COST-SHARING AGREEMENT

Executive Committee Meeting
April 26, 2019
THE PARTICIPANTS

Cost-Sharing Agreement

EBCE
PCE
MBCP
SCICE
SVCE
CONSULTING SERVICES

Master Agreement
Cost Allocated based on participation level

Resource Adequacy Services
Provide RA portfolio management and compliance-related services

Data Management
Develop specifications for joint data-management services

OTHER Services

Resource Adequacy
ACES

OTHER

OTHER

Other
May work together to develop scopes of work for additional consulting services
RESOURCE ADEQUACY

• RA Portfolio Management
  • Aggregate/Pool and Manage Net Open Positions
  • Issue Solicitations on behalf of RA Pool
  • Respond to Others’ Solicitations
  • Negotiate Bilateral Transactions
  • Execute transaction confirmations
• Compliance Reporting – Optional
  • Month-Ahead & Year-Ahead RA filings
  • Load forecasts for RA
Resource Adequacy RFP & Vendor Selection

- Five Proposals – 5 CCAs on evaluation team (7 people)
- Scored & Ranked
  - Organizational Experience and Staff Credentials (45)
  - Proposal – Approach, Systems, Innovation (25)
  - Overall Cost (30)

<table>
<thead>
<tr>
<th>Consultant</th>
<th>RA Portfolio Management Services</th>
<th>Optional RA Compliance Services</th>
<th>RA Management &amp; Compliance</th>
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<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Total</td>
<td>Per CCA</td>
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<td>$15,890</td>
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<td>5</td>
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</table>

Assumes PCE, MBCP, SVCEA, SJCE and EBCE participate in all services
RESOURCE ADEQUACY

✓ RFP Process to select vendor - ACES
✓ PCE/ACES Service Agreement - DRAFT
✓ Cost Sharing Agreement – Exhibit A
  ✔ Scope of Work: Portfolio Management Services and Compliance Reporting (optional)
  ✔ Deliverables: TBD
  ✔ Term: Start June 2019 through May 2022 (3 years)
  ✔ Compensation: NTE Overall - $688K;
    ✔ NTE per CCA - $150,000 (assumes 4 CCAs);
    ✔ Expected - $138,000 (5 CCAs)
Next Steps

• Finalize PCE/ACES Agreement – in process
• 5 CCAs Seek Board/Council Approval of Cost Sharing Agreement & Exhibit A – Resource Adequacy Services
  • SVCE Board Approval– May 8, 2019
    • Delegation of Authority to CEO to Finalize and Execute Exhibit A, NTE $150,000 over three years
• June 2019: On-boarding with ACES
• Now – September 2019: RA Procurement
• Compliance:
  • 2019 Month-Ahead (PEA);
  • 2020-2022 Year-ahead and month-ahead (ACES)
DATA MANAGEMENT

• Don Bray to provide update
THANK YOU
Built Environment, Mobility and Innovation Programs – Background and Interim Update

Executive Committee
April 26, 2019
What is a “Background & Interim Update”? 

• Opportunity to share more info and solicit feedback in formative stages
• Discussion-based format 
• Feedback welcome
Outline

1. Innovation
2. Mobility
3. Built Environment
Outline

1. Innovation
2. Mobility
Innovation to Achieve Leverage

• Key theme of Decarb Roadmap is leverage of SVCE’s unique position and limited resources
• Achieve leverage through:

  Partnerships  Innovation  Data
Programs Roadmap by Sector

1. Power Supply
2. Built Environment
3. Mobility
4. Energy Efficiency & Grid Integration
5. Cross-Sector: Education & Outreach
6. Cross-Sector: Innovation
Innovation Programs Goal

• Leverage SVCE’s unique position to engage and support the innovation ecosystem in addressing key technical, market and policy barriers to achieving deep decarbonization in SVCE service territory & beyond
What do we mean by “innovation”? 

- Innovative hardware technologies 
- Software and data products and services 
- Novel policies & program features and design 
- New forms and means of education and outreach 
- Cross-sector collaboration 
- Replicating innovation that originated elsewhere 
- Etc.
Why SVCE?

• Addressing climate change requires innovation across sectors: public, private, and non-profit
  → SVCE uniquely positioned for cross-sector innovation

• Traditional energy companies funding majority of innovation – vested interests in fossil fuels
  → SVCE can bring attention to “need space” that vested interests don’t acknowledge
Innovation Ecosystem

Accelerators & Incubators

Regional Peers & Cross-Sector

Academic & Industry Research

Schools & Workforce Training
Innovation Ecosystem*

Accelerators & Incubators
- PLUGANDPLAY ELEMENTAL EXCELERATOR
- POWERHOUSE
- PROSPECT Silicon Valley
- EXCELERATOR

Regional Peers & Cross-Sector
- Joint Venture Silicon Valley
- SAN JOSE CLEAN ENERGY
- CITY OF PALO ALTO UTILITIES
- PENINSULA CLEAN ENERGY
- CITY OF SANTA CLARA

Academic & Industry Research
- UC DAVIS
- EPRI ELECTRIC POWER RESEARCH INSTITUTE
- BERKELEY LAB
- UNIVERSITY OF CALIFORNIA BERKELEY

Schools & Workforce Training
- K-12 schools, community colleges, training & technical schools

*List of entities non-exhaustive
Proposed Approach

1. Idea: Innovation events (prizes, challenges, hackathons, etc.) and ongoing activities through **Innovation Partners**

2. Prototype: Pilot proofs of concept and demonstrations through **Innovation Onramp**

3. Commercialization
Supporting Scale

Idea
Prototype
Commercialization

Events & ongoing activities with Innovation Partners

Stage 1 grant ($10k-$75k) for proofs of concept through Innovation Onramp

Stage 2 grant ($50k-100k) for demonstrations through Innovation Onramp
Innovation Partners

• Engage with key strategic partners to participate in the local innovation ecosystem to provide a voice for SVCE customers and the decarbonization mission
  o Sponsor partner events (e.g. Stanford Cleantech Challenge, Powerhouse SunCode hackathon)
  o Work with partners to launch an SVCE “prize” with regional partners
Spotlight: Stanford Cleantech Challenge

- SVCE was one of four sponsors for inaugural Stanford Cleantech Challenge, April 12-15
- Other sponsors: Total, Coalition for Renewable Natural Gas, Google
- SVCE’s “challenge statement” to find help single family homes retrofit from gas to heat pump electric appliances
- Grand prize winner proposed partnering with established solar installers to expand commercial offerings to include heat pump water heaters

Photo source: https://energy.stanford.edu/news/cleantech-hackathon-s-winning-team-leveraged-interdisciplinary-skills

Grand Prize Winners: “The Home Team”

The Home Team will be at May 8 BOD Meeting to share their pitch
Innovation Onramp

• Provide small grants to support innovation through pilot projects with external partners
  - Quarterly application deadline, cross-functional evaluation panel
  - Primary evaluation criteria from Programs Roadmap
  - Grant size:
    - Stage 1 grant: $10k-$75k anticipated award, focus on proofs of concept
    - Stage 2 grant: $50k-100k anticipated award, focus on demonstrations/scaling
  - Initial cap of 5 pilots per quarter – dependent upon staff impact
  - Timeframe: 18 month max term for each pilot
  - Issue RFP for program support
Challenge Areas

• Define key challenge areas to be used for both Innovation Partners events (hackathons, etc.) and to provide guidance for areas of interest for Innovation Onramp proposals
• Challenge areas will be defined and mapped out taking into account a 2-5 year horizon
• Vet challenge areas with member agencies, environmental advocates, and other industry stakeholders
Disseminating Results

• Provide highlights from the innovation programs for:
  • CEO report
  • Monthly SVCE newsletter
  • Quarterly Decarb Programs report

• After multiple months of operation, evaluate a dedicated SVCE innovation newsletter (quarterly, 6-month or annual)
Evaluating Outcomes

• Clearly define an EM&V plan for each individual pilot
• Carry out a comprehensive assessment of success/failures on an annual or semi-annual basis, potentially incl.:
  • Use 3rd party EM&V firm for independent assessment
  • Survey Innovation Partners & Onramp participants for feedback
  • Survey all staff in review process
  • Use quantitative metrics where possible (e.g. $X grant funding led to $Y in follow-on investment)
• Incorporate learnings into next iteration of program design and activities
Next Steps

• **April 30**: first Innovation Onramp deadline
• **May**: First cohort of pilots selected; SVCE sponsoring Powerhouse Suncode Hackathon
• **June**: Pilot agreements brought to BOD; program admin support contract for Innovation Onramp brought to BOD
• **Q3 CY19**: Launch an SVCE “prize” event with regional partners
Outline

1. Innovation
2. Mobility
Mobility Overview

- Transportation electrification largest decarb opportunity (>50% of GHGs)
- EV penetration still low, but growing rapidly
- Charging available critical to continued growth
- Charging access especially challenging for:
  - Low Income
  - MUD
  - Buses, Fleets and Transportation Network Companies
  - Small & medium business/workplace
- County created ‘Driving to Net Zero’ project – we want to leverage!

**EV Charging Infrastructure Strategy and Plan identified as 2019 priority in roadmap (aka Joint Action Plan)**
EVSE Use Cases

• An effective regional EVSE Strategy must consider what’s needed to support a range of important charging use cases

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Levels</th>
<th>Charge</th>
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<tbody>
<tr>
<td>Fleet - Public/Private Transit</td>
<td>L3</td>
<td>100 kWh+</td>
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<tr>
<td>Fleet - Transportation Network</td>
<td>L3</td>
<td>50 kWh+</td>
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<tr>
<td>Corridor</td>
<td>L3</td>
<td>35 kWh+</td>
</tr>
<tr>
<td>Fleet - Public/Private Vehicles</td>
<td>L2</td>
<td>15 kWh+</td>
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<tr>
<td>Destination/Retail</td>
<td>L2</td>
<td>5 kWh+</td>
</tr>
<tr>
<td>Workplace - Large</td>
<td>L2</td>
<td>10 kWh+</td>
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<tr>
<td>Workplace - Small/Medium</td>
<td>L1, L2</td>
<td>10 kWh+</td>
</tr>
<tr>
<td>Multi Unit Dwelling (MUD)</td>
<td>L1, L2</td>
<td>10 kWh+</td>
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<tr>
<td>Single Family Residential</td>
<td>L1, L2</td>
<td>10 kWh+</td>
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<tr>
<td>CITY NAME</td>
<td>Enabling Practice</td>
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<td>Regional Coordination</td>
<td>Funding Support and Incentives</td>
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<td>Fleet - Public/Private Transit</td>
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<td>Fleet - TNC</td>
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**Silicon Valley Clean Energy**
Joint Action Plan – 1. Study

• Assess current state of territory
• Identify key market barriers
• Forecast infrastructure needs
• Identify future-state goals
• EVSE education/level setting
Joint Action Plan – 2. Engage

- Survey stakeholders and customers
- Hold targeted workshops
- Define and launch ongoing working group
- Identify and prioritize shared use cases
- Identify and prioritize shared enabling practices
Joint Action Plan – 3. Act

- Aggregate research and input
- Establish mechanism for pursuing funding
- Identify highest-leverage programs
- Craft program implementation plans
- Summarize findings in report
- Present to Board
External EVSE Resources

Non-exhaustive list:

• BAAQMD: $5M annually for public/private organizations in Bay Area
• PG&E: $130M over 3 years for L2 charging MUD and workplaces in CA
• PG&E: $236M over 5 yrs for med- and heavy-duty EV fleet charging
• VW: $153M over next 3 years, targeting metro areas in CA (other funding also available through VW)
• CALeVIP*: ~$40M available annually
• CEC: $2M loan and financing program for small businesses and landlords

* More funding is available as a part of EV fleet programs
CEC’s CALeVIP Program

Building EV Infrastructure

The California Electric Vehicle Infrastructure Project (CALeVIP) offers incentives for the purchase and installation of electric vehicle charging infrastructure at publicly accessible sites throughout California.

Find a Project | Resources | Available Funding | Help

www.CALeVIP.org
CEC’s CALeVIP Program

- **Goals:**
  - Implement targeted incentive projects throughout California that address a specific region’s EV charging needs.
  - Provide a mechanism that speeds up the installation, reporting and funding processes.

- **Funding:**
  - Current Funding $33 million
  - Up to $200 million in future funding
Coalition for CALeVIP Funds

• SVCE formed regional coalition to pursue CALeVIP funding
• Letters of intent (LOI) submitted to CEC in Feb 2019
• Approx. $31M in Coalition members’ funding commitments greatly strengthens LOI & proposal
• Other prospective coalition benefits:
  • Regional consistency in EV charging incentives, application process, & reporting
  • Coordinated outreach, technical assistance, workforce development & training
  • Builds on “reach code” regional collaboration
Coalition Members

All CCAs and POUs covering San Mateo and Santa Clara Co’s
Proposal for Leveraged Funds

- SVCE’s EVSE Incentive Program of $8M over 4 years to address key market gaps and barriers of EV charging infrastructure deployment (MUD, low-income, TNC, fleets)
- Soliciting feedback from Joint Action Plan stakeholder meetings to inform program design
- Summary of leveraged funding for CALeVIP coalition:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Funding</th>
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<tbody>
<tr>
<td>SVCE</td>
<td>$8M, 4 yrs (proposal – not yet approved)</td>
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<tr>
<td>PCE</td>
<td>$12M, 4 yrs</td>
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<tr>
<td>San Jose</td>
<td>$4M, 2 years (considering – not yet approved)</td>
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<td>Palo Alto</td>
<td>$3M, 3 yrs</td>
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<tr>
<td>Santa Clara</td>
<td>$4M, 4 yrs</td>
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<tr>
<td>CEC’s CALeVIP</td>
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<tr>
<td>PG&amp;E, BAAQMD, VW, etc.</td>
<td>$10M’s in complementary funds</td>
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Next Steps

- **April 25**: Joint Action Plan strategy workshop
- **May 21**: Joint Action Plan program design workshop
- **June 30**: Joint Action Plan complete; notification from CEC on CALeVIP grant award status
- **August**: Presentation to BOD
- **Fall**: Launch identified EV charging programs
Outline

1. Innovation
2. Mobility
Feedback?

• Feedback on “Background & Interim Update” content and/or format?

• Continue to cycle through remaining program focus areas in upcoming Exec. Comm. meetings?
Thank you