market partner

### Key Interventions
- Prizes and competitions
- Special rates for AV charging
- Faster permitting via connections to local government
- Co-fund pilot projects
- Give customers "points" based on SVCE spend for electrification and decarbonization (gamification)
- Partner with schools to take kids to and from school

### Key Stakeholders
- Waymo, Lyft, Chariot, Scoop, Uber
- Public transit agencies
- Major employers
- Vehicle manufacturers
- Amazon, UPS, DoorDash
- Government
- US DOT

### Immediate Next Steps
- Partner with nearby CCAs
- Develop AV tariff (10am-3pm)
- Leverage knowledge for our area to "open source" design
- Partner with Google or Lyft, or identify if anyone is interested in partnering
- Share the vision widely
- Include e-bikes as collectors to get people to pick-up points
Shared, autonomous, EV vans and small buses

How is the future different from today?
- Fewer cars on the road and less congestion
- EVs charge midday to help with duck curve
- Route optimization in real time
- More convenient
- Reduced need for private car ownership and parking

Central elements to the scenario
- Reliable, cost effective, energy efficient EVs
- HOV lanes with 3+ rider minimum
- Young people more open to sharing
- Use for goods delivery
- Road infrastructure makes AVs safe and reliable
- More charging hubs

Milestones of success

2020:
- Remove regulatory barriers
- ADA compliance at launch
- Research into commute patterns and existing AV trends
- Roadmap ready on where to deploy AV and identify partners

2025:
- 3-county system with high ridership

Major actions to achieve milestones
- Enlist a service provider (e.g. Waymo)
- Identify pilot sites
- Service providers see a path to profitability
- Understand regulatory landscape
- Stimulate customer demand via partnerships with large employers
Shared, autonomous, EV vans and small buses

Program Risks
- Can't overcome barriers
- Critical mass
- Customer comfort with driverless vehicles
- Safety perception
- Funding/business startup issues
- Cheap gas
- High-profile fatalities
- Roles and responsibilities for stakeholders

Coaching Questions
- Does the business model need to be just AVs?

Consider:
- Disruption to existing transportation agencies
- Collaboration with existing transportation authorities
- Revenue models and sharing strategies
- Mix of vehicles in the fleet
Section 5: Other Insights

“Envision where you want to be in the future and start acting that way now. If you do this, you will get to the goal in the future.”
Other Insights

Participants captured emergent thoughts over the course of the day on an “Insights Board” that served as a placeholder for SVCE reference.

- V2G may cause consumer problems (battery life) without offering much system benefits
- More generally, need to assess DR benefits, potential
  ○ Assume grid services are just not worth it
- “Virtual Power Plant”
  ○ Software + hardware for managing and coordinating distributed storage behind the meter and providing grid services (Not V2G)
Thank You

For any questions regarding this report, please contact eLab Manager Jason Meyer, jmeyer@rmi.org
To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 5: SVCE 2019 Electric Rates – Outlook and Rate Setting Process

Date: 12/12/2018

RECOMMENDATION
Receive staff report on current outlook for SVCE 2019 rates, and rate setting process.

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.

In late February 2018, PG&E published new rates effective as of March 1st, 2018. Relative to PG&E’s 2017 rates, PG&E 2018 generation rates increased by an average of 9%, and the PCIA in the range of 11-14%. In response, at its March 2018 meeting, the SVCE Board approved updates to all SVCE generation rates, effective April 1, 2018. Updates reflected several key criteria balancing customer savings, cost recovery, risk mitigation, and rate stability:

- meet original SVCE target for contribution to reserves
- provide additional revenue to offset new RA, Bucket 1 cost impacts
- minimize number of rate increases
- avoid price ‘gouging’
- increase savings vs PG&E for all SVCE customers
- balance savings and overall cost impact across rate classes

SVCE’s approved rates for 2018 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.

PG&E’s June 2018 Energy Resource Recovery Account (ERRA) filing and Annual Electric True-Up (AET) filing in August of 2018 provided information for estimating changes to PG&E generation rates in 2019. Based on these inputs, SVCE projected an 8% decrease in generation rates, and a 21% increase in the Power Charge Indifference Adjustment (PCIA), effective January 1, 2019.

Assuming these changes, significant reductions to SVCE’s 2018 rates will be required to stay competitively priced with PG&E. In SVCE’s Fiscal Year 2019 budget approved by the Board in September 2018, it was assumed that SVCE 2019 rates would be returned to 1% below comparable PG&E rates – the discount originally offered by SVCE during 2017. As a result of lowered rates, SVCE’s 2019 budget assumes an annualized contribution to reserves of $29.5M, versus a contribution of $50.3M in fiscal 2018.

Based upon PG&E’s most recent ERRA filing in November 2018, PG&E’s 2019 generation rates are now projected to decrease by 6.5% (versus 8% estimated in August). In addition, the PCIA is now projected to increase by a weighted average of approximately 24%, versus 21% anticipated in August. The net effect of these updated projections are neutral to slightly positive relative to SVCE’s 2019 budget. A smaller decrease than anticipated in PG&E’s 2019 generation rate is offset by the larger-than-anticipated increase in the PCIA.
Note that as of November 2018, these are estimated projections only. Finalized PG&E rates for 2019 are currently scheduled to be published on January 1, 2019 and could vary from SVCE’s current projections. Also, it is possible that publication of PG&E’s 2019 rates will be delayed until March of 2019, if PG&E’s next ERRA filing in early December is delayed. This filing contains finalized PCIA rates.

ANALYSIS & DISCUSSION

Based upon the most recent projections described above, SVCE’s current 2018 rates will be higher than PG&E’s 2019 generation rates, inclusive of the increased PCIA for 2019. To remain competitively priced, SVCE will need to lower its 2019 generation rate to absorb the reduction in PG&E rates, and increased PCIA. As shown in Figure 1 below, SVCE 2019 generation rates will need to be lowered by approximately 12%, on average, from 2018 rates.

It is important to note that rate changes will vary significantly by rate class, and there will be variations to the general case described above. For example, the 2019 PCIA for residential rate classes is currently expected to be reduced by 2% (e.g. $0.034 to $0.033/kWh), whereas PCIA for large commercial rate classes are expected to increase significantly, on the order of 48% (e.g. $0.022 to $0.032).

Rate Design and Update Methodology

For 2019, SVCE currently anticipates lowering all GreenStart generation 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 each rate determinant was originally designed for the E-19 rate schedule for 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

<table>
<thead>
<tr>
<th>Rate Determinant</th>
<th>PG&amp;E Generation</th>
<th>PCIA</th>
<th>FFS</th>
<th>SVCE GreenStart Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENERGY CHARGE</strong></td>
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<tr>
<td>($/kWh)</td>
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<td></td>
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<tr>
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<td>$0.01889</td>
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<td><strong>DEMAND CHARGE</strong></td>
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<tr>
<td>($/kW)</td>
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<td></td>
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<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

100% Renewable Energy Option

The GreenPrime rate premium 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

Assuming PG&E's 2019 rates are published by January 1, 2019, the SVCE Board will approve a new SVCE rate schedule at the January 9, 2019 Board Meeting, effective February 1, 2019. Staff will present a the proposed rate schedule based on the 1% discount to PG&E rates planned in the 2019 SVCE budget.

Depending upon how PG&E’s actual 2019 rates compare with SVCE’s current projections and operating assumptions, SVCE staff may present additional alternatives, e.g. rates established at discount levels other than 1% relative to PG&E, and their relative impacts on SVCE’s budgeted 2019 contribution to operating reserves.

Staff will then work with SVCE’s contracted data services provider (Calpine) to implement the approved 2019 rates in the billing system. These rates will be effective as of February 1st, one calendar month after PG&E's 2019 rates are effective.

If publication of PG&E’s 2019 rates is delayed (e.g. March 2019), the timeline for SVCE 2019 rates will be pushed out by a similar length of time (e.g. April 2019).

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

ALTERNATIVE
N/A – Information only.

FISCAL IMPACT
The fiscal impact of SVCE’s 2019 Rates will be evaluated and presented at the January 9th, 2019 Board Meeting. Based upon current projections for PG&E generation rate and PCIA changes, SVCE 2019 Rates based on the 1% discount assumption will not materially affect SVCE’s current 2019 operating budget.
Staff Report – Item 6

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 6: Executive Committee Report

Date: 12/12/2018

This item will be addressed as an oral report to the Board.
Staff Report – Item 7

To: Silicon Valley Clean Energy Board of Directors

From: Girish Balachandran, CEO

Item 7: Finance and Administration Committee Report

Date: 12/12/2018

No report as the Finance and Administration Committee has not met since September 4, 2018.
Staff Report – Item 8

To: Silicon Valley Clean Energy Board of Directors
From: Girish Balachandran, CEO

Item 8: Legislative Ad Hoc Committee Report
Date: 12/12/2018

This item will be addressed in the form of an oral report to the Board from the Legislative Ad Hoc Committee Chair.
Staff Report – Item 9

To: Silicon Valley Clean Energy Board of Directors
From: Girish Balachandran, CEO

Item 9: Audit Committee Report

Date: 12/12/2018

This item will be addressed in the form of an oral report to the Board.