# Meeting of the Board of Directors of the Valley Clean Energy Alliance (VCEA)
# Wednesday, June 6, 2018
# 5:30 P.M.

Davis City Council Chambers, 23 Russell Blvd., Davis 95616

Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact Alisa Lembke, VCEA Board Clerk/Administrative Analyst, at least 2 working days before the meeting at (530) 446-2754 or Alisa.Lembke@valleycleanenergy.org.

If you have anything that you wish to be distributed to the Board and included in the official record, please hand it to a member of VCEA staff who will distribute the information to the Board members and other staff.

**Board Members:**
Angel Barajas (City of Woodland), Duane Chamberlain (Yolo County), Robb Davis (City of Davis), Lucas Frerichs (Chair/City of Davis), Don Saylor (Yolo County), Tom Stallard (Vice Chair/City of Woodland)

## 5:30 p.m. Call to Order

1. **Welcome and Roll Call**

2. **Approval of Agenda**

3. **Public Comment**
   This item is reserved for persons wishing to address the Board on any VCEA-related matters that are not otherwise on this meeting agenda. Public comments on matters listed on the agenda shall be heard at the time the matter is called. As with all public comment, members of the public who wish to address the Board are customarily limited to two minutes per speaker, but an extension can be provided at the discretion of the Chair.

## CONSENT AGENDA

4. **Appointment of Secretary to VCEA Joint Powers Agency**

5. **Approval of Draft May 10, 2018 Meeting Minutes**

6. **Long Range Calendar**

7. **Approval of VCEA Operating Budget for Fiscal Year 2018/2019**

8. **Regulatory and Legislative Update**

9. **Customer Enrollment Update**

10. **CAC Meeting Update**

## REGULAR AGENDA

11. **Recognition of VCEA Board Member Robb Davis for Service to Valley Clean Energy (Ceremonial)**

12. **Integrated Resource Plan**
    a. **Review Draft Plan Results and Discuss Community Advisory Committee Feedback (Informational)**
    b. **Review Prioritization of Action Plan Activities for Years 1-3 (Informational)**

13. **Suspension of Forward PCC-2 Renewable Procurements (Action)**

14. **Board Member and Staff Announcements**

Action items and reports from members of the Board, including announcements, AB1234 reporting of meetings attended by Board Members at VCEA expense, questions to be referred to staff, future agenda items, and reports on meetings and information which would be of interest to the Board or the public.

***The next VCEA Board meeting: Thursday, July 12, 2018 at 5:30 p.m. at the Woodland City Council Chambers.***

15. **Adjournment (Approximately 7:00pm)**

Public records that relate to any item on the open session agenda for a regular board meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all members, or a majority of the members of the Board. Until VCEA has offices, the Board has designated the Department of Community Development and Sustainability at the City of Davis located at 23 Russell Blvd, Davis, CA for the purpose of making those public records available for inspection. The documents are also available on the Valley Clean Energy website located at: https://valleycleanenergy.org/about-us/meetings/

# VALLEY CLEAN ENERGY ALLIANCE

**Staff Report – Item 4**

**TO:** Valley Clean Energy Alliance Board of Directors

**FROM:** Mitch Sears, Interim General Manager, VCEA

**SUBJECT:** Appointment of Secretary for Valley Clean Energy Alliance

**DATE:** June 6, 2018

**RECOMMENDATION**

Appoint Alisa Lembke, who is VCEA's Board Clerk/Administrative Analyst as Secretary to Valley Clean Energy Alliance Joint Powers Authority (JPA).

**BACKGROUND**

Per Section 3.9.2 Selection of Board Officers, Secretary, of the Joint Exercise of Powers Agreement dated June 13, 2017, the Board has the authority to appoint a Secretary "who shall be responsible for keeping the minutes of all meetings of the Board and all official records of VCEA". Currently, Zoe Mirabile, the City of Davis Board Clerk serves in this role as VCEA's Secretary. With the hiring of Alisa Lembke, it is recommended that she be appointed Secretary of the VCEA JPA.

# VALLEY CLEAN ENERGY ALLIANCE

**Staff Report – Item 5**

**TO:** Valley Clean Energy Alliance Board of Directors

**FROM:** Mitch Sears, Interim General Manager, VCEA

**SUBJECT:** Approval of Minutes from March 22, 2018 Board Meeting

**DATE:** June 6, 2018

**RECOMMENDATION**

Receive, review and approve the attached draft Minutes from the May 10, 2018 Board meeting.

**MINUTES OF THE VALLEY CLEAN ENERGY ALLIANCE**
**BOARD OF DIRECTORS**
**May 10, 2018**

The Board of Directors of the Valley Clean Energy Alliance duly noticed their meeting scheduled for Thursday, May 10, 2018 at 5:30 p.m. at the Woodland Council Chambers, 300 First Street, Woodland CA 95695. Chairperson Lucas Frerichs established that there was a quorum present and began the meeting at 5:41 p.m.

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| Board Members Present: | Lucas Frerichs, Tom Stallard, Angel Barajas, Don Saylor |
| Board Members Absent: | Duane Chamberlain, Robb Davis, Skip Davies (Alternate) |

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| Approval of Agenda | The Agenda was reviewed by Chairperson Frerichs who identified those items that were on consent, regular, and informational only. |
| Public Comment | Chairperson Frerichs opened the floor for public comment. No public comments were made. |
| Approval of Consent Agenda | Motion made by D. Saylor, seconded by T. Stallard to approve the Consent Agenda of the items listed below. Motion passed unanimously with Chamberlain and Davis absent. |
| Approval of Minutes from March 22, 2018 | Motion made by D. Saylor, seconded by T. Stallard to approve the VCEA Board meeting minutes of March 22, 2018. Motion carried unanimously with Chamberlain and Davis absent. |
| Receive and Accept April 25, 2018 Board meeting Recap | Motion made by D. Saylor, seconded by T. Stallard to receive and accept the notes of the April 25, 2018 informational meeting of the VCEA Board where a quorum was not established. Motion carried unanimously with Chamberlain and Davis absent. |
| Approval of Long Range Calendar | Motion made by D. Saylor, seconded by T. Stallard to approve the long range calendar. Motion carried unanimously with Chamberlain and Davis absent. |
| Regulatory and Legislative Update | Motion made by D. Saylor, seconded by T. Stallard to receive the regulatory and legislative report. Motion carried unanimously with Chamberlain and Davis absent. |
| Customer Enrollment Update Approval of Revised Tariff Sheets Reflecting 2.5% General Rate | Motion made by D. Saylor, seconded by T. Stallard to adopt a resolution titled "A Resolution of the Valley Clean Energy Alliance Adopting the Final Customer Rate Discount and Rate Table", said Resolution reflects the rate of 2.5% in the final tariff. Motion carried unanimously with Chamberlain and Davis absent. |

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| Discount / Resolution 2018-011 | |
| Approval of Amended Customer Data Policy to clarify customer data storage standard | Motion made by D. Saylor, seconded by T. Stallard to approve the revision to the VCEA Data Policy adopted on January 18, 2018 (Resolution #2018-001) clarifying the customer data storage standard and policy. Motion carried unanimously with Chamberlain and Davis absent. |
| Approval of Financial Lock, Box Control Agreement and Financial Reserve Account Control Agreement with SMUD and River City Bank / Resolution 2018-012 | Motion made by D. Saylor, seconded by T. Stallard to adopt a resolution titled "Resolution of the Board of Directors of the Valley Clean Energy Alliance Authorizing the Execution and Delivery of the Lock Box Control Agreement and Reserve Account Control Agreement with SMUD and River City Bank". Motion carried unanimously with Chamberlain and Davis absent. |
| VCE Financial Update – March 31, 2018 | Motion made by D. Saylor, seconded by T. Stallard to receive and accept the financial report on VCEA agency cash flows since inception and incurred member agency obligation through March 31, 2018. Motion carried unanimously with Chamberlain and Davis absent. |
| Community Advisory Committee Report – May 10, 2018 | Motion made by D. Saylor, seconded by T. Stallard to receive and accept the report of the Community Advisory Committee's April 26, 2018 meeting of their Integrated Resource Plan workshop. Motion carried unanimously with Chamberlain and Davis absent. |
| Approval of Line of Credit/Loan Documents with River City Bank to provide working capital to fund power purchases, initial operations and reserves as needed to support power purchases / | Lisa Limcaco of SMUD reviewed the highlights of the credit agreement between Valley Clean Energy and River City Bank based on the previous approval of Subordination Agreements by the Davis and Woodland City Councils and the Yolo County Board of Supervisors. The credit agreement will provide working capital to fund power purchases, initial operations and reserves as needed to support power purchases.<br><br>Chairperson Frerichs asked if there were any questions of the Board Members. T. Stallard asked how Ms. Limcaco arrived at the $11 million in total credit facilities. Ms. Limcaco stated that it is a projection based on performance, said power based on the seasons. |

Resolution 2018-013

Chairperson Frerichs opened the floor for public comment. No public comments were made.

Motion made by T. Stallard, seconded by D. Saylor, to adopt a resolution titled "Resolution of the Board of Directors of the Valley Clean Energy Alliance Authorizing the Execution and Delivery of a Credit Agreement with River City Bank". Motion passed by the following vote:

AYES: Barajas, Frerichs, Saylor, Stallard
NOES: None
ABSENT: Chamberlain, Davis
ABSTAIN: None

Approval of Master Power Purchase Agreement between SMUD and VCEA for the recontracting of renewable and clean power to VCEA for regulatory compliance purposes / Resolution 2018-014

Shawn Marshall of Lean Energy reviewed a slide presentation with those present by highlighting that the Master Power Purchase Agreement (MPPA) between VCEA and its wholesale energy services provider, Sacramento Municipal Utility District (SMUD) was necessary to enable the appropriate transfer of the title to renewable and clean power procured by SMUD for VCEA's regulatory compliance purposes.

Chairperson Frerichs asked if there were any questions of the Board Members. D. Saylor asked if VCEA legal counsel Eric May had reviewed the Agreement. Mr. May responded that he had.

Chairperson Frerichs opened the floor for public comment. No public comments were made.

T. Stallard moved, seconded by D. Saylor to adopt a resolution titled "A Resolution of the Valley Clean Energy Alliance Approving a Master Power Purchase Agreement (MPPA) between SMUD and VCEA for the Recontracting of Renewable and Clean Power to VCEA for Regulatory Compliance Purposes". Motion passed by the following vote:

AYES: Barajas, Frerichs, Saylor, Stallard
NOES: None
ABSENT: Chamberlain, Davis
ABSTAIN: None

Approval of VCE/SMUD Services Contract Task Order 5 for Long Term Energy Procurement

Interim General Manager Mitch Sears summarized for those present that Task Order 5 to the VCEA/SMUD Master Agreement is for long term renewable procurement services, which details that SMUD is to consummate up to four (4) long term renewable power contracts on VCES's behalf, estimated at a not to exceed amount of $124,550 based on time and materials. Said Task Order 5 will

Support / Resolution #2018-015

also tie into VCEA's Integrated Resource Plan (IRP). As VCEA develops more in house capability this will set the stage.

Chairperson Frerichs asked if there were any questions of the Board Members. T. Stallard asked what "WWO" was? Westward offers. A. Barajas asked who would perform this "in-house" after this expires? Mr. Sears said that this would be taken over by the unfilled Assistant General Manager/Procurement position.

Chairperson Frerichs opened the floor for public comment. No public comments were made.

A. Barajas moved, seconded by T. Stallard to adopt a resolution titled "A Resolution of the Valley Clean Energy Alliance Approving Long Term Renewable Procurement Services Task Order 5 – Long Term Renewable Procurement Services". Motion passed by the following vote:

AYES: Barajas, Frerichs, Saylor, Stallard
NOES: None
ABSENT: Chamberlain, Davis
ABSTAIN: None

Approval of Peak Day Pricing Pilot Program / Resolution 2018-016

Jim Parks of SMUD announced that the draft VCEA Peak Day Pricing Pilot Program was derived out of a similar program that PG&E offered to its customers but was not being carried over to VCEA customers. Mr. Parks reviewed the proposed resolution and outlined changes to the draft resolution presented in the Board's packet.

Chairperson Frerichs asked if there were any questions of the Board Members. A. Barajas asked about the medium/large customers slide wherein it states that "VCEA will provide a credit…". Mr. Parks stated that the season runs through October, and at that point VCEA will go back and evaluate the credit.

D. Saylor made a comment that the peak day pricing benefit was the shifting loads during peak periods, normal demand responses, turning off lights, not running air conditioner during peaks times, etc. T. Stallard restated that there are approximately 55,000 rate payers with approximately 3,200 peak pricing, and asked of the 3,200 peak pricing customers, who will it benefit? Mr. Parks said possibly 20 % will benefit from the program.

Chairperson Frerichs opened the floor for public comment. No public comments were made.

D. Stallard stated that letters were going out to Customers and asked if there will be other outreach to both key and large customers? Mr. Parks stated that Chris Cole of SMUD was in contact with both.

D. Saylor moved, seconded by A. Barajas to adopt a resolution titled "A Resolution of the Valley Clean Energy Alliance Adopting a Peak Date Pricing (PDP) Pilot Program". Motion passed by the following vote:

AYES: Barajas, Frerichs, Saylor, Stallard
NOES: None
ABSENT: Chamberlain, Davis
ABSTAIN: None

Board Member Tom Stallard excusing himself from meeting

At 6:10 p.m., Board Member Tom Stallard left the meeting. Per Eric May, Yolo County Senior Legal Counsel, the VCEA Board could not take any formal actions due to the lack of quorum; however, the Board could receive information. Mr. May requested that this be noted in the Board meeting Minutes.

Small Scale/local Renewable Energy Production Potential – Presentation (Informational)

Gary Lawson of SMUD reviewed his slide presentation.

Chairperson Frerichs asked if there were any questions of the Board Members. D. Saylor asked when does the Board define local wind resources? Mr. Lawson said that when the Board finalizes their IRP Action Plan. D. Saylor commented that he would like to see the definition of local resources and the preference to use local resources. He is interested in expanding beyond Yolo and jurisdictional boundaries. Mr. Sears stated that there are several other requirements that need to be included in the IRP Action Plan, including what is defined in Task Order 5, all of which will be addressed in the IRP Workshop. Chairperson Frerichs stated that he is very excited. A. Barajas asked that when the Board looks at options, he would like to focus on what will provide the Customers greener and more competitive rates. Mr. Lawson said that to start the Board would need to define local resources, look at what would be produced, then balance the costs for all resources. Chairperson Frerichs commented that he favored the blending of options 2 and 3 and the Board should consider the geography - further conversations would need to take place.

Chairperson Frerichs opened the floor for public comment. No public comments were made.

Update on Resource Plan April 25, 2018 Workshop – Agenda Review (Informational)

Olof Bystrom of SMUD provide a summary of the Community Advisory Committee IRP Workshop held on April 26, 2018. He said that it was a positive meeting with good discussion. The CAC were given an assignment to review a list of possible action plan items for the 1-3-year action plan and to develop criteria for resource selection for VCEA's planned long term renewable solicitation which is a high priority within the action plan. The CAC will review its first draft IRP Plan at their next scheduled meeting. In addition, he anticipates that the CAC will provide feedback on three (3) alternative resource portfolios, review action plan items, then finalize the priorities. Mr. Sears said that the SMUD presentation at the Workshop went smoothly and SMUD did a great job.

Chairperson Frerichs asked if there were any questions of the Board Members. There were none. Chairperson Frerichs asked what the deadline is for the submittal of the IRP? August 1st, so prior to that the VCEA Board will have to approve the plan.

Chairperson Frerichs opened the floor for public comment. No public comments were made.

General Manager's Report (Informational)

Mr. Sears represented VCEA at a booth at the California Honey Festival, along with the help of Don Saylor, Tom Stallard, Yvonne Hunter, Christine Shewmaker, Alisa Lembke and her husband. He announced that Celebrate Davis is scheduled for next week and they are accepting Board Member and volunteers to assist covering the VCEA booth. Mr. Sears presented VCEA information to the Esparto Homeowners Association, a community of manufacturer homes with a master meter and submeters to its Residents. Yesterday, he presented information at the Senior Center, which had 57 people in attendance. Mr. Sears provided a quick update on VCEA Staffing: 1) the Assistant General Manager/Procurement position is an open position and VCEA will be going back out to solicit candidates for the Outreach Specialist position. There were two (2) Outreach Specialist candidates; however, they took jobs with other CCA entities.

He announced that VCEA staff had moved into the City of Davis Hunt-Boyer Mansion located downtown Davis and will continue to look for a permanent location. He invited those present to attend the Mansion ribbon cutting event scheduled for tomorrow, Friday, May 11th and that VCEA would have its launch party on Friday, June 1st at the Mansion. Details and invitations are forthcoming.

D. Saylor commented that at the Honey Festival there were numerous questions and comments and it was a good turnout. He said that a homeowner had a question about his roof top solar, which the homeowner does not own, but the property owner does, and how would the VCEA launch affect them. Mr. Sears informed those present that VCEA staff are working on getting an answer for the homeowner, or any homeowner with a question that cannot be readily answered, by getting back to the Customer with an answer as soon as possible.

Jim Parks of SMUD reviewed the current Customer Enrollment chart of which there are 722 opt outs (1.2%). He informed those present that the first mailing of the second written notification (postcard #2) has been mailed, which in his experience, VCEA will see a little more opting out of Customers. He commented that the Customers are asking good questions which is assisting in vetting out information and resolving similar or same questions. The second mailing of 38,000 postcards #2 are going out soon and that all 65,000 Customers have been mailed the first notification (letter).

Mr. Sears introduced Ms. Shawn Marshall of Lean Energy who would provide a regulatory and legislative update. Ms. Marshall highlighted a few of the items from her slides, such as:

1) regulatory evidentiary hearings were held to address restructuring the model;
2) CCA Bond requirement, no proposed changes;
3) CPUC Green Book came out last Thursday, looking at the rules of the road of managing the "green revolution". Responses are due by 6/4/18 of which CCA is responding. The results will probably be in effect in 2019.

Ms. Marshal reviewed with those present several legislative bills that are up for discussion and Cal CCA's position on each bill.

Chairperson Frerichs asked if there were any questions of the Board Members. There were none other than Chairperson Frerichs who commented that possibly the VCEA government entities should express their concerns to Senator Dobbs office on his SB1088, of which Cal CCA is opposing.

Chairperson Frerichs opened the floor for public comment.

Customer Christine Shewmaker asked what Cal CCA's position was on 2619? Ms. Marshall responded that Cal CCA has no position on this.

Board Member and Staff Announcements

The next VCEA Board meeting has been scheduled for Thursday, June 14, 2018 at 5:30 p.m. at the Davis City Council Chambers, located at 23 Russell Boulevard, Davis, CA 95616.

Meeting was adjourned at 6:50 p.m.

Alisa Lembke
Board Clerk/Administrative Analyst

**VALLEY CLEAN ENERGY ALLIANCE**
**Board of Directors Meeting**

**Staff Report Item – 6**

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**TO:** VCEA Board

**FROM:** Mitch Sears, Interim General Manager

**SUBJECT:** Long Range Calendar

**DATE:** June 6, 2018

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**Recommendation**
Please find attached the long range calendar.

# VALLEY CLEAN ENERGY

## 2018 Meeting Dates and Topics – Board and Community Advisory Committee

| MEETING DATE | | TOPICS | ACTION |
|---|---|---|---|
| May 10, 2018 | **Board** WOODLAND | • Recontracting Master Agreement | • Approve |
| June 4, 2018 | **Advisory Committee** DAVIS | • Integrated Resource Plan | • Informational |
| June 1, 2018 -- LAUNCH | | | |
| June 6, 2018 | **Board** DAVIS | • Integrated Resource Plan | • Discussion |
| July 2, 2018 | **Advisory Committee** WOODLAND | • Integrated Resource Plan | • Recommend |
| July 12, 2018 | **Board** WOODLAND | • Integrated Resource Plan | • Approve |
| July 30, 2018 | **Advisory Committee** DAVIS | • | • |
| August 9, 2018 | **Board** DAVIS | • | • |
| September 3, 2018 | **Advisory Committee** WOODLAND | • | • |
| Sept 13, 2018 | **Board** WOODLAND | • | • |
| October 1, 2018 | **Advisory Committee** DAVIS | • | • |

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|---|---|---|---|
| October 11, 2018 | **Board**<br>DAVIS | • | • |
| October 29, 2018 | **Advisory Committee**<br>WOODLAND | • | • |
| November 8, 2018 | **Board**<br>WOODLAND | • | • |
| December 3, 2018 | **Advisory Committee**<br>DAVIS | • | • |
| December 13, 2018 | Board<br>DAVIS | • | • |

**VALLEY CLEAN ENERGY ALLIANCE**

**Staff Report – Agenda Item 7**

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**TO:** Valley Clean Energy Alliance Board of Directors

**FROM:** Lisa Limcaco, Director of Finance and Internal Operations, VCE
Chad Rinde, Asst. Chief Financial Officer, Yolo County
Mitch Sears, Interim General Manager, VCE

**SUBJECT:** Operating Budget for Fiscal Year 2018-2019

**DATE:** June 6, 2018

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**RECOMMENDATION**

Staff is recommending that the Board adopt a resolution approving the Operating Budget of $46.3 M for fiscal year 2018-2019.

**BACKGROUND AND ANALYSIS**

The Board adopted a preliminary operating budget and associated expenditure authorizations in March 2018. Staff has updated the operating budget based on an updated view of committed and expected costs. The March preliminary budget and updated budget are both consistent with VCE's fiscal model (proforma).

The proposed operating budget for fiscal year 2018-2019 includes Purchased power and other operating expenses. Purchased power is calculated based on 1) procurements in place for the bulk of expected load in 2018 and 2) expected power prices and load forecasts for 2019. Other operating expenses include several services already under contract and others are currently in the process of being procured. There is considerable uncertainty around unknown expenses in the initial year of operations, as there is no operating history to ensure all items are accounted for. Therefore, staff recommends a contingency of 10% of other operating expenses to be built into the operating budget until VCE gains more operating experience.

Staff intends to recommend at the July, 2018 Board meeting, budget policies to formalize processes for measuring budget compliance, amending budgets, re-class contingency funds and other budgetary oversight procedures.

**CONCLUSION**

Staff recommends Board adoption of the aforementioned resolution.

**ATTACHMENT:**

Operating Budget for Fiscal Year 2018-2019

**VALLEY CLEAN ENERGY - OPERATING BUDGET**
**FISCAL YEAR 2018-2019**

| | July-18 | August-18 | September-18 | October-18 | November-18 | December-18 | January-19 | February-19 | March-19 | April-19 | May-19 | June-19 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Purchased Power | $ 5,759,803 | $ 5,513,333 | $ 4,162,898 | $ 2,964,421 | $ 2,565,524 | $ 2,838,918 | $ 2,933,408 | $ 2,433,747 | $ 2,409,822 | $ 2,235,284 | $ 2,877,209 | $ 4,408,919 | $ 41,103,286 |
| Labor & Benefits | $ 120,405 | $ 120,405 | $ 111,239 | $ 111,239 | $ 111,239 | $ 111,239 | $ 112,480 | $ 112,480 | $ 108,697 | $ 108,697 | $ 108,697 | $ 108,697 | $ 1,345,513 |
| Salaries & Wages/Benefits | $ 62,072 | $ 62,072 | $ 62,072 | $ 62,072 | $ 62,072 | $ 62,072 | $ 63,313 | $ 63,313 | $ 63,313 | $ 63,313 | $ 63,313 | $ 63,313 | $ 752,313 |
| Contract Labor | $ 58,333 | $ 58,333 | $ 49,167 | $ 49,167 | $ 49,167 | $ 49,167 | $ 49,167 | $ 49,167 | $ 45,383 | $ 45,383 | $ 45,383 | $ 45,383 | $ 593,200 |
| Office Supplies & Other Expenses | $ 4,600 | $ 4,650 | $ 5,150 | $ 5,150 | $ 5,150 | $ 5,150 | $ 107,192 | $ 5,192 | $ 10,292 | $ 5,192 | $ 5,192 | $ 5,192 | $ 168,102 |
| Technology Costs | $ 1,000 | $ 1,000 | $ 1,500 | $ 1,500 | $ 1,500 | $ 1,500 | $ 1,520 | $ 1,520 | $ 6,620 | $ 1,520 | $ 1,520 | $ 1,520 | $ 22,220 |
| Office Supplies | $ 100 | $ 100 | $ 100 | $ 100 | $ 100 | $ 100 | $ 102 | $ 102 | $ 102 | $ 102 | $ 102 | $ 102 | $ 1,212 |
| Travel | $ 2,500 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 2,550 | $ 30,550 |
| CalCCA Dues | $ - | $ - | $ - | $ - | $ - | $ - | $ 102,000 | $ - | $ - | $ - | $ - | $ - | $ 102,000 |
| Memberships | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,020 | $ 1,020 | $ 1,020 | $ 1,020 | $ 1,020 | $ 1,020 | $ 12,120 |
| Contractual Services | $ 253,904 | $ 257,912 | $ 201,795 | $ 253,525 | $ 189,354 | $ 191,625 | $ 191,749 | $ 185,333 | $ 188,402 | $ 189,690 | $ 200,378 | $ 213,998 | $ 2,517,664 |
| LEAN Energy | $ 6,000 | $ 6,000 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 12,000 |
| Don Dame | $ 1,500 | $ 1,500 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 3,000 |
| SMUD - Credit Support | $ 73,596 | $ 69,201 | $ 56,984 | $ 48,714 | $ 44,543 | $ 46,814 | $ 46,919 | $ 40,503 | $ 43,572 | $ 44,860 | $ 55,140 | $ 66,739 | $ 637,585 |
| SMUD - Wholesale Energy Services | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 47,000 | $ 564,000 |
| SMUD - Call Center | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 64,521 | $ 66,544 | $ 776,275 |
| CirclePoint | $ 36,401 | $ 36,401 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 72,801 |
| Legal | $ 3,500 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 3,570 | $ 42,770 |
| Legislative/Regulatory | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,000 | $ 20,400 | $ 20,400 | $ 240,800 |
| Accounting Services | $ - | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 8,333 | $ 91,667 |
| Human Resources & Payroll | $ 1,007 | $ 1,007 | $ 1,007 | $ 1,007 | $ 1,007 | $ 1,007 | $ 1,025 | $ 1,025 | $ 1,025 | $ 1,025 | $ 1,025 | $ 1,025 | $ 12,190 |
| Audit Fees | $ - | $ - | $ - | $ 60,000 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 60,000 |
| Banking Fees | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 380 | $ 388 | $ 388 | $ 4,576 |
| Rents & Leases | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 39,000 |
| Hunt Boyer Mansion | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ 1,400 | $ - | $ - | $ - | $ - | $ - | $ - | $ 8,400 |
| Future Office Space | $ - | $ - | $ - | $ - | $ - | $ - | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 5,100 | $ 30,600 |
| Other A&G | $ 33,511 | $ 33,511 | $ 55,018 | $ 55,018 | $ 55,018 | $ 55,018 | $ 56,093 | $ 56,093 | $ 56,093 | $ 56,113 | $ 56,113 | $ 56,723 | $ 624,318 |
| Marketing Collateral | $ - | $ - | $ 21,507 | $ 21,507 | $ 21,507 | $ 21,507 | $ 21,937 | $ 21,937 | $ 21,937 | $ 21,937 | $ 21,937 | $ 22,181 | $ 217,895 |
| PG&E Data Fees | $ 32,261 | $ 32,261 | $ 32,261 | $ 32,261 | $ 32,261 | $ 32,261 | $ 32,906 | $ 32,906 | $ 32,906 | $ 32,906 | $ 32,906 | $ 33,272 | $ 391,363 |
| Community Engagement Activities & Sponsorships | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,000 | $ 1,020 | $ 1,020 | $ 1,020 | $ 12,060 |
| Green-e Certification | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 250 | $ 3,000 |
| Miscellaneous Operating Expenses | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 500 | $ 510 | $ 6,010 |
| Contingency | $ 41,432 | $ 41,838 | $ 37,510 | $ 42,683 | $ 36,266 | $ 36,493 | $ 47,311 | $ 36,470 | $ 36,908 | $ 36,529 | $ 37,598 | $ 39,022 | $ 470,061 |
| TOTAL OPERATING BUDGET | $ 6,215,555 | $ 5,973,549 | $ 4,575,509 | $ 3,433,935 | $ 2,964,450 | $ 3,240,342 | $ 3,453,833 | $ 2,834,914 | $ 2,815,813 | $ 2,637,105 | $ 3,290,787 | $ 4,838,161 | $ 46,273,953 |

**RESOLUTION NO. 2018-_____**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE VALLEY CLEAN ENERGY ALLIANCE ADOPTING THE OPERATING BUDGET FOR FISCAL YEAR 2018-2019**

**WHEREAS**, Valley Clean Energy Alliance ("VCEA"), is a public agency formed in January 2017 under the provisions of the Joint Exercise of Powers Act of the State of California, Government Code Section 6500 et. seq., between the County of Yolo and the City of Davis to provide Community Choice Energy (CCE) programs within the member agencies, and in June 2017, the City of Woodland also joined VCEA adding to the overall VCEA service territory;

**WHEREAS**, the VCE Operating Budget for Fiscal year 2018-2019 includes purchased power and other operating expenses, totaling $46.3 M;

**NOW, THEREFORE**, the Board of Directors of the Valley Clean Energy Alliance hereby adopts the Operating Budget for Fiscal Year 2018-2019.

**PASSED, APPROVED AND ADOPTED** at a regular meeting of the Valley Clean Energy Alliance, held on the ____ day of _____, 2018, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Lucas Frerichs, VCEA Chair

ATTEST: _____
Alisa Lembke, Secretary

APPROVED AS TO FORM:

_____
Eric May, Interim General Counsel

# VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 8

To: Valley Clean Energy Alliance Board of Directors

From: Mitch Sears, Interim General Manager
Shawn Marshall, LEAN Energy US

Subject: Regulatory Update

Date: June 6, 2018

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RECOMMENDATION: Receive attached regulatory report.

BACKGROUND & DISCUSSION:
Participation in CCA regulatory and legislative affairs is a critical aspect of VCEA's long-term planning, operations, and risk management strategy that will grow in importance as VCEA draws closer to full operations. LEAN Energy has been providing regulatory monitoring and reporting on key regulatory issues affecting emergent CCAs. Cal-CCA, of which VCEA is an operational member, participates in regulatory proceedings and also provides coordinated legislative support in Sacramento. Starting in July, regulatory reports will be provided by Keyes & Fox, VCEA's regulatory counsel, as part of their ongoing regulatory engagement now that VCEA is operational.

Regulatory Priorities
Attached please find LEAN's most recent regulatory report (dated June 4, 2018) which provides a summary overview and several links to supporting documents regarding key regulatory issues currently before the CPUC and other State Commissions. Please note that the report makes use of yellow-shading to highlight those items that are new, and green-shading to highlight items that may be of particular interest.

Priority issues called out in this month's report include:

- CPUC's "Green Report" regarding CA Customer Choice Regulatory Framework Options for an Evolving Electricity Market (see update below)
- PCIA Rulemaking (see update below)
- CCA Bond/Financial Security Requirements (see update below)
- Resource Adequacy Rulemaking (see update below)
- Integrated Resource Planning
- Time of Use (TOU) Pilots and Applications
- RPS Procurement Plans

CPUC Green Report Issued: As an outgrowth of the ongoing CPUC Customer Choice Project, the CPUC issued a report entitled California Customer Choice: An Evaluation of Regulatory

Framework Options for an Evolving Electricity Market; also being referred to as the "Green Book." As described by the CPUC, the Green Book is designed to initiate a policy conversation among a wide range of stakeholders and interests about the future of California's electricity market. This draft report will inform the next stage of the Customer Choice Project to gather input before issuing a final paper (expected Summer 2018). Public comments on the draft report are due June 11th. A follow up En Banc has been scheduled for June 22 from 9 -5 pm at the CPUC auditorium in San Francisco.

PCIA Reform (track 2) Schedule/Process

- May 7-11: Evidentiary Hearings
- June 1: Concurrent Opening Briefs/ Request for Final Oral Argument Filed and Served
- June 15: Concurrent Reply Briefs
- Late July 2018: Proposed Decision mailed for comment

CCA Bond Requirement -- Now Called Financial Security Requirement (FSR)
This rulemaking proceeding was originally opened in 2003 to implement the CCA enabling statute AB 117. However, this rulemaking is now focused on the methodology for setting the CCA financial security requirement, which is intended to cover the costs of involuntary re-entry fees of CCA customers to bundled IOU service.

On May 31, the CPUC adopted a slightly revised Agenda Decision, which includes the following revisions:

- A minimum Financial Security Requirement (FSR) of $147,000 was established.
- Surety bonds were reinserted as an acceptable form of security for the FSR.

Resource Adequacy (RA) Rulemaking

The CPUC regularly considers RA-related matters in a rulemaking proceeding. This proceeding was instituted in September 2017, and on January 18, 2018, a Scoping Memo was issued. Among other things, RA-related issues associated with CCA load migration will be addressed in a decision by early June 2018. Recent activities include:

- May 22: Proposed Decision adopting local capacity obligations for 2019 and refinements.
    - For 2019, the PD denies intra-year migration allowed under Resolution E-4907; all CCA load migration must follow the RA year-ahead process.
    - The PD did not adopt a multi-year RA requirement for Track 1, but endorsed an approach for Track 2.
    - RA measurement hours were modified in the PD to align with a shift to later hours (4PM-9PM).
    - Combined energy storage/demand response resources are now eligible RA resources under the PD.

Attachments:
LEAN Energy US May/June 2018 Regulatory Report

To: LEAN Energy Clients:
City of San Luis Obispo
Desert Community Energy
East Bay Community Energy
Monterey Bay Community Power
Valley Clean Energy Alliance
Western Community Energy

From: Shawn Marshall, Executive Director, LEAN Energy US

Date: June 4, 2018

Subject: Regulatory Update #23, May/June 2018

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Each month, LEAN focuses on regulatory activities likely to have broad impact on the Community Choice Aggregation (CCA) community and emergent CCA programs. This memo provides an update on key developments at the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) in the past month.[1] Since this memo is progressive, using information from last month's memo, LEAN makes use of yellow-shading to generally note those items that are new to the report, and green-shading to note those items that may be of particular interest. As a general matter, the information contained at the beginning of a section provides historical information on the issue, and is repeated from month-to-month in order to provide context.

## CCA-SPECIFIC ACTIVITY

### 1. Final Resolution E-4907

As further described below, the CPUC issued a Proposed Decision in the Resource Adequacy (RA) proceeding. The Proposed Decision states that the intra-year transition and waiver process allowed under Resolution E-4907 will not be carried-forward. Instead, CCAs that plan to serve load in the upcoming year must follow the RA process timeline, which initially requires load forecasts to be submitted in April.

On December 8, the CPUC issued Draft Resolution E-4907, (DR) proposing a registration and implementation plan process for CCA programs, including requirements on RA forecasting. The DR would have, in effect, delayed until 2020 the launch of any CCA program that had not submitted an Implementation Plan as of December 8. In response to submitted comments, revisions were made to offer flexibility for CCA programs that wish to serve load in 2019, but had not submitted an Implementation Plan as of December 8, 2017.

On February 8, the Commission approved Final Resolution E-4907. The Energy Division gave a presentation at the Commission Voting Meeting to explain the purpose, requirements and revisions to Resolution E-4907. In sum, the Resolution requires that all CCA programs meet the same forecasting and contracting process for RA as all other Load Serving Entities (LSEs) prior to serving new customers. Energy Division claims the Resolution serves two major purposes:

[1] This monthly memo is designed to provide LEAN's clients with a current snapshot of key regulatory activities related to CCA in order to help them make informed decisions about whether and how to engage in regulatory processes during their program formation and early operations. This monthly report is not a comprehensive inventory of regulatory and statutory requirements impacting operational CCAs. Regulatory and statutory compliance requires a more comprehensive inventory than the subset of activities described herein, and must be tailored to the specific circumstances of each CCA program.

(1) to ensure that CCA programs are incorporated into the annual RA process when they launch or expand (to help avoid cost-shifting); and (2) to satisfy an outstanding order in D. 05-12-041, which required a process on how to submit implementation plans for CCAs and obtain registration for RA. Energy Division states publication of this process will provide needed clarity to prospective communities about how to submit implementation plans and obtain registration.

The Final Resolution grandfathers all CCA programs that submitted implementation plans prior to December 8, 2017. Additionally, the Resolution also includes the Energy Division's plan to process CCA implementation plans submitted by March 1, 2018, within 45 days (which is half the statutory mandate of 90 days.) For CCAs that weren't grandfathered under either of these options, and want to serve load in 2019, there is a waiver process with two options:

1. The CCA can negotiate with the investor-owned utility (IOU) to buy RA needed to serve their load.
2. If the CCA is not able to buy the RA from the IOU, the CCA can submit a letter to the CPUC, and the RA will be assigned at a CPUC determined price.

Recent Activity:

- March 12: the City and County of San Francisco (CCSF) filed an Application for Rehearing (A. 18-03-005).
  - March 27: Joint IOUs' filed a Response.
- April 16: PG&E and King City Community Power file AL 5275-E on RA allocation under Resolution E-4907.
- April 18: Energy Division approves SVCE-PG&E advice letter on RA allocation under Resolution E-4907.
- May 9: SCE and Desert Community Energy submit AL 3801-E allowing for August 2018 launch.

## 2. Petition for Modification of the CCA Code of Conduct

No relevant activity occurred on this matter last month.

On January 30, 2018, the Joint Utilities filed a Petition for Modification of CPUC Decision 12-12-036, which adopted the CCA Code of Conduct as required by Senate Bill (SB) 790 (2011). The Joint Utilities request that the CCA Code of Conduct be modified to eliminate the current limitation imposed on utilities to refrain from "lobbying" against CCA programs, which is broadly defined as communicating with public officials or the public for the purpose of convincing a government agency not to participate in or to withdraw from a CCA program. The Joint Utilities claim that the current restriction is inhibiting their ability to provide timely and effective information to local governments on CCA formation decisions. Responses to the Petition for Modification were filed on March 1. (See CalCCA Response, WRCOG-LACCE-DCE Response, Other Responses.) On March 12, the Joint IOUs filed Reply Comments addressing other parties' responses.

## 3. SCE Submittal of Advice Letter 3781-E Proposing Substantive CCA Tariff Changes

On April 11, 2018, SCE submitted an Advice Letter 3781-E, which contains certain Changes to its CCA tariff. The changes were included in an advice letter that addressed various tariff changes. Among other things, SCE has proposed that it not be involved in rebilling for CCA charges, notwithstanding SCE's role as the exclusive billing service provider for CCA customers. SCE also proposes to modify the scope of its non-disclosure agreement with prospective CCAs, and to limit information that is provided to prospective and operational CCAs. On May 1, CCEA, CPA-WRCOG, and CC Partners filed extensive protests arguing that SCE's proposals are unjustified and that SCE's proposals should be considered in a formal proceeding.

Recent Activity:

- May 8: SCE requested that its advice letter be withdrawn, acknowledging CCEA's protest, which pointed out that SCE failed to include all prospective and current CCAs in its service of the advice letter.
- TBD: SCE indicates that it plans to refile the advice letter.

### 4. Announcement of "Green Book" – Changes to the Retail Choice Regulatory Framework

On May 3, 2018 the CPUC Customer Choice Project issued a draft report, entitled California Customer Choice: An Evaluation of Regulatory Framework Options for an Evolving Electricity Market. This draft report is also being referred to as the "Green Book." Also on May 3, a webinar was held to introduce the Green Book (see presentation). The CPUC indicates the Green Book is designed to initiate a policy conversation among a wide range of stakeholders and interests about the future of California's electricity market. This draft report will inform the next stage of the process to gather input before issuing a final paper (expected Summer 2018).

Next Steps:

- June 11: Public comments on the draft report due.
- June 22: En Banc to be held at CPUC in San Francisco.

## CPUC REGULATORY CASE DEVELOPMENTS

### 1. Power Charge Indifference Adjustment (PCIA) Rulemaking Proceeding

To Do:
LEAN is monitoring developments in the PCIA Rulemaking Proceeding.

Background:

As previously reported, the topics for consideration in the PCIA rulemaking include:

1. Improving the transparency of the existing PCIA process;
2. Revising the current PCIA methodology to increase stability and certainty;
3. Reviewing specific issues related to inputs and calculations for the current PCIA methodology;
4. Considering alternatives to the PCIA;
5. SB 350 considerations on the treatment of bundled retail customers and departing load customers;
6. Status of PCIA exemptions for California Alternate Rate for Energy (CARE) and Medical Baseline (MB) customers.

The initial Scoping Memo established two Tracks of the PCIA Rulemaking proceeding. On March 2, an Amended Scoping Memo was issued establishing a new schedule for the proceeding (reflected below).

Track 1 is addressing exemptions from the PCIA for customers participating in the CARE and MB programs (PCIA Exemption). On March 28, PG&E filed a Motion seeking approval of a settlement agreement regarding the PCIA Exemption, which will apply to CCA customers that receive service prior to the date PG&E first starts phasing-out the PCIA Exemption (likely 2019). Phase-out will occur over a 4-year period in equal increments (e.g., 25% PCIA in 2020, 50% PCIA in 2021, 75% PCIA in 2022, and 100% PCIA in 2023). Alternatively, SCE moved forward to briefing on Phase 1 issues, with Opening Briefs filed February 20 (See: SCE, CCEA, CforAT, ORA, LACCE/DCE/WRCOG) and Reply Briefs filed on March 13 (See Reply Brief Folder.) No responses were filed on PG&E's joint motion for approval of settlement agreement.

Track 2 is considering alternatives to the current PCIA methodology, with initial emphasis placed on how to get proper access to PCIA data through a protective order. Direct testimony was filed April 2. (CalCCA Testimony; Joint IOUs; Combined Folder of all Testimony; CalCCA Press Release; CalCCA Testimony Fact Sheet.) Rebuttal testimony was filed April 23 (CalCCA, Joint IOUs, and Folder of all Rebuttal Testimony). On April 24, the Joint IOUs filed a Request for Oral Argument. Evidentiary hearings took place May 7-11. (See Transcript Folder.)

Recent Activity:

- May 18: CalCCA Ex Parte Meeting (See Notice/Presentation).
- May 21: East Bay Community Energy (EBCE) Ex Parte Meeting (See Notice).
- June 1: 20 parties submited opening briefs on Track 2 issues. (See PCIA Openig Brief Folder.)

Next Steps:

Track 1 – PCIA Exemption

- June: Likely Proposed Decision on the PG&E settlement and on contested matters litigated by SCE and parties.

Track 2 – PCIA Successor

- June 15: Concurrent Reply Briefs.
- Late July 2018: Proposed Decision mailed for comment.

## 2. Integrated Resource Planning (IRP)

To Do:
LEAN is monitoring this proceeding and considering forming a working group to address CCA IRP issues.

Background:

This rulemaking proceeding addresses the new IRP requirements associated with SB 350, as well as long-term procurement planning (LTPP) policies. On December 28, Assigned Commissioner (Randolph) issued a Proposed Decision (PD) setting requirements for CCA programs and other LSEs' IRPs and adopting a two-year planning cycle for the CPUC to consider IRP filings. (See Initial Summary and Recommendation.) As written, the PD minimized the role of local CCA governing boards in approving IRPs and elevated the CPUC's role over such IRPs. On January 17, Parties filed Opening Comments on the PD (CalCCA, SCE and Folder of all Opening Comments.) On January 22, Parties filed Reply Comments on the PD (CalCCA comments).

On February 8, the CPUC approved D.18-02-018 (see Redline PD). The final decision acknowledges a certain degree of distinction and separation between the CPUC and local governing boards, but does not go as far as CalCCA requested. The decision also clarifies that any CCA that has an approved implementation plan as of the scheduled IRP filing date should be required to file an IRP, even if it is not yet serving load. The decision maintained the "Alternative" Plan approach for CCAS serving less than 700 GWh per year in load, but added a number of additional requirements for these IRP submittals (see D.18-02-018 at 135). On April 16, a Ruling granted Valley Clean Energy Alliance (VCEA) party status and also noted that new CCAs are not required to submit motions for party status before their August 1, 2018 IRP filing deadline.

On February 28, several parties (including PG&E and Natural Resources Defense Council) jointly filed a Petition for Modification seeking to modify D.18-02-018 to authorize greenhouse gas-free procurement to replace Diablo Canyon. On March 30, CalCCA filed a response, requesting that the Petition for Modification be rejected. (See Other Parties' Responses). On April 9, PG&E along with other parties filed a Reply to responses to the Petition for Modification.

On April 3, the ALJ issued a Ruling Seeking Comment on GHG Emissions Accounting Methods and Providing Updated GHG Benchmarks. Opening comments were filed April 20 (CalCCA, Joint IOUs, Riverside CCA, San Jacinto, RMEA, and CMUA) and reply comments were filed April 30 (CalCCA and Joint IOUs).

On April 23, PG&E and SCE filed informal comments regarding Draft Sources for 2019-2020 IRP Supply Side Resources. On April 27, an IRP Modeling Advisory Group Webinar was held (See Agenda and Slides). CARB held an SB 350 IRP Workshop on April 30 (See Notice.)

Recent Activity:

- May 14: Amended Scoping Memo and ruling re-categorized the proceeding as ratesetting.
- May 18: Peninsula Clean Energy Ex Parte Notice (Meeting to discuss Energy Division's Net Short Proposal)
- May 25: ALJ Ruling finalizing GHG emissions accounting methods, load forecasts and GHG benchmarks.
- May 25: The CPUC posts IRP Filing Templates.

Next Steps:

- August 1: IRP filings by individual CCAs.
- Early August: Commission Staff workshop for LSEs to present key elements of their IRPs.
- September 12: Stakeholder Comments due on individual LSE IRP filings.
- September 26: LSE reply comments due.

## 3. CCA Bond Requirements

To Do:
LEAN will continue to monitor this proceeding.

Background:

This rulemaking proceeding was originally opened in 2003 to implement the CCA enabling statute (Assembly Bill (AB) 117). However, this rulemaking proceeding is now simply focused on the methodology for setting the CCA Bond, which is intended to cover the costs of involuntary re-entry fees of CCA customers to bundled IOU service. On April 6, a Proposed Decision was issued. On April 26, Opening Comments were filed by Joint Utilities and CalCCA, both of whom are seeking revisions.

Recent Activity:

- May 1: Reply comments filed (Joint Utilities and CalCCA).
- May 31: The CPUC adopts a slightly revised Agenda Decision, which include the following revisions:
  - A minimum Financial Security Requirement (FSR) of $147,000 was established (the original PD would have allowed negative incremental procurement costs to fully offset administrative costs.
    - Given current market conditions, the FSR is expected to be the minimum amount ($147,000).
  - Surety bonds were reinserted as an acceptable form of security for the FSR.

Next Steps:

- Late-June: Guidance from the CPUC Energy Division on process for updating the FSR amount for CCAs.

## 4. Resource Adequacy (RA) Rulemaking

To Do:
LEAN will monitor developments in this RA Rulemaking Proceeding.

Background:

The CPUC regularly considers RA-related matters in a rulemaking proceeding. This proceeding was instituted in September 2017, and on January 18, 2018, a Scoping Memo was issued. Among other things, RA-related issues associated with CCA load migration will be addressed in a decision by June 1, 2018.

On February 16, RA proposals were filed (See Energy Division, CCA Parties, SCE, PG&E and Folder of all Proposals.) A workshop to discuss these proposals took place on February 22-23. (See Agenda, ED Presentation and Email Ruling

noting issues for comment.) On March 7, parties filed Opening Comments on the Track 1 Proposals and Workshop (CCA Parties', PG&E, and SCE; See Folder with all). Reply Comments were filed March 16 (CCA Parties', PG&E, and SCE; See Folder with all). On April 23, CAISO filed its Report on local capacity and flexible capacity needs. On April 24, a working group meeting on RA Reforms took place (see Working Group Questions). On April 27, CalCCA submitted a Motion for Leave to Submit RA-related Information to Staff Under Seal.

Recent Activity:

- May 18: Ruling Granting CalCCA request to submit RA price data under seal.
- May 22: Proposed Decision adopting local capacity obligations for 2019 and refinements. (See PD Summary.)
  - For 2019, the PD denies intra-year migration allowed under Resolution E-4907; all CCA load migration must follow the RA year-ahead process.
  - The PD did not adopt a mult-year RA requirement for Track 1, but endorsed an approach for Track 2.
  - RA measurement hours were modified in the PD to align with a shift to later hours (4PM-9PM).
  - Combined energy storage/demand response resources are now eligible RA resources under the PD.

Next Steps:

- June 11: Opening Comments on Proposed Decision.
- June 16: Reply Comments on Proposed Decision.
- June 21: Expected Adoption of Final Decision.
- July 10: Revised date for submission of Track 2 opening testimony.

## 5. Residential Rates, Default Time of Use (TOU), and Marketing Education and Outreach (ME&O)

To Do:
LEAN will monitor developments in the Residential Rate Rulemaking and Rate Design Window Applications.

Residential Rate TOU-Pilots

On June 28, a Draft Resolution was issued on PG&E's Pilot Residential Rate TOU program. MCE and SCP are the only CCAs participating in PG&E's Pilot TOU program; all other CCAs are excluded from participation. On July 31, MCE and SCP submitted comments on the Draft Resolution, expressing concern about PG&E's lack of progress in providing a comparable bill-comparison tool for CCA customers. On August 10, a Final Resolution approved PG&E's Residential Rate TOU Pilot program. The resolution clarified that PG&E may recover costs necessary to provide CCA customers with rate comparisons for the default pilot entirely through distribution rates. However, the resolution declined to provide any direction regarding the appropriate method or cost recovery for creating a long-term rate comparison tool solution for CCA customers.

Residential Default TOU-ME&O

On September 26, the CPUC submitted Draft Resolution E-4882 addressing PG&E's ME&O on Residential Default TOU Rates. On October 30, CCA parties (MCE, SCP and SVCE) submitted a response to the Draft Resolution, arguing that CCA representatives should be involved in the development of marketing material. On December 14, the Commission approved PG&E's ME&O plan with Final Resolution E-4882, which now recognizes the need for coordination with CCAs in ME&O efforts.

On December 14, a final decision (D.17-12-023) was issued in the residential rate rulemaking on statewide ME&O. This decision expands the existing Energy Upgrade California campaign and permits IOUs to switch customers to TOU rates in waves. (See Redlined Version.)

On January 5, the Commission issued Draft Resolution 4895, approving SCE's ME&O Plan for Residential Default TOU Rates; CCEA submitted Comments on the DR. On February 8, the Commission approved Final Resolution E-4895. The

resolution required SCE to file a Tier 2 advice letter to provide a proposal describing how it intends to engage with CCAs in its service territory regarding the development of default TOU ME&O materials.

Recent Activity:

- March 30: PG&E AL 5263-E, submitting CCA coordination plan pursuant to Resolution E-4882.
  - April 19: CCA Parties Protest, requesting more coordination with CCAs.
  - April 26: PG&E Reply, confirming that issues will be addressed in the consolidated proceeding.
- March 30: SCE AL 3777-E, submitting CCA engagement plan pursuant to Resolution E-4895.
  - April 19: CCEA Protest, requesting more coordination with CCAs.
  - April 26: SCE Reply, confirming that issues will be addressed in the consolidated proceeding.

Default TOU- IOU Applications

On December 20 and 21, PG&E and SCE filed their Rate Design Window (Default TOU) Applications (PG&E Application and Testimony; SCE Application and Testimony). On January 22, parties filed Protests/Responses to the applications. (See CCA Parties' Protest to PG&E and East Bay Community Energy Response to PG&E; see CCEA Protest to SCE).

On January 25, ALJ Tsen issued a Ruling consolidating the three IOU Rate Design Window applications (PG&E - A.17-12-011, SCE - A.17-12-012, SDG&E - A.17-12-013). On February 14, a joint Prehearing Conference Statement was filed, and a Prehearing Conference was held on February 21. On February 23, the CCA Parties' and CCEA filed a Supplemental Prehearing Conference Statement, further arguing that the issue of cost allocation is within the scope of the proceeding.

On March 1, a Scoping Memo was issued for Phase 1, which addressed PG&E's and SCE's requests to delay roll-out until late-2020. Opening Comments on Phase 1 were filed March 12 (PG&E, SCE, SDG&E, ORA, EDF, CFC) and Reply Comments were filed March 19 (PG&E, SCE, SDG&E, CforAT, EDF, CCA Parties, UCAN).

On April 10, a Scoping Memo, for phases two and three was issued and set the schedule for the remainder of consolidated proceeding.

Recent Activity:

- May 17: Phase 1 Final Decision, authorizing PG&E and SCE to begin transitioning eligible residential customers to TOU rates later than originally expected: now October 2020.

Next Steps:

- October 26: Intervenor Testimony for Phase IIB (most CCA related issues).
- December 7: Rebuttal Testimony for Phase IIB (most CCA related issues).

## 6. Renewables Portfolio Standard (RPS)-Procurement Plans

To Do:

A final decision was adopted in this proceeding. LEAN will continue to monitor any developments.

Background:

This rulemaking proceeding addresses ongoing oversight of the RPS program, including review of procurement plans and reporting on RPS progress. The following CCA-related RPS Procurement Plans were submitted July 21, 2017:

- Apple Valley Choice Energy

- Lancaster Choice Energy (LCE)
- Silicon Valley Clean Energy (SVCE)
- MCE
- Peninsula Clean Energy (PCE)
- Pico Rivera Innovative Municipal Energy (PRIME)
- Redwood Coast Energy Authority (RCEA)
- SCP

On September 22, Apple Valley Choice Energy, PRIME, SVCE and LCE submitted Updated 2017 RPS Procurements Plans. On November 1, several CCAs submitted supplemental compliance documents. On November 14, a Proposed Decision was issued, approving all of the submitted CCA RPS procurement plans. On December 12, the Agenda Redline Decision accepted CCA Parties' request on the submission date for new CCAs. On December 14, the CPUC adopted the Final Decision (D.17-12-007). On January 11, PG&E, Monterey Bay Community Power Authority and San Jacinto Power filed 2017 RPS Procurement Plans, followed on January 31 by Rancho Mirage. On March 2, Valley Clean Energy Alliance filed its 2017 RPS Procurement Plan.

Recent Activity:

- May 16: PG&E AL 5294-E seeking approval of power purchase and sale agreements that seek to sell RPS-eligible products from PG&E's existing procured energy portfolio to other LSEs (including CCAs).

## 7. Green Tariff Shared Renewables (Green Tariff or GTSR)

To Do:
No relevant activity occurred on this matter last month. LEAN will monitor developments.

Background:

The Green Tariff program was authorized in SB 43 (2013). The program allows the utilities an opportunity to offer optional Green Tariff rates for customers electing to receive a higher level of renewable energy. The CPUC approved the programs in D.15-01-051. In that decision, the CPUC set a termination date of January 1, 2019 and required the utilities to file advice letters to extend the programs. On December 22, PG&E filed AL 5206-E proposing modifications to its Green Tariff program, and SCE filed AL 3722-E, proposing to terminate its Green Tariff program due to low subscription rates. (See PG&E's 2016 Annual GTSR Report and SCE's Annual GTSR Progress Report.)

On February 2, protests were filed on IOU advice letters. (SCE AL 3722-E: Joint Parties, the Joint Solar Interests, Clean Coalition, and ORA; PG&E AL 5206-E: CCA Parties, CCSF, ORA, SEIA and CCSA). On February 9, the IOUs filed replies to the protests (SCE and PG&E). On February 21, the Annual Green Tariff program forum took place (See Agenda and Presentation.)

Recent Activity:

- March 15: PG&E 2017 Annual Progress GTSR Report and SCE Annual GTSR Progress Report.

Next Steps:

- Disposition letter or draft resolution in response to PG&E and SCE advice letters.

## 8. SDG&E's Request to Establish a Marketing Affiliate (Advice Letter 2822-E) (CCA Code of Conduct)

To Do:
No relevant activity occurred on this matter last month. LEAN will continue to monitor activity related to this matter.

Background:

On January 27, 2017 SDG&E filed a revised compliance plan, Advice Letter 3035, for its Independent Marketing Division (IMD). On February 16, 2017 LEAN joined with other parties in protesting this latest advice letter. On April 6, 2017 the Energy Division issued a Disposition Letter approving AL 3035. On April 17, 2017 the CalCCA sent a letter to the CPUC requesting full Commission review of the Disposition Letter, and reiterating an earlier request for an Order to Show Cause regarding lobbying activity that SDG&E/Sempra conducted before the Advice Letter was approved. CalCCA's request, however, does not suspend the effectiveness of the Energy Division's approval. CPUC staff indicated in a teleconference on July 24, 2017 that no formal action will be taken on the Order to Show Cause.

On a matter related to the CCA Code of Conduct, Cal Choice submitted a Letter to assigned Commissioners on September 25, 2017. The letter expressed concern for SCE's conduct in forming a coalition related to the PCIA. On September 28, SCE submitted a Response.

Next Steps:

- The CPUC's Energy Division will prepare a draft resolution addressing CalCCA's request for full Commission review of the disposition letter. This request is long overdue.
- Separately, the CPUC's Legal Division is preparing a decision responding to SDG&E's application for rehearing of Resolution E-4874, which determined that SDG&E's IMD is also subject to the CPUC's affiliate transaction rules.

## 9. Tree Mortality Nonbypassable Charge (NBC)

To Do:

LEAN will continue monitoring this proceeding.

Background:

On November 14, 2016, the Joint Utilities filed their proposal to establish a Tree Mortality NBC (Testimony.) CalCCA filed a Protest. On July 14, 2017 CalCCA filed a motion arguing that parties should be allowed to argue for different cost recovery treatment for costs that have been statutorily authorized, on the one hand, versus costs that have simply been authorized by the CPUC. On December 12, 2017, there was an Informal Workshop on BioRAM NBC Mechanism IOU/CCA proposals. (See Agenda, CalCCA and IOUs Presentations.) An initial settlement teleconference took place on January 5. On March 14, 2018, a Ruling denied CalCCA's Motion to include consolidated cost recovery in the scope of the application. On April 17, the ALJ issued a Ruling requesting comments on the Energy Division Staff Proposal, which proposes to determine above-market costs by subtracting aggregate 2016 RPS PPA costs from BioRAM PPA costs.

Recent Activity:

- May 11: Opening Comments on Staff Proposal (CalCCA, Joint IOU).
- May 18: Reply Comments on Staff Proposal (CalCCA, Joint IOU, ORA [ORA supports Joint IOU approach]).
- May 30: CPUC issues Scoping Memo, providing for testimony, possible hearings and briefing.

Next Steps:

- June 21: Opening testimony.

## CEC REGULATORY CASE DEVELOPMENTS

### 1. Implementation of AB 1110 – Power Source Disclosure

To Do:

No relevant activity occurred on this matter last month. LEAN is monitoring developments in this CEC Proceeding. (See OIR.)

Background:

This proceeding considers modifications to the Power Source Disclosure Program. Retail sellers, which includes CCAs, will be required to disclose both GHG emissions intensity of their respective electricity portfolios offered to customers and the CEC's calculation of GHG emissions intensity associated with all statewide sales. Retail sellers will also annually report other information to verify procurement claims and environmental claims made for the previous year. The CEC is required to adopt program guidelines by January 1, 2018. On June 27, 2017, CEC staff issued the AB 1110 Implementation Proposal. Numerous parties have submitted comments on the proposal. On September 18, PCE submitted a fairly detailed set of Comments. On January 17, 2018, the CEC released the Revised AB 1110 Implementation Proposal for Power Source Disclosure.

On February 1, 2018, there was a staff workshop on the updates to the Power Source Disclosure regulations (see Notice, Slides, and Transcript). On February 23, parties filed comments on the Revised Proposal (See CalCCA Comments and Joint Utility comments). On April 10, PG&E filed Comments further advocating for PG&E's Clean Net Short proposal.

Next Steps:

- CEC staff continues to work on the AB 1110 Implementation Proposal. AB 1110 set a January 1, 2018 CEC adoption timeframe, with reporting of GHG intensity occurring after December 31, 2018, though this adoption timeframe may be extended.

## CPUC/CEC – JOINT ACTIVITY

### 1. Environmental Justice (EJ) and Disadvantaged Communities (DAC) Issues

To Do:

LEAN will monitor any developments related to the new DAC Advisory Group.

Background:

SB 350 requires that the CPUC and the CEC create a DAC Advisory Group (DACAG), which will assist the two Commissions in understanding how energy programs impact these communities. On July 31, the CPUC and the CEC provided notice of their proposal to establish the DACAG. (See summary.) On November 1, the CPUC released a Draft Resolution and a Solicitation Letter proposing to establish a charter for the DACAG. On December 13/14, the CEC/CPUC approved the DACAG charter (see CPUC Resolution); the CEC subsequently approved 10 members of the DACAG. On April 4, the first meeting took place at the CEC.

On a related note, on March 2, CCEA submitted a Proposal to provide CCA support services in the San Joaquin Valley. On April 6, Parties filed comments on CCEA's San Joaquin proposal. (See TURN, Greenlining and Pilot Team).

Recent Activity:

- May 8: Workshop on Proposed Implementation Plan for AB 523 (see slide deck).

Next Steps:

- May 30: Joint Agency Workshop on Clean Energy in Low-Income Multifamily Buildings.

## CA Air Resources Board (CARB) ACTIVITY

### 1. Low Carbon Fuel Standard

To Do:

LEAN will monitor key CCA-related developments in the California Air Resources Board's (CARB) review of proposed regulations related to the Low Carbon Fuel Standard (LCFS). CARB's LCFS Webpage.

Background:

CARB is considering LCFS amendments that staff expect will be adopted in 2018. The proposed changes range from simple updates to improve the program's overall effectiveness, to more significant proposals for improving California's long-term ability to support the consumption of increasingly lower-Carbon Intensity fuel. (See Current LCFS Regulations). On February 20, CARB posted the Draft Proposed Regulation Order. CCAs are participating in the proceeding to address various issues associated with the CCAs' promotion of transportation electrification and electric vehicle efforts.

Recent Activity:

- April 23: Various parties submitted comments on the draft regulations:
  - Public Comments Folder
  - Smart EV Charging Group (Various CCAs, ChargePoint et al.) Comments.
- April 27: Public hearing to consider proposed amendments to the LCFS regulations. (See Notice.)
- April 30: PG&E and SCE LCFS Standard Annual Reports.

Next Steps:

- June 11: Workshop to discuss proposed amendments to the LCFS regulations.

VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 10

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| | |
|---|---|
| TO: | Valley Clean Energy Alliance Board of Directors |
| FROM: | Mitch Sears, Interim General Manager |
| SUBJECT: | Transmittal of Community Advisory Committee Report – May 30, 2018 meeting summary |
| DATE: | June 6, 2018 |

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This report transmits the Community Advisory Committee's Report regarding its May 30, 2018 meeting.

Attachment
1. CAC Report

Valley Clean Energy Alliance
Community Advisory Committee Report to the Board
Summary of May 30th CAC Meeting

Background: Following a Chair/Vice-Chair discussion in March 2018 with Mitch Sears, Gerry Braun, Christine Shewmaker, Lucas Frerichs and Tom Stallard, it was suggested that instead of a CAC report at the end of the Board meeting, that a brief written summary be included in the Board agenda materials. Included would be short explanations of votes, particularly when they were not unanimous.

- Integrated Resource Plan - Draft

  Reviewed draft of IRP which is due on August 1st. Will review final version at July meeting. Reviewed 4 resource portfolio alternatives and draft recommendations. CAC members will be reviewing Action Plan and submitting their thoughts on priorities to Staff. Additionally, CAC plans to prepare documentation on longer range plans for VCEA. This would be brought to the Board at a meeting later in the year.
- Vote on Suspension of Forward PCC-2 Renewable Procurements

  CAC supported staff recommendation with a vote of 7-0-1. The reason one member abstained was that she felt we need to examine the impacts of PCC-2s more and whether we want to continue to have them in VCE's portfolio.
- Outreach

  After reviewing the Solar Customer page on the website, the Outreach Task Group felt it was overly technical and difficult to understand. Yvonne Hunter of the OTG has prepared a rework of the web page with inputs from the other members of the task group and additional experts in the community. The suggested changes have been handed off to Jim Parks for incorporation.

**VALLEY CLEAN ENERGY ALLIANCE**

**Staff Report – Agenda Item 12**

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**TO:** Valley Clean Energy Alliance Board of Directors

**FROM:** Mitch Sears, Interim General Manager
Olof Bystrom, Sacramento Municipal Utility District (SMUD)
Gary Lawson, SMUD

**SUBJECT:** Integrated Resource Plan (IRP) and 1-3 Year Action Plan

**DATE:** June 6, 2018

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**RECOMMENDATION**

Review draft results of VCE Integrated Resource Plan (IRP) model runs and review 1-3 Year Action Plan.

**BACKGROUND**

VCE is required by the California Public Utilities Commission (CPUC) to prepare an IRP for the supply of energy in the period from 2018 to 2030. The objective of the IRP is to provide guidance for VCEA's Board, executive management, and the public regarding the relative power supply cost impact of various long-term resource options for meeting electric demand in the 2018-2030 period and to ensure that these options are strategically aligned with VCEA's short and long-term vision. SMUD completed draft model runs and presented the run results in and proposed recommendations on which scenario to identify as the "Preferred Plan" for the CPUC filing. These were reviewed with the Community Advisory Committee at its May 30, 2018 meeting.

The 1 to 3 year Action Plan outlines the actions VCE plans to take to achieve the goals and objectives set out in the IRP. The Action Plan can but is not required to include additional actions contemplated by VCE to achieve its short and long-term vision. The activities documented in the attached Action Plan reflect discussion at the April 26 CAC IRP Workshop. The attached action plan list was presented to the Community Advisory Committee and at its May 30, 2018 meeting.

Between now and July, staff will be finalizing the IRP report, as well as the Action Plan, and the CAC will be providing comments on the plan report and will be discussing prioritization and finalization of the Action Plan. The final draft IRP 1-3 year Action Plan will be reviewed by the CAC at its meeting in July for incorporation into the IRP. The final draft IRP, inclusive of the 1-3 year Action Plan will be presented to the VCE Board of Directors for action at the July Board meeting. With the Board's approval of the final draft, VCE will adopt and submit the IRP to the CPUC by August 1.

In addition to prioritizing the 1-3 year Action Plan, Committee members provided a list of strategic initiatives for long term consideration by VCE. The Strategic Initiative list will be discussed during the CAC update.

**Attachments**

A. Draft IRP
B. Draft 1-3 Year Action Plan

**Attachment A**

ATTACHMENT A

Standard LSE Plan

Valley Clean Energy Alliance

2018 INTEGRATED RESOURCE PLAN Draft, June 1, 2018

# Contents

# Executive Summary

Valley Clean Energy Alliance (VCEA) is a joint-powers authority working to implement a state-authorized Community Choice Energy (CCE) program. Participating VCEA governments include the City of Davis, the City of Woodland and County of Yolo. The purpose of VCEA is to enable the participating jurisdictions to determine the sources, modes of production, and costs of the electricity they procure for the residential, commercial, agricultural, and industrial users in their areas. PG&E would continue to deliver the electricity procured by VCEA and perform billing, metering, and other electric distribution utility functions and services. Customers within the participating jurisdictions would have the choice not to participate in the VCEA program. VCEA's vision as an organization and as adopted by its Board in 2017 is shown in Figure 1.

INSERT SUMMARY OF RESULTS AND RECOMMENDATIONS, INCLUDING SUMMARY OF METHODOLOGY, PREFERRED PORTFOLIO AND ACTION PLAN

Figure 1. VCEA Vision

**The near-term vision for VCEA** is to provide electricity users with greater choice over the sources and prices of the electricity they use, by:

- Offering basic electricity service with higher renewable electricity content, at a rate competitive with PG&E;
- Developing and offering additional low-carbon or local generation options at modest price premiums;
- Establishing an energy planning framework for developing local energy efficiency programs and local energy resources and infrastructure; and
- Accomplishing the goals enumerated above while accumulating reserve funds for future VCEA energy programs and mitigation of future energy costs and risks.

**The long -term vision for VCEA** is to continuously improve the electricity choices available to VCEA customers, while expanding local energy-related economic opportunities, by:

- Causing the deployment of new renewable and low carbon energy sources;
- Evaluating and adopting best practices of the electricity service industry for planning and operational management;
- Substantially increasing the renewable electricity content of basic electricity service, with the ultimate goal of achieving zero carbon emissions electricity;
- Developing and managing customized programs for energy efficiency, on-site electricity production and storage;
- Accelerating deployment of local energy resources to increase localized investment, employment, innovation and resilience;
- Working to achieve the climate action goals of participating jurisdictions to shape a sustainable energy future; and
- Saving money for ratepayers on their energy bills.
- Remaining open to the participation of additional jurisdictions.

# Study Design

The study was designed to inform VCEA, its Board, management, and community on the relative energy supply cost differences between different portfolios that would meet the minimum required to achieve compliance with RPS requirements and the 2030 GHG target established by the Commission for VCEA. Four portfolios were modeled: 1. A conforming portfolio that meets the minimum renewable content and GHG emissions requirement at least cost ("Base"); 2. An alternative scenario to emphasize exceeding the CPUC GHG targets in 2030 through greater renewable resource acquisition than the minimum required by RPS at the lowest cost ("Cleaner Base"); 3. An alternative scenario to emphasize exceeding the CPUC GHG targets in 2030 through greater renewable resource acquisition than the minimum required by RPS by placing more emphasis on procurement of local renewable resources ("Clean Local"); and 4. A scenario that uses VCEA's current load forecast and load shape instead of the 2017 IEPR load forecast of the other scenarios. Except for using a higher load, this portfolio is otherwise very similar to the Cleaner Base Scenario ("Cleaner VCEA").

The IRP study period required by the Commission covers 2018 through 2030. VCEA began operations in June of 2018 and therefore 2018 is modeled for the June 1 – December 31 period. As discussed below, VCEA's approach is based on utilizing current market data for the front years of the IRP study period (2108-2021), and using available data and assumptions from CPUC to the extent possible as a basis for resource planning choices in the 2022-2030 period.

Our modeling approach is based on considering VCEA as a "price taker" in the CAISO market wherein it is assumed that VCEA, due to its small peak load and energy demand relative to the rest of the CAISO market, cannot influence prices and therefore can buy and sell power at CAISO spot market prices, as

represented by the RESOLVE model results for the 42 MMT case, wherein CO2 allowance prices are implicitly reflected in the CAISO price.

The GHG planning price is not used in the VCEA model runs, because VCEA does not propose to own or otherwise sign long term contracts for fossil-fueled generation. VCEA's only exposure to GHG avoidance costs is from the cost of GHG mitigation implicit in power market pricing for net purchases of load from the CAISO and for sales of renewables into the CAISO market.

## a. Objectives

The objective of the IRP is to provide guidance for VCEA's Board, executive management, and the public regarding the relative power supply cost impact of various long term resource options for meeting electric demand in the 2018-2030 period and to ensure that these options are strategically aligned with VCEA's short and long term vision (see Figure 1).

The resource portfolios identified in this IRP showcase tradeoffs in terms of costs and greenhouse gas emissions between different resource options and levels of ambition in terms of the amount of renewable and non-GHG emitting energy used by VCEA to meet its load obligations. Four portfolio scenarios are considered to reflect resource choice alternatives as well as potential outcomes in terms of load – including the use of CEC's updated 2017 IEPR load forecast for the mid AAEE and mid AAPV cases. The cases and resource portfolio choices are discussed in the assumptions section below.

## b. Methodology

Based on CEC's IEPR forecasts, annual electric consumption for VCEA in the 2018-2030 period represents less than half a percent of the statewide electric consumption (0.28%). It is therefore expected that VCEA will have little or no opportunity to influence market prices of any of the components of the electric supply for this IRP. In other words, VCEA is a price taker. Under this expectation, VCEA can therefore transact energy, capacity, resource adequacy and enter into short or long term contracts without impacting the overall market prices for these items. This philosophy is reflected in our methodology. In a further effort to make the IRP consistent with CPUC's requirements and assumptions for California as a whole, our methodology for quantifying the costs and greenhouse gas impacts of portfolio alternatives rely exclusively on publicly available data provided by the CPUC to support this IRP process. The only exception is the use of VCEA's own hourly load shape (since none was made available by the CEC) as well as a load-forecast that is used in one of the scenarios that is developed by VCEA and that is used for near term and longer term planning and that reflects a lower level of energy efficiency and behind-the-meter PV compared to the 2017 IEPR forecast.

Four load and resource portfolios are considered in this IRP:

1. Base Compliance Portfolio (aka conforming portfolio)
2. Cleaner Base Portfolio (aka Preferred Portfolio)
3. Clean and Local Portfolio (to reflect more ambitious local resource choices)
4. VCEA Load Portfolio (reflecting the impact of the Preferred Portfolio with a different load)

The detailed assumptions for each portfolio as well as the individual resource components of each portfolio are shown in the Modeling Approach Section below.

### i. Modeling Tool(s)

VCEA's resource plan is based on a simplified production cost modeling approach that utilizes publicly available data from the various tools provided by the CPUC. With this data, VCEA developed a spreadsheet model that captures the expected costs of providing electricity to VCEA's customers in the 2018-2030 period under different resource portfolio alternatives. Thus, no formal commercially available production cost model is used, but the analysis is consistent with the data and assumptions of the RESOLVE model, the GHG calculator, and the RPS calculator.

The RESOLVE model provides a simplified representation of the entire WECC system and performs a cost-based simulation and forecast for the 2018-2030 period that selects resources and provides estimates of total and marginal costs as well as emissions and reliability parameters. With this model, only 37 representative days per year are modeled and subsequently aggregated to provide an estimate of full-year impacts. In contrast, the spreadsheet model utilized by VCEA assumes that prices and resources are given and treats VCEA as a price taker in the CAISO market, in which VCEA's objective is to minimize costs for meeting its resource needs at given prices for capacity, energy, and new resources. However, the input assumptions used for this model are almost exclusively drawn from the RESOLVE model results and input assumptions. We believe this approach provides a view of VCEA's resource costs and portfolio options in the 2018-2030 period that is consistent with the RESOLVE model.

The main difference between the RESOLVE model and the simplified production cost model used by VCEA in this IRP is the hourly load profile used: Both RESOLVE and the GHG Calculator use a generic hourly load forecast that is not tuned to VCEA's actual expected hourly load shape. As discussed below, we instead rely on a bottom-up forecast for VCEA that is based on an aggregation of meter data in Yolo County which contributes to a more accurate load shape in our modeling. Care should therefore be taken when aggregating the Conforming portfolio in this report into the aggregate model that CPUC has a vision to complete. In addition, VCEA's load forecast and load shape are based on a forecast for all 8760 hours of a normal year. Therefore, in order to be able to use the hourly RESOLVE marginal costs for CAISO power, these were re-calculated to an 8760 price series, whereby the RESOLVE prices were first compacted into a monthly 24h hourly power price and subsequently extrapolated to create an 8760 price series. As an example, this means that with this approach, there are only 24 hourly prices in each month – every first hour of each day has the same price, and so on. While simplified, this approach provides a view of marginal electricity costs in the CAISO market that is consistent with the RESOLVE model results and also captures the impact of carbon prices on the CAISO market price for electricity.

### ii. Modeling Approach

The IRP covers the period 2018-2030. However, not every year is modeled. For the first 3.5 years of the forecast, June 1, 2018 through December 31, 2021, our outlook is based on market forecasts and expectations of market prices rather than a production cost model. We feel that this provides a more realistic approach to near term resource costs. We also expect that in the 2018-2021 period, the majority of resources used to meet VCEA's load will be based on short term contracts and market purchases that will cover VCEA's need for energy, capacity and RPS-eligible renewable energy (and/or RECs).

For the period 2022-2030, VCEA relies on the materials available from the CPUC as described under Modeling Tools above as well as in the assumptions section of this chapter. As a result, only the years 2022, 2026 and 2030 are analyzed into hourly detail and only for these years are the detailed portfolio choices considered.

### *Resource Portfolio Alternatives Considered*

VCEA considered four alternative resource portfolios to obtain a range of potential outcomes that will help guide future procurement and illustrate trade-offs in terms of costs and the amount of energy bought in the CAISO market. All four resource portfolios are designed to comply with California's 2030 RPS goals as well as with the CPUC GHG emissions benchmark of 129,000 tons by 2030.

The four scenarios considered were constructed around shifting three policy parameters that are important to VCEA: The overall carbon footprint of the portfolio, the amount of RPS-eligible renewable energy, and the resource mix, including the amount of energy that is sourced from locally available renewable energy sources. Note that since VCEA currently does not have any resources under ownership or long term contracts, the IRP portfolio alternatives are purely for illustration of options and potential trade-offs. One of the portfolios, VCEA Cleaner Base, uses VCEA's load forecast rather than the IEPR to illustrate the potential range of capacity that must be procured to meet energy and capacity needs.

As discussed in the Action Plan section of this report, we expect that the actual resource trade-offs and costs will be discovered only following more detailed studies and evaluation of actual offers for long term supply. Table 1 below provides an overview of the Resource Portfolios.

**Table 1 Resource Portfolios**

| Portfolio | Portfolio Aspect | 2018 | 2022 | 2026 | 2030 |
|---|---|---|---|---|---|
| **Base** | Load Forecast | IEPR | | | |
| | Resource Mix | Least cost California resources. Local renewables if cost effective. | | | |
| | RPS | 42% | 42% | 45% | 50% |
| | Carbon Free | 75% | 75% | 75% | 75% |
| **Cleaner Base** | Load Forecast | IEPR | | | |
| | Resource Mix | Least cost California resources. | | | |
| | RPS | 42% | 60% | 70% | 80% |
| | Carbon Free | 75% | 100% | 100% | 100% |
| **Cleaner VCEA** | Load Forecast | VCEA (Higher than IEPR due to omission of AAEE and AAPV) | | | |
| | Resource Mix | Least cost California resources. | | | |
| | RPS | 42% | 60% | 70% | 80% |
| | Carbon Free | 75% | 100% | 100% | 100% |
| **Clean Local** | Load Forecast | IEPR | | | |
| | Resource Mix | Expand local wind, biomass, geothermal and solar from 2022. | | | |
| | RPS | 42% | 60% | 70% | 80% |
| | Carbon Free | 75% | 100% | 100% | 100% |

VCEA plans to secure RPS resources from RPS-eligible California resources as well as through PCC1 RECs. Carbon free resources are expected to be purchases under long or short term contracts that do not qualify for RECs but are otherwise carbon free, such as large scale hydro resources from California or the Pacific Northwest. The resource mix under each of these portfolios is shown in separate Excel files that are submitted together with this IRP. It should be noted, that for near term supply, VCEA will rely on available generic non-resource-specific power in the CAISO market for energy and capacity and on RECs to meet RPS requirements.

### *Modeling Approach Details*

For the 2018-2021 period, VCEA models costs and resource portfolio impacts for each year based on expected market conditions, as described by currently available price in bilateral markets for energy and capacity as well as electric power futures from the Intercontinental Exchange (ICE) for NP15. Electric demand is based on CEC's 2017 IEPR Baseline Electric Mid Demand Mid AAEE and AAPV forecast, as published in April 2018[1]. Since CEC does not publish hourly demand profiles for VCEA, we elected to use an hourly demand forecast based on VCEA's own hourly load forecast to convert and shape the electric demand in the IEPR to an hourly forecast.

For the 2022-2030 period, VCEA relies on data from the GHG calculator and the RESOLVE model's updated results for the 42MMT case, as made available by the CPUC in April 2018[2]. The main RESOLVE model results and assumptions used include: hourly CAISO market price forecast, levelized costs of new entry of renewable energy capacity and lithium ion batteries, resource potential for new capacity in California.

The spreadsheet model was developed based on existing tools and data from the CPUC and uses renewable energy profiles and the IRP portfolio selection to calculate the "clean net short" for each hour of the forecast period. The gap between renewable energy generation in each hour is then expected to be filled with CAISO energy purchases at prices made available through RESOLVE. To calculate the clean net short for VCEA, we use the renewable energy profiles from CPUC's GHG Calculator version 1.3[3]

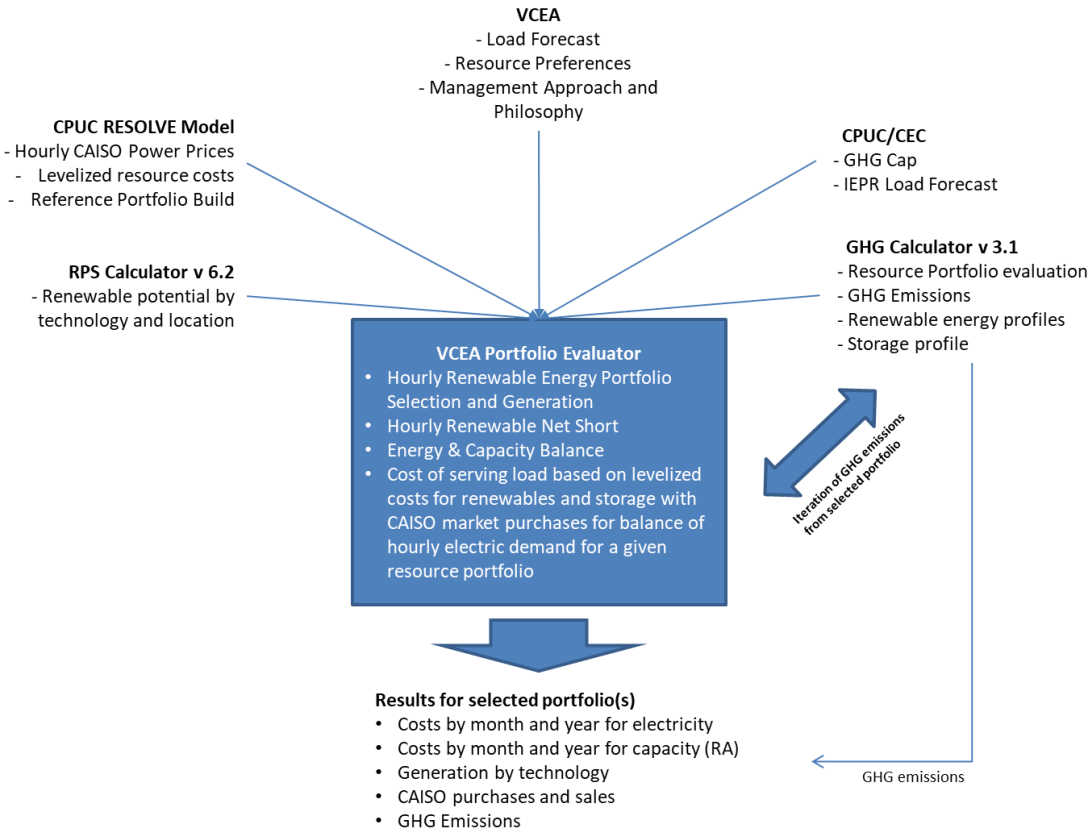
Figure 2 below provides an overview of the modeling methodology used in this IRP.

[1] https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-IEPR-03

[2] http://cpuc.ca.gov/General.aspx?id=6442457210

[3] While largely the same as the RESOLVE renewable energy profiles, the GHG calculator provides for full 8760h per year renewable energy profiles that are more useful for VCEA's mode.

**Figure 2. Modeling Methodology**




## iii. Assumptions

### *Load*

VCEA uses two load forecasts to assess a total of four resource portfolios in this IRP: The first is the "mid Baseline mid AAEE mid AAPV" version of Form 1.1c of the CEC's adopted 2017 IEPR forecast, that was published in February of 2018 (henceforth IEPR forecast). This is the main forecast used in this IRP. The annual energy demand in this forecast is shown in Table 2, below. No modification was made to this forecast other than adding an hourly load shape (not available from CEC).

Due to the fact that the IEPR forecast published in February by the CEC does not include any hourly forecast of electric demand for VCEA, we used an hourly load shape based on VCEA's own forecast of hourly demand that is based on historical meter data for the VCEA service territory (described below and in Appendix 1) to estimate the annual peak load for VCEA for the IEPR forecast. The estimated annual peak load using this approach is also shown in Table 2. We estimate that using VCEA's forecasted load shape will lead to a slightly lower load factor (peakier load) compared to using the hourly load shape for PG&E as a whole, considering that VCEA's load is not moderated by coastal weather to the same extent as PG&E.

The second load forecast is used as an alternative to illustrate the impact of a more limited expansion of energy efficiency and behind-the-meter solar PV, and is used by VCEA in its short term load forecasts and

resource procurement (henceforth VCEA forecast). This forecast is also what VCEA filed with the CEC as part of the IEPR process. It represents a detailed bottom-up view of expected hourly generation that utilizes hourly metering data for all VCEA-eligible customers that were rolled up into an aggregate hourly forecast. A detailed overview of VCEA's load forecast methodology is available in Appendix 1 to this report. One key difference between the IEPR forecast and the VCEA forecast is that the unlike the IEPR forecast used in this IRP, the VCEA forecast does not include any incremental energy efficiency, behind-the-meter solar resources or other demand changing measures beyond what is already reflected in the historical statistical trends used as a basis for the forecast. The expected annual energy and peak demand with the VCEA forecast is shown in Table 2.

**Table 2. Updated IEPR forecast and VCEA load forecast. (Annual Energy and Peak Demand) under the updated 2017 IEPR forecast Mid AAEE, Mid AAPV case**

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2026 | 2030 |
|---|---|---|---|---|---|---|---|
| 2017 IEPR forecast Mid AAEE, Mid AAPV case | 456 | 762 | 756 | 753 | 752 | 738 | 726 |
| Expected annual peak load in IEPR forecast (MW) | 217 | 231 | 229 | 228 | 228 | 224 | 220 |
| VCEA load forecast (GWh) | 504 | 793 | 797 | 798 | 801 | 813 | 826 |
| VCEA annual peak load (MW) | 236 | 238 | 239 | 240 | 241 | 244 | 248 |

## *Expected Power Market Prices and Resource Costs*

### 2018-2021

In the early part of the IRP planning horizon, covering the 2018-2020 period, VCEA expects to rely mainly on short-term contracted resources to meet resource needs. By 2021, VCEA will need to have in place long term renewable supply contracts of terms at least 10 years in duration for at least 65% of its minimum RPS obligations. Those long term contracts are expected to begin phasing in during 2020. For the short term resource supply, VCEA expects to procure them at current market prices and that these market prices will remain relatively stable in the 2018-2021 period. For this period, our estimates of costs for generation are therefore based on current market conditions for electricity and RA.

For the 2020-2021 period, we use the ICE power forwards for NP15 as a guidance to expected spot market prices. We also expect RA costs to remain stable. The latter assumption is supported by forecasts by CAISO and NERC that suggest that California reserve margins will remain above California's 15% planning reserve margin until at least 2024 when the Diablo Canyon nuclear facility retires. Table 3, below shows the expected electricity prices, resource adequacy and REC prices for the 2018-2021 period.

**Table 3. Power, RA, REC and Carbon Free Prices 2018-2021**

| | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| Wholesale electric power prices ($/MWh) | 29.5 | 29.5 | 31.9 | 35.0 |
| Resource Adequacy ($kW-yr) | 44.3 | 44.3 | 44.3 | 65.4 |
| PCC1 RECs ($/MWh) | 16.0 | 16.0 | 16.0 | 16.0 |

| | | | | |
|---|---|---|---|---|
| Carbon Free Price Premium ($/MWh) | 2.3 | 4.0 | 4.0 | 4.0 |

For modeling purposes VCEA does not expect that the long term renewable supply contracts put in place to meet the 2021 requirement that will start delivery of substantial quantities of energy enter into any ownership or long term PPAs that will have a material impact on power supply in the 2018-2020 period.

### 2022-2030

From 2022 onwards, the IRP relies on results and assumptions from the RESOLVE model as an approximation of expected market conditions, including CAISO power prices, value of additional capacity to meet planning reserve margins and local capacity margins, and the cost of new entry for new capacity with which VCEA is assumed to be able to contract. Table 3 summarizes the annual expected values for power, RA, RECs, and the estimated price Premium for Carbon Free key energy.

For new or existing renewable energy capacity that VCEA will enter into contracts for in the 2018-2030 period, VCEA relies on the RESOLVE model's cost of new capacity entry. As part of the Action Plan described in Section 4 of this report, VCEA expects to conduct a solicitation for new resource in 2018 and in 2019. As part of that process, it is anticipated that more detailed insights will be gained regarding near term costs for new capacity that will eventually replace the RESOLVE model assumptions used in this report. Note that VCEA only performs a detailed assessment of resource needs and resource portfolios for the years that were covered in the RESOLVE model, namely 2022, 2026 and 2030.

**Table 4. Power, RA, REC and Carbon Free Prices 2022-2030**

| | 2022 | 2026 | 2030 |
|---|---|---|---|
| Wholesale electric power prices ($/MWh) | 36.8 | 47.9 | 99.1 |
| Resource Adequacy ($kW-yr) | 83.6 | 116.4 | 110.2 |
| PCC1 RECs ($) | 16.0 | 16.0 | 16.0 |
| Carbon Free Price Premium ($/MWh) | 4.0 | 4.0 | 4.0 |

## *VCEA Market Modeling Assumptions*

There are several assumptions that may influence the results of the IRP as shown in this study. For example, per the instructions offered in the guidelines to this IRP template provided by the CPUC as attachment A to R.16-02-007 COM/LR1/lil/jt2, load serving entities (LSEs) are directed to "*.. assume that other LSEs procure in a manner consistent with the Reference System Plan*" . VCEA is a small LSE that represent only 0.28% of the anticipated CAISO electricity consumption in the 2018-2030 period. It is therefore assumed that VCEA's resource decisions will not impact market prices for power, capacity, or new renewable energy resource costs during the 2018-2030 period. Thus, if other LSE perform in accordance with the Reference System Plan, then VCEA will be able to buy and sell power at the prices modeled in RESOLVE (as a price taker) and will be able to enter into long term contracts at the levelized cost levels shown in the RESOLVE model's results for the Reference System plan.

The RESOLVE model Reference System Plan suggests that planning reserve margins in California will exceed 15% for the entire 2022-2030 period. As a result we can expect that sufficient capacity is available for procurement of resource adequacy as well as energy in the 2022-2030 period from the market.

VCEA's resource plan assumes that its resource portfolio will include only RPS-eligible renewable energy resources, and that the balance of its electricity and resource adequacy supply will be procured in CAISO

electricity markets. Consistent with VCEA's long term vision of increasingly procuring local resources and contributing to the development of new capacity, VCEA expects its portfolio of resources to be located primarily in northern California. It is also assumed that any additional capacity needed to meet electric demand in any hour during the 2022-2030 period can be met with RA and energy resources that are available in the CAISO market. Thus, all resource portfolios envision contracting for less than 100 percent of VCEA's total anticipated energy and capacity need.

### *Planning Reserve Margins, Local RA, and Flexible Resource needs*

All resource portfolios in this IRP are based on contracting and procuring energy and capacity to meet the annual energy demand as well as the expected monthly capacity need, including a 15% planning reserve margin to meet resource adequacy needs. It is also assumed that in procuring capacity to meet a 15% reserve margin, the procured capacity will be able to also meet local and flexible ramping needs. As a result, no additional capacity is envisioned to meet this need. This is consistent with the modeling results of RESOLVE for the Reference System Plan, which suggests that sufficient capacity will be available in CAISO and in the North Bay area without additional procurement (by VCEA or other LSEs) of additional new thermal capacity.

### *Inflation*

Unless otherwise indicated, all cost impacts shown in this IRP are in constant 2016 dollars. For the purpose of estimating nominal costs or for converting nominal dollars to real, the IEPR deflator posted on CPUC's IRP website was used[4].

### *Greenhouse Gas Planning Price and Emissions Benchmark*

The greenhouse gas planning price is not explicitly used in this IRP since all of the resources identified by VCEA are renewable resources not emitting any greenhouse gas. Instead, we utilize as an estimate of future prices, RESOLVE's hourly CAISO prices for the Reference System Plan, in which the Greenhouse gas planning price should be reflected implicitly and therefore does not need to be considered separately.

This IRP includes three conforming resource plan options, of which VCEA's Board has adopted the Cleaner Base Portfolio as its Preferred Portfolio. All of the resource portfolios show that the expected greenhouse gas emissions are lower than the Greenhouse Gas Emissions Benchmark for VCEA of 129,000 metric tons by 2030. This is a result of focusing mainly on renewable energy and storage as well as the stated policy of VCEA to be at least 75% carbon free – a goal that is expected to be achieved by a cost-effective combination of contracted renewable energy resources, RECs, and procurement of energy from carbon free resources that are not eligible for the RPS such as existing large scale hydro facilities. Enclosed with this IRP, VCEA also submits the GHG calculator tool showing the estimated 2030 emissions from its 2030 Preferred Portfolio.

Pursuant to the April 3 ruling by the CPUC regarding GHG Benchmarks, VCEA calculated its estimated greenhouse gas emissions for 2030 using the Clean Net Short method by utilizing version 1.3 of the GHG Calculator tool.

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[4] http://cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/UtilitiesIndustries/Energy/EnergyPrograms/ElectPowerProcurementGeneration/irp/2018/IEPR_dollar_deflator_series_2018-04.xlsx

# 3. Study Results

This section shows study results for the four different IRP portfolios that were considered by VCEA. Detailed portfolio selection results are shown in Excel spreadsheets that were filed together with this IRP. However, we emphasize the tentative and hypothetical nature of this IRP. Due to the fact that VCEA just started its operations in June of 2018 and the fact that VCEA has not yet entered into long term contracts for new or existing resources, the identified resource portfolios should be seen as tentative and expressing a broad direction rather than a precise result. VCEA expects that its resource and contracts portfolio will evolve significantly in the 2018-2021 period.

## a. Portfolio Results

Four resource portfolios were considered by VCEA in this IRP in order to obtain directional insights on future resource investment alternatives that are aligned with VCEA's long term vision for how to serve its customers in the future. Since VCEA does not yet have any resources under contracts spanning beyond 2019, the results shown in this section as well as in the attached spreadsheets that provide details on the portfolio selection, are necessarily approximations that should be viewed as options and guidance on general direction rather than providing specific detailed procurement targets. VCEA expects that in the next 1-3 years, as it conducts additional studies and gains operational experience, it will develop more detailed procurement plans for short and long term contracting of resources. These planned activities are described in Section 4 of this report.

Table 5 below shows a summary of resource portfolio results for each of the four portfolios considered. Except for the portfolio entitled Cleaner VCEA, all resource portfolios shown in Table 5 could be considered Conforming Portfolios, i.e. they meet all CPUC and regulatory requirements. VCEA's Board utilized these alternative portfolios in its consideration of future resource policy. The portfolio entitled Cleaner Base was selected as VCEA's Preferred Portfolio and Section 3b provides a detailed overview of this portfolio and how it complies with regulatory and statutory requirements. The detailed resource choices for each portfolio are also shown in the following Excel files that were submitted together with this IRP:

- LIST OF XLS FILES FOR NEW AND EXISTING RESOURCES – TWO FILES FOR EACH PORTFOLIO IN CPUC FORMAT

**Table 5. Portfolio results summary (MW Nameplate Capacity)**

| | Base | | | | CleanerBase | | | | CleanLocal | | | | Cleaner VCEA | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2018** | **2022** | **2026** | **2030** | **2018** | **2022** | **2026** | **2030** | **2018** | **2022** | **2026** | **2030** | **2018** | **2022** | **2026** | **2030** |
| Wind | 0 | 49 | 33 | 46 | 0 | 51 | 55 | 5 | 0 | 31 | 20 | 30 | 0 | 51 | 55 | 50 |
| BTM Solar | 0 | 39 | 52 | 65 | 0 | 39 | 52 | 65 | 0 | 39 | 52 | 65 | 0 | 0 | 0 | 0 |
| Solar | 0 | 69 | 91.5 | 91.5 | 0 | 120 | 140 | 173 | 0 | 85 | 89 | 104.5 | 0 | 121 | 150 | 190.5 |
| Local Solar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36.5 | 36.5 | 36.5 | 0 | 0 | 0 | 0 |
| Geothermal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 6 | 0 | 0 | 0 | 0 |
| Biomass | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 0 | 0 | 0 | 0 |
| 4 hour Li-Ion Battery Storage | 0 | 0 | 3 | 20 | 0 | 3 | 7 | 20 | 0 | 3 | 7 | 20 | 0 | 3 | 7 | 20 |
| Percent RPS Delivered | 42 | 42 | 45 | 50 | 42 | 60 | 70 | 80 | 42 | 60 | 70 | 80 | 42 | 60 | 70 | 80 |
| Percent Carbon Free | 75 | 75 | 75 | 75 | 75 | 100 | 100 | 100 | 75 | 100 | 100 | 100 | 75 | 100 | 100 | 100 |

## b. Preferred Portfolio

VCEA's Board of Directors at its meeting on July [TBD], 2018, approved this resource plan, including the Cleaner Base Portfolio which was selected by the Board as its Preferred Portfolio. This portfolio represents an ambitious combination of renewable and carbon free energy that will allow VCEA to reach an 80% RPS level by 2030 and to become carbon neutral by 2022 through a combination contracted renewable energy resources REC purchases and procurement of energy from carbon free resources such as large scale hydro. A summary of the resource choices in this portfolio is shown in Table 5, above. The resulting generation from the Preferred portfolio as well as the estimated annual electric demand is summarized in Table 6, below. Portfolio details for the Preferred Portfolio are also shown in the Excel files TBD and TBD.

**Table 6. Summary of annual electric demand and generation by resource group for the Preferred Portfolio Cleaner Base (MWh).**

| | 2018 | 2022 | 2026 | 2030 |
|---|---|---|---|---|
| Wholesale Energy Demand | 488,226 | 804,926 | 789,678 | 776,575 |
| ST Contracted Energy | 351,040 | | | |
| CAISO Energy | (10,154) | 54,597 | 57,954 | 73,786 |
| Carbon Free Energy[5] | 147,340 | 296,472 | 221,312 | 142,081 |
| Wind | - | 141,461 | 153,647 | 139,579 |
| Solar | - | 314,176 | 363,075 | 444,342 |
| Storage | - | (1,780) | (6,309) | (23,213) |
| | | | | |
| RPS Delivered (% of Retail load) | 42 | 60 | 70 | 80 |
| Percent Carbon Free Supply (of Retail Load) | 75 | 100 | 100 | 100 |
| Estimated Portfolio GHG Emissions (MT 000) | N/A | 61 | 78 | 97 |

The portfolio generation summarized in Table 6, above, shows the performance of a tentative resource portfolio for VCEA that is consistent with VCEA's long term vision while at the same time meeting CPUC and statutory requirements as well as delivering a cost-effective portfolio. The resource choices are based on estimated short term and long term costs for energy, capacity, renewables and carbon-free energy.

VCEA's long term operational goals include maintaining electricity prices that are competitive with PG&E retail prices while at the same time delivering a supply portfolio that is both cleaner and more locally sourced than PG&E's portfolio. Considering these priorities, the long term portfolio mix is likely to be adjusted compared to the above in line with changes in market prices.

The main renewable resource available to VCEA for new development is solar PV. In Yolo County and its surrounding areas, there are very few options for other types of renewable energy such as wind, biomass, and geothermal energy. VCEA expects to explore such supply options opportunistically depending on what prices and terms can be obtained from new and/or existing RPS-eligible resources.

[5] Carbon Free Energy is supply of electricity that is certified to be carbon free but typically not RPS eligible or synced with hourly load for VCEA. Sources likely include in state or out of state large hydro facilities

Based on the levelized cost estimates that were included in the RESOLVE model, VCEA expects solar PV along with wind to be the lowest cost supply alternative for supply from existing and new sources in the 2018-2030 period. As part of VCEA's action plan that is described in Section 4 of this report, we plan to conduct solicitations for near term and long term renewable energy supply, which we expect result in PPAs for VCEA's future supply, As part of this process, we also expect to develop a deeper understanding of what resources can be developed locally and the estimated costs for such resources. It should therefore be emphasized that the specific resource groups identified in the Excel files submitted with this IRP (Large Hydro, Northern California Solar, etc) are only indicative sources of potential supply that may change depending on availability and price of resources – if VCEA were to have the opportunity to secure lower cost renewable energy supply from other sources, those would most likely be considered and perhaps used for contracting.

In line with many other industry analysts, the RESOLVE model's levelized costs for battery storage also suggests a long term declining trend. Declining costs for battery storage also suggest that in the next ten years, batteries are likely to become the most cost-effective means of meeting VCEA's resource adequacy needs, surpassing traditional gas-fired generation in terms of resource costs. Therefore, the Preferred portfolio includes up to 20MW of battery capacity by 2030, far surpassing the statutory mandate of 1 percent of VCEA's demand. If battery storage costs decline faster than anticipated, VCEA may consider to increase its reliance on batteries, and conversely, if battery costs remain at close to 2018-2020 levels, then VCEA is likely to rely more on market purchases for its RA needs.

The estimated Greenhouse gas emissions from the Preferred portfolio are far below the 2030 Greenhouse Gas Emissions Benchmark that was mandated by CPUC in its April 3, 2018 ruling on GHG benchmarks, which stipulated a GHG Emissions Benchmark for VCEA of 129,000 tons per year. There are two reasons why VCEA's GHG emissions are expected to be significantly below this benchmark. First, the modeling performed by VCEA suggests that higher RPS levels can be achieved at little or no incremental cost compared to other more carbon intensive portfolios. This result is of course a direct result of the expected market prices for energy and the expected levelized costs for new renewable energy resources - should costs change significantly, VCEA expects to also re-prioritize its portfolio. Second, VCEA already delivers electricity that is 75% carbon free. By increasing its procurement of carbon free energy, VCEA expects to be able to be carbon neutral by 2022 and offset 100 percent of its retail energy sales with RPS eligible energy or carbon free resources. Procurement of carbon free (non RPS) resources manifests itself in the GHG Calculator as procuring energy from "Large Hydro" as a proxy for generic carbon free energy. We also note that RPS levels and the estimated clean net short estimated through the GHG calculator differ somewhat from VCEA's own calculations and modeling using the methodology described in section 2 of this report. We expect that a leading cause of such discrepancies is the load shape applied to VCEA's load – the load shape in the GHG calculator appears to be more generic than the VCEA-specific shape used by VCEA for developing its portfolio.

### *Statutory Requirements under PUC 454.52 (a) (1)*

Section 454.52 (a) (1) of the Public Utility Code sets out a number of requirements which LSE's must demonstrate that they meet the following requirements in their IRP:

- **Meet GHG emissions reduction targets established by the State Air Resources Board.** VCEA's Preferred Resource Portfolio shows estimated GHG emissions of 97,000 metric tons per year by 2030, which is well below the 129,000 per year planning target established for VCEA. In fact, when taking VCEA's planned procurement of carbon free resources such as hydro and its planned 80% RPS level into account, VCEA plans to become carbon neutral by 2022.
- **Procure at least 50 percent eligible renewable energy resources by December 31, 2030.** All portfolios considered in this IRP will meet the statutory RPS requirements. The Preferred Portfolio will significantly exceed the RPS by getting to an 80 percent RPS by 2030. As noted above, the actual level achieved is subject to continuous evaluation by VCEA and will depend on how market

conditions and prices for renewable energy evolve. While VCEA has a strong commitment to a clean local supply of energy, maintaining competitive retail electric prices are also a key consideration in the balancing of priorities for VCEA.

- **Enable each electrical corporation to fulfill its obligation to serve its customers at just and reasonable rates.** Although technically not applicable to VCEA as it is a CCA and not an electrical corporation, VCEA's goal is to keep its rates competitive with PG&E (see Figure 1). As an example, VCEA in 2018 adopted rates that were set to be 2.5 percent below PG&E's for the generation portion of customers' generation portion of the bill.
- **Minimize impacts on ratepayers' bills.** See section 3.b.ii below.
- **Ensure system and local reliability.** Since VCEA is not a distribution utility, most of the obligations in this area do not apply. However, VCEA, in its resource plan have incorporated the need for providing system and local RA at 115% of the expected monthly peak load for VCEA. The estimated costs for such capacity is incorporated in the resource costs for all portfolios, including the Preferred Portfolio. Additionally, VCEA will incorporate into its long-term power purchase agreements with intermittent renewable resources the ability to curtail output in the face of negative market prices.
- **Strengthen the diversity, sustainability, and resilience of the bulk transmission and distribution systems, and local communities.** VCEA is not responsible for the transmission and distribution systems and this requirement is therefore not applicable to VCEA.
- **Enhance distribution systems and demand-side energy management.** At this point in its short existence VCEA has not taken any action regarding demand side energy management. As highlighted in the Action Plan in section 4 below, VCEA plans to conduct studies regarding commencing programs that could include energy efficiency, demand response and other incentives for VCEA customers, once VCEA accrues sufficient financial reserves to start such activities. Until such time that VCEA starts any demand or efficiency programs, all such activities and programs will be the responsibility of PG&E as the distribution utility for VCEA.
- **Minimize localized air pollutants and other greenhouse gas emissions, with early priority on disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code.** See section 3.b.i below.

### i. Local Air Pollutant Minimization

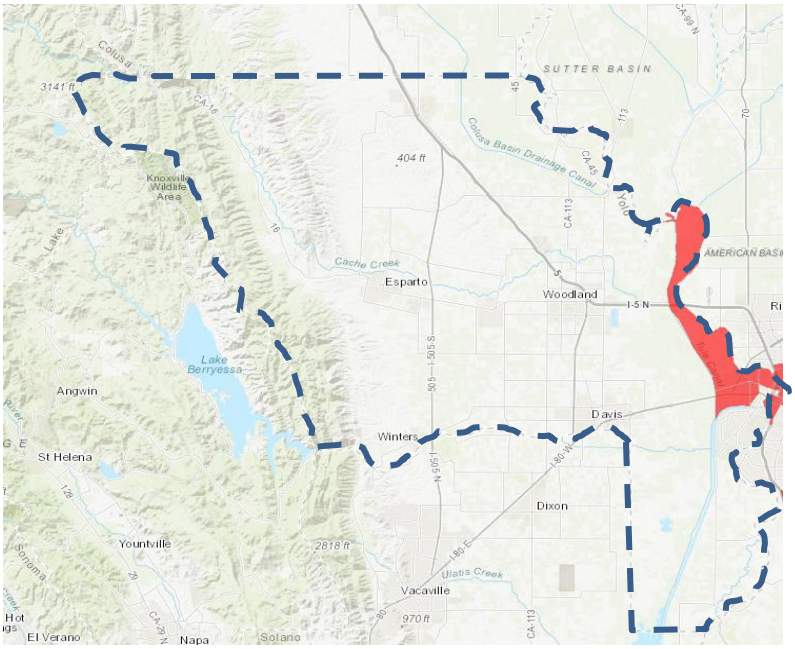
VCEA's Preferred Portfolio includes only renewable energy resources. These will be supplemented by additional market purchases of energy and resource adequacy to ensure a complete supply portfolio. VCEA's contract portfolio is therefore not expected to include any resources that adversely impact local air pollution.

CalEnviroScreen 3.0 shows that within Yolo county there are four census tracts that meet the CPUC's criteria of identifying the top 25% of impacted areas. Of these, only one, namely area 101.02 is partially located in VCEA's service territory. The total number of households in this census tract is 2,436. Based on a cross-comparison with VCEA customer addresses in this area, we estimate that less than 100 VCEA customer service accounts are located within this impacted area. According to the CalEnviroscreen 3.0 tool[6], the key reasons for this census tract falling within the top 25% appears to be risks associated with a combination of low income and environmental factors such as groundwater risks, cleanup sites, hazardous waste and air pollution. There are no power plants in this area. It should also be noted that the impacted areas are situated close to major transportation hubs that likely contribute to the rating.

[6] https://oehha.ca.gov/media/downloads/calenviroscreen/document/ces3results.xlsx

VCEA owns no fossil fuel-fired generation, has no plans to procure energy under long term contract from, or to construct and own, fossil fuel-fired generation. Instead, VCEA will be procuring resources with a focus on renewable and carbon free energy which are not expected to have a significant impact on the census tracts identified by the CalEnviroScreen. To the extent there are any impacts we expect those to be beneficial through an overall focus on cleaner energy.

**Figure 3. CalEnviroScreen 3.0 Results for Yolo County**




VCEA's rate are designed to provide economic benefits for all rate payers, including disadvantaged communities. As part of the Action Plan described in chapter 4, we also plan to conduct studies to determine suitable programs and incentives that can be launched once VCEA accumulates sufficient financial reserves and cash flow to be able to run programs. We note that PG&E will continue to make its programs for energy efficiency and demand response available to VCEA customers.

## ii. Cost and Rate Analysis

VCEA's cost and rate analysis includes only an assessment of generation costs. VCEA recognizes that while areas such as transmission, distribution and programs are very important for the overall energy cost for VCEA customers , PG&E is responsible for the energy delivery infrastructure and any costs associated with this will likely be covered in PG&E's IRP filing.

Figure 4, shows a comparison of the estimated generation costs for VCEA in each of the years, 2018, 2022, 2026 and 2030 for the Preferred Portfolio as well as the other portfolios considered. The Figure also contrasts the estimated costs for VCEA's generation supply with the expected generation costs reported in the RESOLVE model's Reference Portfolio. The results for VCEA's portfolios were derived by using the CPUC provided tools, including the GHG Calculator and the RESOLVE modeling results and assumptions, as described in Section 2, above. Table 7 shows these results in Table format.

Figure 4. Estimated annual generation costs by resource portfolio (2016 $/MWh)

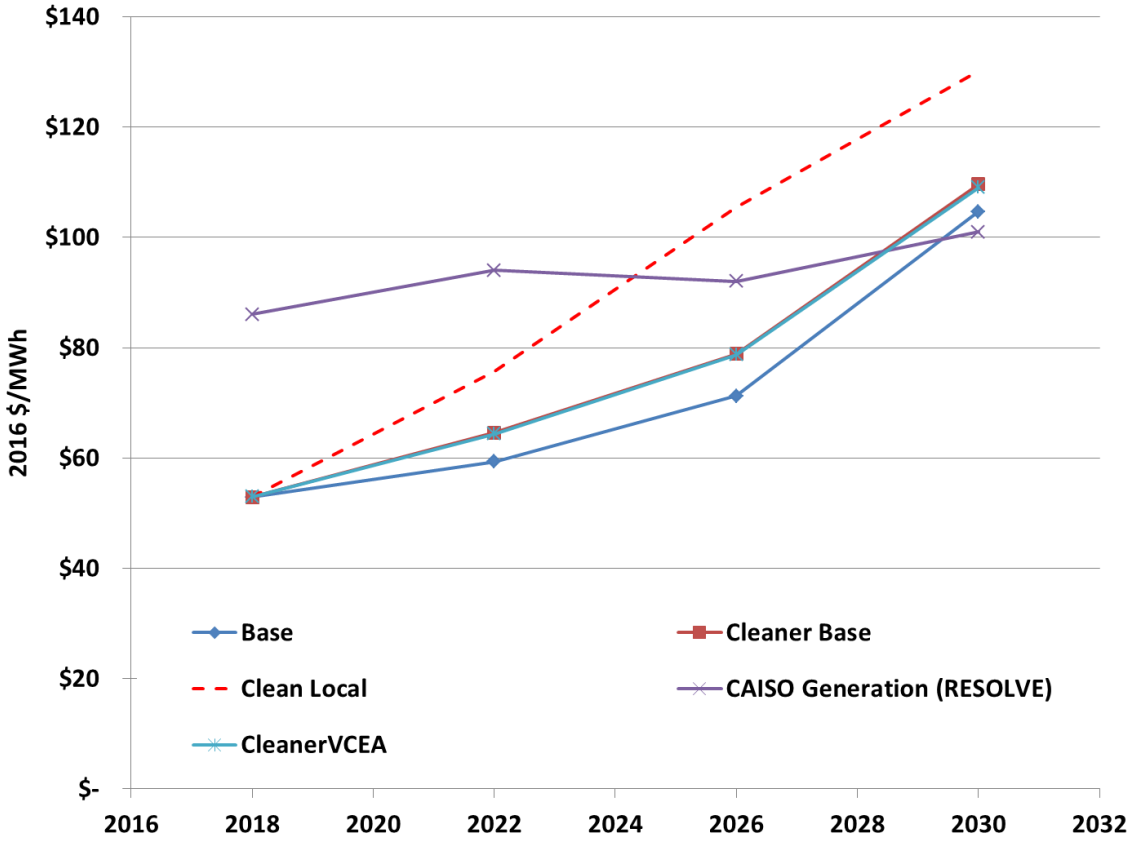



Table 7. Estimated annual generation costs ($/MWh)

| Resource Portfolio | 2018 | 2022 | 2026 | 2030 |
|---|---|---|---|---|
| Base | $52.91 | $59.36 | $71.27 | $104.66 |
| Cleaner Base (Preferred Portfolio) | $52.91 | $64.61 | $78.82 | $109.65 |
| Clean Local | $52.91 | $75.73 | $105.41 | $130.20 |
| Cleaner VCEA | $52.91 | $64.38 | $78.68 | $109.01 |
| CAISO Generation (RESOLVE) | $86.00 | $94.00 | $92.00 | $101.00 |

Table 7 and Figure 4 show that the Preferred Portfolio will remain below the RESOLVE model's estimated generation costs for the Reference Portfolio except in the year 2030 when the Preferred portfolio will be slightly above the Reference Portfolio's modeled generation costs. The main reason that VCEA's estimated portfolio costs exceed the results of the RESOLVE model, is likely that VCEA's model assumes that new capacity and RA will be procured at costs that are at or close to the levelized fixed cost of new storage whereas the RESOLVE model appears to have a (near) zero value for capacity in 2030. This implies that if electricity markets get constrained to the point of needing new investments in capacity by 2030, market prices could be substantially higher than those approximated by the RESOLVE curve. Conversely, if the electricity market remains over-supplied with capacity as a result of declining demand and/or investments in capacity that are not motivated by reserve margin needs, the estimated costs for VCEA's portfolio alternative could go down to levels that are at or below the RESOLVE model generation cost benchmark.

VCEA's estimated costs include the estimated levelized costs for resource under contract. We have assumed that all renewable resources, existing or new, can be contracted at the estimated levelized costs for new resources of the RESOLVE model. It further assumed that VCEA will get access to all attributes of resources that are under contract – energy, RA, RECs, and local RA. VCEA plans to rely on market purchases for all energy and capacity needed beyond the renewable energy and capacity that will be under contract.

For market purchases, it is assumed that in the 2018-2021 period, energy and RA will be available at prices indicated through current RA prices in bilateral or OTC markets. Energy is expected to be available at prices corresponding to ICE's power futures prices for NP15. In the 2022-2030 period it is assumed that energy can be procured at the estimated hourly CAISO price reported for RESOLVE's Reference Portfolio. It is also assumed that RA can be secured at a capacity corresponding to the lowest capacity cost between the traditional provider of capacity, a Gas-fired combustion turbine and the emerging capacity resource - 4-hour lithium ion batteries. Cost estimates displayed in the RESOLVE model suggests that from 2022 onwards, 4 hour battery storage capacity will be a lower cost alternative than conventional gas fired generation. We note, however, that this expectation is based on the assumption that the RA resource will operate for energy only infrequently and that sufficient resources will be available in the system to meet night time and winter energy demand.

When compared to the RESOLVE model's results, the Preferred portfolio compares favorably in terms of generation costs and by extension also rate impacts over the forecast period. However, the difference in the estimated costs of VCEA's portfolio and the RESOLVE model results suggests that if true, most or all of California's LSE's would prefer finding a lower cost solution similar to the one identified by VCEA. This, in turn, makes the RESOLVE model outcome increasingly unlikely as a market outcome and could potentially leave existing assets unable to recover their full costs. VCEA recommends that the CPUC looks into this potential outcome to better understand overall results when aggregating individual LSE IRPs.

We also note that the generation cost estimates shown in Figure 4 and Table 7 do not include PCIA. The PCIA is an important component of VCEA's generation that will significantly influence VCEA's ability to meet all statutory requirements versus its customers in line with 454.52.(a)(1).

The 2018 Year Ahead CAM List Final Allocation published by the CPUC, indicates that there is a total of 1375.36MW of CAM resources available for the month of August[7]t. Using the estimated VCEA load share for 2030 published by the CPUC in its 2030 GHG Benchmark ruling, VCEA would benefit from 0.9% of this capacity, or about 12MW, which in turn corresponds to about 5% of VCEA's anticipated RA requirement in the 2018-2030 period[8]. The financial costs or benefits of using CAM resources rather than generally available resources to meet VCEA's RA need in the forecast has not been accounted for in this IRP, but it is anticipated that the difference in cost should be small.

### b. Deviations from Current Resource Plans

At the time this report was prepared, there were no deviations from any other filed plans, considering that VCEA commenced operations only in June of 2018.

[7] http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442454905

[8] http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M214/K459/214459514.PDF

### d. Local Needs Analysis

VCEA is not located in a defined Local Capacity Area. Furthermore, the CAISO's 2017-2018 Transmission Plan as well as the most recent local capacity assessment by the CAISO, suggests that the Central Valley where VCEA is located will not have any shortage of local capacity for the 2018-2027 period. However, VCEA will continue to procure its share of Resource Adequacy from defined constrained Local Capacity Areas as required by Resource Adequacy mandates. This may include Resource Adequacy available from renewable projects that VCEA may procure the output of that happen to be located in Local Capacity Areas within the NP-15 zone. VCEA expects that sufficient local capacity and flexible capacity will be available in the market throughout the forecast period.

# 4. Action Plan

VCEA only started to serve load for its customers on June 1, 2018. Initial operations are entirely based on energy and capacity procurement under short term contracts. VCEA also does not yet administer any programs relating to energy efficiency, demand response, or programs to stimulate electrification. Due to its short operational tenure to date, it is therefore imperative to perform a number of studies and resource solicitations to firm up VCEA's long term planning, procurement and strategy. In particular, key issues such as what resource types to focus on, the importance of a local resource supply and potential trade-offs between resource costs and other portfolio attributes still remain to be completed. The action plan items below highlights the key near term actions to be taken in the next 1-3 years, including activities to be performed in 2018.

## a. Proposed Activities

### i. Long Term Renewable Procurement

VCEA will be conducting a long term solicitation in 2018 in which it will be seeking renewable power from RPS-qualifying renewable energy projects, with an expectation that power purchase agreements will be executed in early 2019. In support of this solicitation, VCEA will:

- Develop criteria for project siting preferences;
- Develop criteria for acceptable renewable technologies;
- Make a policy determination of whether long term renewable supply may be sourced from out-of-state projects;
- Develop a definition of "local" for the purposes of having some preference for local renewable projects; and
- Determine whether to accept renewable project proposals that include integrated battery storage.

As part of the siting criteria established for the solicitation, VCEA will require that bidders identify whether their projects are located in areas with disadvantaged communities. For proposed projects located in disadvantaged communities, as defined in PUC 399.13(a)(7)(A-B), that can demonstrate that their project will provide environmental and economic benefits to that community, additional credit will be given in the selection scoring and ranking.

This long term renewable procurement directly supports achievement of the Preferred Portfolio.

### ii. Establish Long Term Renewable and GHG Targets for 2030

VCEA's Preferred Portfolio is presented as a planned target for VCEA to achieve compliance with RPS requirements and the Commission's GHG emissions target and go beyond statutory mandates. One of VCEA's long term goals is to exceed the renewable portfolio content and have lower GHG emissions

intensity that PG&E, the host utility. VCEA will continue to assess the most cost-effective ways to achieve a cleaner supply portfolio and plan on using the results from resource solicitations to discover the local cost of renewable energy options and storage in Yolo County and surrounding areas. This activity will also involve conducting studies and analysis to evaluate in more detail the costs and ability of VCEA to achieving greater than 50% RPS by 2030, and when carbon neutrality might be able to be achieved.

#### iii. Key Portfolio Performance Indicators

Develop metrics to track aspects of the portfolio performance relative to a baseline/comparison metrics. These indicators are also intended to facilitate member jurisdiction's work on their own policy such as Climate Action Plans.

#### iv. Evaluate Impacts of Climate Change on Load Forecast

Evaluate methods for incorporating the impacts of climate change on expected future loads (particularly peak loads).

#### v. Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E

VCEA will evaluate the scope of effort and potential benefits of assuming control over funds that are collected under CPUC authorization to support energy efficiency and demand side management programs. In particular, demand side management programs, if viable, may become a cost-effective complement to battery storage to better integrate renewable energy.

#### vi. Evaluate Non-Battery Storage Options

Investigate other storage technologies and their cost effectiveness.

## b. Barrier Analysis

VCEA does not own, nor does it have any Long Term power purchase agreements with existing facilities. VCEA expects to enter into long term contracts for renewable energy capacity in 2018 and 2019 to meet its resource needs in line with the Preferred Portfolio identified in this report. It is anticipated that sufficient competitive offers are submitted. If costs are higher or resource offers fewer than anticipated, this could trigger changes in the Preferred Portfolio.

One of the challenges for VCEA as a recently formed JPA is to obtain and manage the financial security required by counterparties to successfully enter into the amount of long term contracts for renewable energy required by SB350 (399.13 (b)). This cost will be factored in the evaluation of proposed projects during the solicitation process.

An ongoing risk for VCEA as well as all parties entering into long term contracts in line with the requirement in PUC Section 399.13 (b) is falling costs of new renewable energy and battery storage. If costs for new resources continue to fall in line with historical trends, there is a risk that VCEA and other CCAs entering into long term contracts will eventually encounter above-market costs in their contracted portfolios that need to be accounted for through the PCIA or similar mechanism by which CCA customers opting out of a CCA program can be subject to PCIA charges in the same manners as IOUs use the PCIA today.

VCEA does not anticipate to secure all of its resource needs through long term contracts. In fact, VCEA plans to only contract for renewable energy resources and procure the remaining balancing capacity and energy needed for its load through short term contracts and spot market purchases of energy, RECs, and capacity. This exposes VCEA to market price risks. In line with the results shown in the RESOLVE model as well as recent work by the CAISO for RA, VCEA expects sufficient energy and capacity resources to be

available throughout the 2018-2030 period. Natural gas market forecasts also suggest that gas prices (and thereby marginal power prices) are expected to remain low over the foreseeable future, which means electric power prices also should remain low or moderate. Should market conditions tighten, for example through gas price increases or faster than expected tightening of the supply and demand balance in California's power markets, this could result in higher costs for meeting load and therefore also higher rates. VCEA plans to manage this risk by continuously assessing risks and opportunities associated with contracting in line with its risk policy.

### c. Proposed Commission Direction

Not Applicable. VCEA is not seeking direction from the CPUC at this time

## 5. Data

To be completed

[3] Available at: http://www.cpuc.ca.gov/irp/filingtemplates/.

[4] Available at: http://www.cpuc.ca.gov/irp/filingtemplates/.

### a. Baseline Resource Data Template

To be completed

### b. New Resource Data Template

To be completed

| Form # | Form Description | IOU | CCA | ESP |
|---|---|---|---|---|
| | RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR | X | | |
| | RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR | X | | |
| Form 1.2 | DISTRIBUTION AREA NET ELECTRICITY FOR GENERATION LOAD (GWh) | X | | |
| | LSE COINCIDENT PEAK DEMAND BY SECTOR | X | | |
| Form 1.4 | DISTRIBUTION AREA COINCIDENT PEAK DEMAND | X | | |
| | ENERGY EFFICIENCY - CUMULATIVE INCREMENTAL | X | | |
| | DISTRIBUTED GENERATION - CUMULATIVE | X | | |
| | DEMAND RESPONSE - CUMULATIVE INCREMENTAL | X | | |
| Form 4 | REPORT ON FORECAST METHODS AND MODELS | X | X | |
| | UNCOMMITTED DEMAND-SIDE PROGRAM | X | | |
| Form 7.1 | ESP DEMAND FORECAST | | | X |
| Form 7.2 | CCA DEMAND FORECAST | | X | |

Each LSE should save a separate file for each portfolio in the format of "Data_LSEname_NewRsrc_Identifier_yyyymmdd.xlsx" where the field "LSEname" is replaced with the LSE name (e.g. "MCE" or "PGE"), the field "Identifier" is replaced with Conforming, TE, Alternate1, Alternate2, etc, and "yyyymmdd" is replaced with the date the file is submitted to the Commission. Spaces are not allowed in the file name. Special characters are not allowed, except for underscore ("_") and dash ("-").

### c. Other Data Reporting Guidelines

To be completed

## 6. Lessons Learned

To be completed

# Glossary of Terms

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

**Conforming Portfolio** – Each LSE must produce a "Conforming Portfolio" that is demonstrated to be consistent with the Reference System Portfolio according to the following criteria: (1) use of either the GHG Planning Prices or the LSE-Specific 2030 GHG Emissions Benchmark, and (2) use of input assumptions matching those used in developing the Reference System Portfolio

**Data Template** – Data provided by the LSE should be reported in the "Baseline Resource Data Template" and the "New Resource Data Template" provided by the Commission. "Baseline" means existing resources and costs, including resources already contracted but not yet online. "New" means any new (incremental to the baseline) resources and costs associated with a particular LSE portfolio.

**Disadvantaged Communities** – For the purposes of IRP, and consistent with the results of the California Communities Environmental Health Screening Tool Version 3 (CalEnviroScreen 3.0), "disadvantaged communities" refer to the 25% highest scoring census tracts in the state along with the 22 census tracts that score in the highest 5% of CalEnviroScreen's pollution burden, but which do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data.

**GHG Emissions Benchmark** – Each LSE filing a Standard LSE Plan must use either the GHG Emissions Benchmark or GHG Planning Price in developing its Conforming Portfolio. The LSE-specific benchmarks and calculation method are provided in Table B. If the total emissions attributable to the LSE's preferred portfolio exceed its GHG Emissions Benchmark for 2030, the LSE must explain the difference and describe additional measures it would take over the following 1 - 3 years to close the gap, along with the cost of those measures.

**GHG Planning Price** –The GHG Planning Price is equivalent to the marginal cost of GHG abatement associated with the 42 MMT Scenario for the years 2018 to 2026 (i.e., a curve that slopes upward from

~$15/ton to ~$23/ton), followed by a straight-line increase from ~$23/ton in 2026 to $150/ton in 2030,

as shown in Table A. Each LSE must use either the GHG Planning Price or GHG Emissions Benchmark in developing its Conforming Portfolio.

**IRP Planning Horizon** – The IRP Planning Horizon will typically cover 20 years. However, for the purposes of this IRP 2017-18 cycle, the IRP Planning Horizon will cover only up to the year 2030.

**Long term** – 10 or more years (unless otherwise specified)

**Portfolio** – A portfolio is a set of supply and/or demand resources with certain attributes that together serve a particular level of load.

**Preferred Portfolio** – Among all the portfolios developed by the LSE, the LSE will identify one as the most suitable to its own needs, deemed its "Preferred Portfolio." Any deviations from the Conforming Portfolio must be justified and explained.

**Reference System Plan** – The Reference System Plan refers to the Commission-approved integrated resource plan that includes an optimal portfolio (Reference System Portfolio) of future resources for serving load in the CAISO balancing authority area and meeting multiple state goals, including meeting GHG reduction and reliability targets at least cost.

**Reference System Portfolio** – The Reference System Plan refers to the Commission-approved portfolio that is responsive to statutory requirements per Pub. Util. Code 454.51; it is part of the Reference System Plan.

**Scenario** – A scenario is a portfolio together with a set of assumptions about future conditions.

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

**Standard LSE Plan** – A Standard LSE Plan is the type of integrated resource plan that an LSE is required to file if its assigned load forecast is ≥ 700 GWh in any of the first five years of the IRP planning horizon.

**Standard LSE Plan Template** – Each LSE required to file a Standard LSE Plan must use the Standard LSE Plan Template according to the instructions provided herein.

(End of Attachment A)

# APPENDIX 1. Load Forecast Methodology

The VCEA retail sales and load forecasts presented in this report are based on the historical retail billed sales (PG&E Item 16) and hourly loads (PG&E Item 17) SMUD received from PG&E. The data includes billing and load data by customer account for the cities of Davis and Woodland and the unincorporated portion of Yolo County. Regression models are used to normalize both retail sales and loads for variations in monthly electricity use and temperatures. The VCEA forecasts are based on normalized sales, and loads are scaled to reflect the growth in customer accounts. It is assumed that 10 percent of VCEA's customers may opt out and revert back to PG&E service. This is likely an aggressive value but was chosen to capture the risk of revenue attrition due to opt outs.

## Forecast Methodology

VCEA forecast models utilizes statistical regression techniques which normalize electricity use for variation in temperatures, seasonal use, and number of customer accounts. The forecast is based on four regression models:

1) daily system energy,
2) daily system peak,
3) system hourly loads (24 separate hourly equations), and
4) retail class sales

For each model, the dependent variables for loads and retail sales are normalized by customer accounts.

The daily energy and peak models serve as the foundation for the load forecast. These models normalize VCEA retail loads for variations in daily temperatures, weekdays and weekends, months, seasons and holidays. The system hourly load equations provide a daily load shape which is calibrated to daily energy and peak model estimates with the following restrictions:

- Maximum of estimated hourly loads for day (i) = estimated peak for day (i) for each day of the forecast year.
- Sum of the estimated hourly estimate loads for day (i) = estimated daily energy for day(i) for each day of the forecast year.

The predicted values from these models are:

- kwh/day/account,
- peak kW/day/account, and
- kW/hour/account.

The retail sales model includes separate regression equations for each major rate class served by the VCEA. They are:

- Residential (rate schedules E1 to E9)
- Small Commercial (A1 and A6)
- Medium Commercial (A10)

- Large Commercial (E19, all service voltages)
- E20S
- E20P
- Agricultural (AG)
- Street lighting (LS, OL1, and T)
- Standby (STOU)

The dependent variable for the sales models is monthly kWh/customer per billing period. The regression model normalized class sales for variations in monthly use and temperature conditions. The temperature variables are billing month heating and cooling degree days. The predicted values are kWh/billing month for each rate class.

### Retail Sales History

The retail sales historical billing file includes city, service point id, service agreement id, customer information, service address, rate schedule, meter number, and monthly billing kWh, and direct access provider. The historical period is from 2014 to 2016.

### Interval Data History

The interval data historical file includes interval loads, service area, service point id, service agreement id, date, and rate schedule. Load intervals include both 15 minute reads and 60 minute reads. The historical period is from 2015 to 2016.

Billing and interval data was also available for a portion of 2017 but was not used for the data analysis.

### Weather Data

Daily high and low temperatures were extracted from the NOAA website for weather station Davis 2WSW Experimental Farm. The temperature data covers the period from 1998 to September 2017.

### VCEA Customer Growth

Customer growth for the VCEA was based on the population, housing units, and employment forecast from the Sacramento Area Council of Government (SACOG) 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Modeling projections for 2012, 2020, and 2036. February 18, 2016. (https://www.sacog.org/post/sacog-2016-mtpscs-modeling-projections-2012-2020-and-2036)

### Data Editing

The billing data was edited to include customer accounts who were full service PG&E customers for the 12 monthly billing periods for each year. In the PG&E billing files, each account is a separate record. In cases where there were 2 or more accounts for the same premise (that is, a tenant moves out, and another moves in during the same billing month), the accounts are consolidated to avoid double counting of the premise. Direct access customer are omitted from the analysis and assumed to remain direct access customers for the forecast period.

The interval data included both 15 minute reads and 60 minutes reads. The accounts with 15 minute reads were aggregated in 60 minute interval reads. The data analysis and forecasts were based on hourly interval reads. The interval data included both hourly loads delivered to full service customers and hourly loads that were returned to PG&E. The returned loads are behind the meter surplus PV or CHP generation. The data analysis and forecast were based on the delivered loads provided by PG&E.

For forecasting purposes, the billed sale data was aggregated to the VCEA rate classes and the interval data was aggregated to the VCEA full service retail service level.

### Weather Data

Daily high temperatures and cooling and heating degree days with a base temperature of 65 degree Fahrenheit were used directly in the regression models.

For the class sales models, cooling and heating degree days for each billing month were calculated based on the PG&E's billing cycle definition. The start date for a billing cycle begins on the 16$^{th}$ day of the previous month and the ends by the 14$^{th}$ day of the next month. For example, the cooling degree day for the July billing month starts on June 16 and ends on August 14. The cooling degree month is the sum of the daily cooling degree days during this period.

### VCEA Historical Data

The following tables presents historical figures for customer accounts, sales by rate class, monthly peaks for full service accounts and direct access accounts. While direct access account represents less than 1 percent of the total population, the majority of the accounts are medium and large commercial accounts. For the VCEA service territory, the direct access customers represent 10 percent of total sales and seven percent of the annual peak.

**Figure 5. VCEA Service Territory Retail Electricity sales for Full Service and Direct Access Customers 2014-2016 (MWH)**

| | 2014 | 2015 | 2016 |
|---|---|---|---|
| Full Service Sales | 860,378 | 839,708 | 814,333 |
| Direct Access Sales | 91,926 | 90,733 | 88,314 |
| Total Sales | 952,303 | 930,441 | 902,647 |

Figure 6. VCEA Monthly Billed Sales by Full Service and Direct Access Customer for 2016 (MWh)

| MWH | Full Service | Direct Access | Total |
|---|---|---|---|
| January | 59,328 | 6,010 | 65,337 |
| February | 54,003 | 6,148 | 60,151 |
| March | 49,906 | 5,890 | 55,796 |
| April | 56,227 | 6,422 | 62,649 |
| May | 71,613 | 6,877 | 78,489 |
| June | 88,932 | 7,362 | 96,294 |
| July | 95,736 | 9,523 | 105,259 |
| August | 88,033 | 12,058 | 100,091 |
| September | 72,774 | 10,034 | 82,808 |
| October | 60,374 | 6,249 | 66,623 |
| November | 57,942 | 6,210 | 64,153 |
| December | 59,465 | 5,530 | 64,995 |
| Annual | 814,333 | 88,314 | 902,647 |

Figure 7. VCEA Monthly Peaks by Full Service and Direct Access Customers 2016 (kW)

| MW | Full Service | Direct Access | Total |
|---|---|---|---|
| January | 106,344 | 8,837 | 115,181 |
| February | 103,685 | 8,519 | 112,204 |
| March | 94,948 | 8,619 | 103,567 |
| April | 111,750 | 10,128 | 121,878 |
| May | 205,911 | 12,651 | 218,562 |
| June | 227,888 | 12,833 | 240,721 |
| July | 224,344 | 17,688 | 242,032 |
| August | 195,837 | 18,355 | 214,193 |
| September | 185,128 | 17,229 | 202,356 |
| October | 114,942 | 10,105 | 125,047 |
| November | 106,198 | 8,467 | 114,665 |
| December | 114,079 | 8,953 | 123,031 |

## Load and Retail Sales Forecast

The sales and load forecast combines the forecasted normalized sales and the forecasted customer count.

The customer forecast is based on SACOG demographic forecast for Yolo County. The SACOG growth assumptions were applied to the Residential, Small and Medium Commercial customer classes. Large Commercial was based on their historical growth. Lighting was based on a moving average of historical lighting accounts. Customer counts for E20, Agr, and Standby were assumed to be constant over the forecast period. These customer classes illustrated very lumpy growth and therefore the SACOG growth assumptions were not applicable.

## Sales and load forecast with Attrition

For purposes of developing a forecast of sales and load for the VCEA service territory, an attrition rate of 10 percent was assumed for customer's choosing to either return to PG&E firm service or direct access provider. The tables below show the annual sales and peaks for full service accounts net of attritions.

**Figure 8. Annual retail sales and peak load forecast for VCEA, net of estimated attrition**

| | Sales (MWH) | Peak (MW) | Customers Accounts |
|---|---|---|---|
| 2018 | 754,457 | 214 | 58,626 |
| 2019 | 756,404 | 215 | 58,823 |
| 2020 | 760,328 | 215 | 59,084 |
| 2021 | 761,396 | 216 | 59,411 |
| 2022 | 764,073 | 217 | 59,741 |
| 2023 | 766,788 | 218 | 60,076 |
| 2024 | 771,325 | 218 | 60,409 |
| 2025 | 772,192 | 219 | 60,745 |
| 2026 | 774,904 | 220 | 61,082 |
| 2027 | 777,643 | 221 | 61,422 |
| 2028 | 782,290 | 221 | 61,767 |
| 2029 | 785,089 | 223 | 62,115 |
| 2030 | 787,903 | 224 | 62,464 |

## Future Research to Improve Forecast Accuracy

### PG&E Data Sources

The data that was provided by PG&E was a very limited data time series covering the periods 2014-2017 for billing data and 2015-2017 for interval data. At the time the forecast was develop, 2017 data included the months of January to June. For modelling purposes, 10 years of data would be preferred in order to understand if any trends in electricity use could be observed. That is, it would be helpful to see if over this periods, if sales or loads per account were decreasing or increasing.

### Distributed Energy Resource (DER) Program Impacts

The sales and load forecast for VCEA participants reflects the current trend in electricity use which includes embedded energy efficiency, behind the meter PV, and EV battery charging. The forecast does not incorporate incremental DER impacts for energy efficiency programs, building and appliance standards, behind the meter PV, electric vehicle battery charging, and electrification. While net metering customer information was provided by PG&E, information on energy efficiency participation and electric vehicle charging was not provided. In previous research done at SMUD, customers who participate in utility programs are more likely to participate in future programs which would allow for forecasting participation rates and therefore program impacts. Demographic information such as type of dwelling (single family vs. multi-family), home ownership, age of house, and other demographic information would also be useful to understand the take rates for future program participation.

Current appliance saturations, average age of appliances, and the efficiency of appliances are embedded in the current forecast. Changes to equipment saturations and efficiencies are not incorporated into the forecast and therefore may overestimate the forecast loads and sales in the long run.

For future forecasting projections, incorporating these DER impacts would greatly enhance the forecast from both a behavioral and policy perspective.

### Temperature Data and Climate Change

The statistical models to weather normalize electricity use were based on average daily temperatures from1998 to 2016. If climate change occurred during this period, they are captured as the average impact. Future climate changes, however, were not included in the long term VCEA forecast.

For forecasting purposes, we do not have sufficient information on daily variations in temperature due to future climate change, to adjust the normal temperature patterns for the long term forecast. While this research is ongoing at many research institutions, we have found that the results of climate change research are not sufficient to develop the future day to day temperature variations needed to forecast electricity using the current modelling methodology. Additional research is needed to make this link between long term climate change trends and the impact on daily temperatures changes.

**Attachment B**

## VCEA Integrated Resource Plan

## Listing of Possible Action Plan Activities/Proposed Prioritization

**5/31/18**

| Priority | Title | Description |
|---|---|---|
| 1 | **Long Term Renewable Procurement** | Conduct a solicitation and evaluation of proposals for the purchase of energy from existing or new RPS qualifying renewable energy resources.<br><br>Additional Related Action Plan:<br><br>1. Develop criteria/information requests to evaluate new renewable ~~for~~ projects implementing responsible siting practices (both environmental and land use). Develop associated evaluation criteria.<br><br>2. Develop Criteria for Acceptable and Preferred renewable technologies and locations (e.g. local v. remote).<br><br>3. Develop criteria and position on defining limits on which states ~~to~~ VCEA will source~~procure~~ long term renewables from.<br><br>4. Develop a position on the definition of "local" for renewable resource procurement.<br><br>5. Determine whether to include ~~(or not)~~ battery or other storage options in solicitation.<br><br>6. Develop criteria for assessing the portfolio content of local versus non local for short-list selection. |

## VCEA Integrated Resource Plan

## Listing of Possible Action Plan Activities/Proposed Prioritization

**5/31/18**

| Priority | Title | Description |
|---|---|---|
| 2 | **Establish Renewable and GHG Targets for 2030** | Conduct studies to evaluate in more detail the costs and ability of VCEA to achieving greater than 50% RPS by 2030, when carbon neutrality might be able to be achieved. Establish the LT Targets for VCEA.<br><br>Additional Related Action Plan:<br><br>1. Assess whether VCEA should bifurcate its portfolio to meet the varying sustainability goals of its Members.<br><br>2. Conduct Document review of other entities' climate action plans to inform on extent of aggressive goals established by other entities.<br><br>3. Develop policy proposal for tradeoffs between costs, GHG emissions, local renewable content, etc. |
| 3 | **Key Portfolio Performance Indicators** | Develop a list of desired metrics to track aspects of the portfolio performance relative to a baseline/comparison metric. |
| 4 | **Evaluate Impacts of Climate Change on Load Forecast** | Evaluate methods for incorporating the impacts of climate change on expected future loads (particularly peak loads). |
| | **Evaluate impacts of electrification on load forecast** | Evaluate methods for incorporating electrification initiatives (e.g., all electric buildings, clean local mobility services, ag pumping conversion) on expected future loads (load profiles as well as peak loads). |

## VCEA Integrated Resource Plan

## Listing of Possible Action Plan Activities/Proposed Prioritization

**5/31/18**

| Priority | Title | Description |
|---|---|---|
| 5 | **Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E** | Evaluate the scope of effort to assume control of energy efficiency and demand side management programs required by CPUC~~/regulatorily required energy efficiency and demand side management programs~~, and what kinds of programs VCEA would implement if we get control. |
| 6 | **Evaluate Non-Battery Storage and Demand Response Options** | Investigate ~~other~~ demand response program options and non-battery storage technologies and their cost effectiveness.<br><br>1. Identify trends that may impact VCEA's long term demand forecast and/or load shifting opportunities<br><br>2. Determine program options or investments consistent with market and technology trends and cost of service goals. |
| | | |

# VCEA Integrated Resource Plan

## Listing of Possible Action Plan Activities/Proposed Prioritization

**5/25/18**

**Logic for Proposed Prioritization**

| Priority | Title | Description |
|---|---|---|
| 1 | Long Term Renewable Procurement | This is the highest priority because of the need to get long term contracts in place so long-term renewable supply from these can begin in or prior to 2021. A task for this long term procurement process has been signed. |
| 2 | Establish Renewable and GHG Targets for 2030 | Determining VCEA's long term goals is important to inform the procurement effort on what level of procurements above minimum levels will be required as part of the long term renewable procurement process. This would involve additional analysis. |
| 3 | Key Portfolio Performance Indicators | This is probably not a lengthy discussion. In addition, KPPIs can evolve over time. A few of the KPPIs would relate to the 2030 targets established. |
| 4 | Evaluate Impacts of Climate Change on Load Forecast | This would primarily be a literature research and review on forecast local climate impacts over time. Then would need to determine how to incorporate climate change impacts into the actual load forecasting process. |
| 5 | Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E | Assuming operational responsibility for these programs from PG&E is a long-term proposition. The opportunity will remain |
| 6 | Evaluate Non-Battery Storage Options | Many non-batter storage options are likely to be customer-sited, which means that they will fit into the demand response category. VCEA initiating responsibility for demand response programs is a longer-term proposition. |

VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Agenda Item 13

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TO: Valley Clean Energy Alliance Board of Directors

FROM: Mitch Sears, Interim General Manager
Gary Lawson, Sacramento Municipal Utility District (SMUD)

SUBJECT: Suspension of Forward PCC-2 Renewable Procurements

DATE: June 6, 2018

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## RECOMMENDATION

Staff is recommending that the Board adopt a resolution establishing the following:

- Suspend the current forward procurement of PCC-2 Renewable Power pending outcome of the California Energy Commission's effort to update the Power Source Disclosure/Power Content Labeling requirements for load serving entities.
- Authorize the General Manager to reactivate PCC-2 Renewable Power Procurement in the event that the outcome of the CEC's change in Power Source Disclosure/Power Content Labeling requirements is favorable as to the treatment of PCC-2 Power. The General Manager will report back to the Board with such information.
- Require staff to return for additional authorization in the event that CEC's change in Power Source Disclosure/Power Content Labeling requirements is not favorable as to the treatment of PCC-2 Power.

## BACKGROUND

The California Energy Commission (CEC) is in the process of revising the Power Source Disclosure/Power Content Label (PSD/PCL) requirements for California load serving entities resulting from changes to the PSD/PCL law affected by AB 1110 passed in 2016. The changes would apply starting with 2019 power deliveries. (The resulting reporting would be published in 2020 on the specified reporting schedule for 2019 deliveries.) AB 1110 changes include the addition of greenhouse gas emissions intensity reporting in the mandatory Power Content Labeling.

As part of an informal stakeholder process taking place before the rulemaking process starts, CEC staff has developed a proposal that would not be favorable with regard to the greenhouse gas reporting associated with PCC-2 renewable power imports.

As you will recall, PCC-2 renewable power is imported from outside California from a seller supplying RECs from a renewable resource which are provided along with a power import into California. Currently, the ownership of PCC-2 RECs is evidence that the purchaser has bought

the renewable carbon free attributes of the supplying renewable energy resource. For example, the RECs might be matched with an import of power from a natural gas-fired power plant. The PCC-2 REC offsets any carbon emissions associated with the underlying imported energy under current rules.

The CEC staff proposal would require the load serving entity to declare the carbon emissions associated with the underlying energy, and would not allow the PCC-2 REC to offset the carbon emissions for greenhouse gas reporting purposes.

ADDITIONAL CONSIDERATIONS

While the changes in law require all retail sellers to begin reporting greenhouse gas emissions intensity in 2020 for the 2019 calendar year, that legislation also allows a newly formed CCA to avoid reporting carbon emissions for 24 months up to 36 months after launch, meaning that VCEA would not have to report carbon emissions for 2019, and possibly for 2020:

"Any new community choice aggregator formed after January 1, 2016, shall not be required to report data on greenhouse gas emissions intensity associated with retail sales until at least 24 months, but shall be required to report that data no later than 36 months, after serving its first retail customer. (PUC § 398.4 (k)2.F(ii).

Therefore, VCEA will have a choice on whether it reports greenhouse gas emissions in 2020 for 2019 power deliveries. VCEA has stated that a key goal for CCE formation is to achieve an energy supply that is cleaner than PG&E's. So despite the option to not report greenhouse gas emissions intensity on 2019 power deliveries, given its stated goal VCEA may want to be able to report favorable greenhouse gas emissions for its 2019 power supply.

ANALYSIS

Table 1 in the Attachment shows the estimated carbon emissions for VCEA's 2019 power portfolio under the current assumptions that PCC-2 RECs would offset the carbon emissions associated with the matched imported power.

In the event that the CEC were to adopt CEC staff's position, the consequence to VCEA would be that without any action, VCEA's reported carbon emissions increase significantly. Table 2 in the Attachment shows that VCEA's estimated carbon emissions could go to 144,744 metric tonnes based upon the reporting change, and assuming VCEA took no other action to try and reduce reported carbon emissions.

VCEA would incur increased costs to procure additional no/low carbon energy to offset the increase in carbon emissions that would be attributed to PCC-2 renewable power. Under today's power costs, VCEA could pay up to $750,000 annually for the additional no/low carbon energy.

Given the current market for renewables, staff does not view that suspending PCC-2 power procurement will disadvantage VCEA in its renewable procurement. In fact, should the CEC

staff's proposal be adopted by the CEC, the cost of PCC-2 power may actually drop, because it would no longer be treated as greenhouse gas free which would requiring purchasers to incur additional expense to mitigate the greenhouse gas impacts.

COMMUNITY ADVISORY COMMITTEE REVIEW

Staff reviewed the recommendation with the Community Advisory Committee on May 30, 2018, which voted on and approved supporting staff's recommendation with a 7-0-1 vote.

CONCLUSION

Because the CEC is still working through development of the revised reporting rules, and because staff does not have clarity yet on the likely direction of the CEC on enacting staff's current proposal (or not), staff proposes that PCC-2 procurements be suspended until more certainty is obtained on the likely direction of the CEC, or until the CEC adopts the final rule change.

Staff makes the specific recommendations in the aforementioned resolution.

Attachment
1. Resolution

Attachment

Table 1. VCEA 2019 Portfolio Carbon Emissions Estimate Under Current Assumptions

| | Content | | Retail Load, MWhs | | CO2 Emissions Intensity Per Product | | CO2 Emissions Per Product | | CO2 Emissions Instensity/ Contribution to Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Renewable | 42% | | 318,293 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh | |
| PCC-1[1] | | 23.25% | | 176,198 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh |
| PCC-2[2] | | 18.75% | | 142,095 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh |
| Large Hydro[3] | 33% | | 250,087 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh | |
| Unspecified Market Power[4] | 25% | | 189,460 | | 962 lb/MWh | | 82,711 MT | | 241 lb/MWh | |
| **Total** | 100% | | 757,840 | | | | 82,711 MT | | **241 lb/MWh** | |

Assumptions:

1 Assumes PCC-1 renewable power has no associated net carbon emissions.

2 Assumes PCC-2 renewable power has no associated net carbon emissions.

3 Assumes Large Hydro has no associated net carbon emissions.

4 California Air Resource Board's calculation for emissions from Unspecified Sources of Power has an emission factor of 0.428 MT CO2/MWh, in addition to a transmission loss adjustment of 1.02. Converted to lbs/MWh, that equates to 962 lb/MWh. Source: Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, Title 17, California Code of Regulations.

Table 2. VCEA 2019 Portfolio Carbon Emissions Estimate Under Proposed Reporting Requirement

| | Content | | Retail Load, MWhs | | CO2 Emissions Intensity Per Product | | CO2 Emissions Per Product | | CO2 Emissions Instensity/ Contribution to Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Renewable | 42% | | 318,293 | | 430 lb/MWh | | 62,033 MT | | 180 lb/MWh | |
| PCC-1[1] | | 23.25% | | 176,198 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh |
| PCC-2[2] | | 18.75% | | 142,095 | | 962 lb/MWh | | 62,033 MT | | 180 lb/MWh |
| Large Hydro[3] | 33% | | 250,087 | | 0 lb/MWh | | 0 MT | | 0 lb/MWh | |
| Unspecified Market Power[4] | 25% | | 189,460 | | 962 lb/MWh | | 82,711 MT | | 241 lb/MWh | |
| **Total** | 100% | | 757,840 | | | | 144,744 MT | | **421 lb/MWh** | |

Assumptions:

1 Assumes PCC-1 renewable power has no associated net carbon emissions.

2 Assumes PCC-2 renewable power has net carbon emissions associated with unspecified imports (See note 4).

3 Assumes Large Hydro has no associated net carbon emissions.

4 California Air Resource Board's calculation for emissions from Unspecified Sources of Power has an emission factor of 0.428 MT CO2/MWh, in addition to a transmission loss adjustment of 1.02. Converted to lbs/MWh, that equates to 962 lb/MWh. Source: Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, Title 17, California Code of Regulations.

VALLEY CLEAN ENERGY ALLIANCE

RESOLUTION NO. 2018- _____

A RESOLUTION OF THE VALLEY CLEAN ENERGY ALLIANCE SUSPENDING THE CURRENT FORWARD PROCUREMENT OF PCC-2 RENEWABLE POWER PENDING OUTCOME OF THE CALIFORNIA ENERGY COMMISSION'S EFFORT TO UPDATE THE POWER SOURCE DISCLOSURE/POWER CONTENT LABELING REQUIREMENTS FOR LOAD SERVING ENTITIES

WHEREAS, the Valley Clean Energy Alliance ("VCEA") is a joint powers agency established under the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) ("Act"), and pursuant to a Joint Exercise of Powers Agreement Relating to and Creating the Valley Clean Energy Alliance between the County of Yolo ("County"), the City of Davis ("Davis"), and the City of Woodland ("City") (the "JPA Agreement"), to collectively study, promote, develop, conduct, operate, and manage energy programs; and

WHEREAS, to serve its customers, VCEA has procured PCC-2 renewable power to partially meet its renewable energy and clean power goals; and

WHEREAS, the California Energy Commission (CEC) is currently considering changes to the Power Source Disclosure/Power Content Label (PSD/PCL) requirements for California load serving entities resulting from changes to the PSD/PCL law affected by AB 1110; and

WHEREAS, the CEC's pending action creates uncertainty as to the future applicability of PCC-2 for off-setting carbon emissions; and

WHEREAS, the CEC's final decision on PCC-2 renewable power is anticipated later in 2018.

NOW, THEREFORE, the Board of Directors of the Valley Clean Energy Alliance resolves as follows:

1. Suspend the current forward procurement of PCC-2 Renewable Power pending outcome of the California Energy Commission's (CEC) effort to update the Power Source Disclosure/Power Content Labeling requirements for load serving entities.

2. Authorize the General Manager to reactivate PCC-2 Renewable Power Procurement in the event that the outcome of the CEC's change in Power Source Disclosure/Power Content Labeling requirements is favorable as to the treatment of PCC-2 Power. The General Manager will report back to the Board with such information.

3. Require staff to return for additional authorization in the event that the CEC's change in Power Source Disclosure/Power Content Labeling requirements is not favorable as to the treatment of PCC-2 Power.

ADOPTED, this _____ day of _____, 2018, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Lucas Frerichs, Chair

_____
Secretary

Approved as to form:

_____
Interim VCEA Counsel