Valley Clean Energy Alliance
A locally controlled energy provider

Board of Directors Meeting

November 16, 2017
5:30 pm
Recommendation: Adopt resolution authorizing VCEA General Manager and General Counsel to finalize SMUD professional services agreement ‘Task Order 3’ in substantial conformance with document in Board packet.

Scope/Deliverables:
1.1 Load forecast model development
1.2 Wholesale power procurement and risk policy and reporting
1.3 Resource portfolio modeling and power supply budget
1.4 Program launch filings
1.5 Scheduling coordinator service
1.6 Load and resource portfolio operation service
1.7 Wholesale load and resource settlements and verification
1.8 Power portfolio purchase service

Scope (cont.)

1.9 Market risk instruments management
1.10 Update portfolio model and report supply risk metrics
1.11 CAISO market monitoring
1.12 Resource portfolio compliance reporting
1.13 Credit support
1.14 Enterprise Risk Mgmt program support

Term: Now – 5 years post launch

Fees: Cost of power plus WES services @ $46,000/month through June 2019 then subject to annual CPI escalation; credit offered at 0.80 per megawatt hour/month; hourly fees for additional staff support as needed.
Item 10: Approval of Strategic Marketing and Communications Plan

Recommendation: Approve VCEA Strategic Marketing and Communications Plan

Primary Goals: (1) educate and inform the general public in Yolo County about VCEA, (2) establish household recognition and trustworthiness for the VCEA brand within the County, and (3) minimize opt-outs while maximizing “opt-ups”.

Process: Previewed by VCEA Board at its September 20th meeting and recommended for adoption by the Community Advisory Committee at its meeting on November 6, 2017.
Valley Clean Energy (VCE) is bringing cleaner energy at competitive rates to residents and businesses in Woodland, Davis, and unincorporated Yolo County. As a Community Choice Energy (CCE) Program, VCE provides an alternative to PG&E and gives our member communities a choice in how much of our electricity comes from renewable sources.
ENROLLMENT PROCESS

Here’s how the Valley Clean Energy enrollment process works:

1. Enrollment is automatic, so you can start receiving cost-competitive, cleaner power with no effort.
2. VCE service begins on June 1, 2018.
3. Electricity customers will be automatically enrolled in VCE’s default product, lightgreen.
4. You may opt-out of our services and return to PG&E at any time.
5. You have the opportunity to opt-up to ultragreen to receive 100% clean energy.
6. If you opt-out within the first 60 days of service, you may re-enroll at any time.

ENERGY OPTIONS

All VCE customers can choose from two different product options. Each product has a different amount of sustainable energy.

**VCE'S SELECT OPTION**
All customers are automatically enrolled for this product in June 2018. Comparable rates than what you’re currently paying with PG&E. Higher renewable energy compared to PG&E.

**VCE’S PRIME OPTION**
For customers who want to source 100% of their energy from renewable sources. This option is 100% renewable and 100% carbon-free. Slightly higher rates when you opt-up.

If you opt-out and return to PG&E within 60 days of service, you may re-enroll with VCE at any time.
Item 11: Approval of Amended Implementation Budget

Recommendations:

1. Approve amended budget allocations for the fiscal year ended 2017-18 for the period of VCEA program implementation (Attachment 1: Implementation Budget);

2. Accept report on accumulated member agency costs subject to reimbursement as of September 30, 2017.
# Item 11: Approval of Amended Implementation Budget

<table>
<thead>
<tr>
<th>Program Planning, Strategy and Project Management</th>
<th>Original Budget</th>
<th>Proposed Amendment</th>
<th>Amended Budget</th>
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</thead>
<tbody>
<tr>
<td>$75,000</td>
<td>$50,000</td>
<td>$125,000</td>
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</tr>
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</table>

| JPA Formation                                    | $585,750        | - $99,000          | $486,750      |

| Technical and Energy Services                    | $250,000        | - $158,000         | $92,000       |

| Communications/Customer Enrollment               | $400,407        |                    | $400,407      |

| Data Management/Call Center                      | 0               | $451,657           | $451,657      |

| Finance/Legal                                    | $120,000        |                    | $120,000      |

| Regulatory/Legislative                           | $25,000         | $10,000            | $35,000       |

| Contingency                                      | $54,716         | - $54,716          | 0             |

| TOTAL                                            | $1,510,873      | $199,931           | $1,1710,804   |
**Recommendation:** Receive draft staffing plan and provide feedback as desired.

**Background/Approach:**

- VCEA team worked in partnership with SMUD on staffing design
- Reflects SMUD proposal and information in comparative analysis
- Organization charts of operational CCAs were consulted as reference points
- Initial staff plan will inform content of remaining Task Order 4
- Uses minimal in-house staff and relies heavily on SMUD staff and other service providers in VCEA’s early years
Key Considerations:

1) Consistent with budget estimates for the first few years of operation
2) Reflective of necessary staffing functions for CCA programs
3) Balances VCEA’s need for capacity building with SMUD’s experience
4) Provides an appropriate allocation of staff to functions, including areas such as legal, regulatory and legislative that SMUD prefers not to provide
5) Supports VCEA independent leadership and autonomy as well as local presence to support VCEA-specific outreach, community needs
6) Offers flexibility to continue long-term outsourcing or build internal capacity over time
Item 12: Consideration of Draft VCEA Staffing Plan (cont.)
Item 12: Consideration of Draft VCEA Staffing Plan (cont.)
Item 12: Consideration of Draft VCEA Staffing Plan (cont.)

VCEA ORGANIZATION CHART
DRAFT BY POSITION V3

- VCEA Leadership
- VCEA In-House Staff
- VCEA Contractor
- SAMUD Staff on Loan
- SAMUD Contract Services

Board of Directors
- General Counsel (contract)
- Regulatory Counsel (contract)

Community Advisory Committee

Data Management / Call Center (Task Order 2)

Wholesale Energy Services (Task Order 3)
Technical & Energy Services (Task Order 1)

Admin / Hourly Support (Task Order 4)
Regulatory & Legislative Analyst (contract)
Banking Services (contract)
Item 12: Consideration of Draft VCEA Staffing Plan (cont.)
Item 12: Consideration of Draft VCEA Staffing Plan (cont.)
Summary Metrics of Proposed Staffing Plan:

- VCEA In House: 4 full-time equivalent
- SMUD Contract: ~12 full-time equivalent (hourly/contract and 2.5 dedicated staff)
- Additional Contract Services: < 1 full-time equivalent (i.e. general counsel, regulatory counsel/analyst, etc)

Timing:
- Post positions in December for hire in January and through Q1 2018
Wholesale Procurement & Risk Policy Background and Purpose

- Establishes Risk Management Program – with focus on commodity risk
- Identifies specific Risk Management functions and procedures to manage risks associated with power procurement activities
- Specifies roles and responsibilities
- Establishes Risk Management Standards
Item 13: Preview Wholesale Power Procurement and Risk Management Policy

Wholesale Procurement & Risk Policy - Key Elements

• Enterprise Risk Oversight Committee
• Business Practices
  – General Conduct requirements
  – Notification of conflicts
  – Counterparty suitability
  – Transaction records
  – Transaction valuation
  – Stress testing
Key Elements (cont.)

• Establishes criteria for Wholesale Energy Service Provider Front, Middle and Back Offices
  – Middle Office – Risk and Credit
  – Front Office – Execute trades
  – Back Office – Settlements

• Delegations of Authority

• Risk and Credit Monitoring and Reporting
Item 13: Preview Wholesale Power Procurement and Risk Management Policy

Power Procurement Process - Timeline

• December 2017: Finalize preferred portfolio mix/plan and requirements
• January 2018: Obtain approvals and delegations to trade for portfolio products
• January 2018: Implementation Plan Certification
• January 2018 – April 2018: Procurement Window.
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Power Procurement Process - Products

VCEA’s Portfolio Will Include:

1) Power
   - PCC1
   - PCC2
   - ACS/SS2

2) Resource Adequacy
   - System
   - Local Area
   - Flexible

3) Price Hedging Products
Power Procurement Process - Potential Channels for Product Procurement

- Direct Solicitation to Counterparties for Bilateral Agreements
- Electronic Platforms (e.g. ICE)
- Auction Platform (EnerNoc)
- Brokers
- Respond to Solicitations From Other Counterparties for Bilateral Agreements
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Power Procurement Process - Steps of Procurement

• Obtain Directive/Delegation and Approval to Transact
• Go to Market
• Transact
• Route confirms (Internal to SMUD)
• Finalize and Sign Contracts (Internal to SMUD)
VCEA Load Forecast – Background & Purpose

• Purpose:
  – Guide Power Procurement
  – Produce Accurate Revenue Forecasts

• Methodology:
  – Normalize historical data for weather, population, and economy to get base case.
  – Forecast growth in load per customer and customer count
  – Adjust for known developments, Energy Efficiency, DER, etc.
  – Forecast potential variability due to weather

• Data used:
  – SACOG Growth forecasts (2016 Estimates)
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Load Forecast – Customer Count

<table>
<thead>
<tr>
<th></th>
<th>Davis</th>
<th>Woodland</th>
<th>Unincorporated</th>
<th>Total</th>
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<tbody>
<tr>
<td>Residential</td>
<td>26,871</td>
<td>20,640</td>
<td>8,863</td>
<td>56,374</td>
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<tr>
<td>Small Commercial</td>
<td>1,794</td>
<td>2,068</td>
<td>1,355</td>
<td>5,217</td>
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<tr>
<td>Medium Commercial</td>
<td>182</td>
<td>211</td>
<td>73</td>
<td>466</td>
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<tr>
<td>Large Commercial</td>
<td>93</td>
<td>100</td>
<td>58</td>
<td>251</td>
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<tr>
<td>E20S</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>E20P</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Agricultural</td>
<td>3</td>
<td>28</td>
<td>2,201</td>
<td>2,232</td>
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<tr>
<td>Street</td>
<td>140</td>
<td>223</td>
<td>322</td>
<td>685</td>
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<tr>
<td>Standby</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>6</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>29,083</strong></td>
<td><strong>23,274</strong></td>
<td><strong>12,883</strong></td>
<td><strong>65,240</strong></td>
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</table>
Load Forecast – Economic Inputs

February 2016 SACOG Forecast:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Housing Units</th>
<th>Employment</th>
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<tbody>
<tr>
<td>2012</td>
<td>134,875</td>
<td>52,309</td>
<td>42,874</td>
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<tr>
<td>2020</td>
<td>143,964</td>
<td>53,675</td>
<td>48,945</td>
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<tr>
<td>2036</td>
<td>160,348</td>
<td>59,200</td>
<td>61,990</td>
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Growth Rates 2012-2020: 0.8% 0.3% 1.7%
Growth Rates 2020-2036: 0.7% 0.6% 1.5%

| Class          | Annual Growth Rate | Comments                                                      |
|----------------|--------------------|                                                               |
| Residential    | 0.6%               | Based on SACOG Population and Housing Unit Growth             |
| Small Commercial | 0.3%              | Based on SACOG Employment Growth                               |
| Medium Commercial  | 0.3%              | Based on SACOG Employment Growth                               |
| Large Commercial  | 0.4%              | Based on historical Growth                                     |
| E20S            | 0.0%               | No Growth Assumed                                              |
| E20P            | 0.0%               | No Growth Assumed                                              |
| Agricultural    | 0.0%               | No Growth Assumed                                              |
| Street          | 0.0%               | Based on historical Growth                                     |
| Standby         | 0.0%               | No Growth Assumed                                              |

Total VCEA 0.5%
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Load Forecast – Weather Inputs

Source: DAVIS EXPERIMENTAL FARM, CA US
Station ID: USC00042294
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Load Forecast – By Year and Customer Class

Forecast Retail Sales (GWh)

- E2OP
- E20S
- Large Commercial
- Medium Commercial
- Small Commercial
- Agriculture
- Street
- Residential
- Standby

Year: 2014 - 2028
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)

Load Forecast - Typical Daily System Load Shapes

- January-2018 vs January-2016
- April-2018 vs April-2016
- July-2018 vs July-2016
- October-2018 vs October-2016
- February-2018 vs February-2016
- May-2018 vs May-2016
- August-2018 vs August-2016
- November-2018 vs November-2016
- March-2018 vs March-2016
- June-2018 vs June-2016
- September-2018 vs September-2016
- December-2018 vs December-2016
Item 14: Review Updated Load Forecast and Procurement Approach (Informational)
Committee Charge

1. Advise the VCEA Board of Directors on VCEA’s general policy and operational objectives, including portfolio mix and objectives, as well as technical, market, program and policy areas;

2. Collaborate with VCEA staff and consultants with community outreach to and liaison with member communities;

3. Provide a public forum to inform, advise and consult through community discussions on energy related issues and a wide variety of strategies to reduce carbon emissions;

4. Collaborate with VCEA staff with monitoring legislative and regulatory activities related to Community Choice Energy issues.
Item 16: Community Advisory Committee Report

VCEA CAC Meeting – November 6, 2017

• Committee Long Range Calendar/Work Plan – Approve
• Strategic Marketing and Communications Plan – Recommend Board Approval
• Vision Statement - Recommend Board Approval
• Updated Load Forecasts, Procurement Approach – Introductory Briefing
• Energy Trading and Risk Management Policy – Introductory Briefing
• Legislative and Regulatory Task Group – Decision to Initiate Planning
Thank you!

Next meeting: December 14, 2017
5:30 pm – Davis, CA