MEETING of the Energy Planning & Resources Committee
of the Clean Power Alliance of Southern California

Thursday, December 13, 2018
12:15 p.m.

Metro Headquarters
4th Floor, Plaza View Room
One Gateway Plaza
Los Angeles, CA 90012

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 Jacquelyn Betha, at least two (2) working days before the meeting at jbetha@cleanpoweralliance.org or (213) 269-5870, ext.1001.

Notification in advance of the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

Members of the public may also participate in this meeting remotely at the following address:

Thousand Oaks City Hall
Public Works Conference Room
2100 Thousand Oaks Blvd., Thousand Oaks, CA 91362

Ventura County Government Center
Channel Islands Conference Room, 4th Floor Hall of Administration
800 South Victoria Avenue, Ventura, CA 93009

I. WELCOME & ROLL CALL
II. PUBLIC COMMENT

This item is reserved for persons wishing to address the Committee on any Clean Power Alliance-related matters not on today’s agenda. Public comments on matters on today’s 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 Committee are requested to complete a speaker’s slip. If you have anything that you wish to be distributed to the Committee and included in the official record, please hand it to a member of the staff who will distribute the information to the Committee members and staff. Speakers are customarily limited to three minutes, but is at the discretion of the Committee Chair.

III. REGULAR AGENDA

1. Approve Minutes from September 26, 2018 Energy Planning & Resources Committee Meeting
2. November 2018 Risk Management Team Report
3. Long Term Request for Offers (RFO) Update

IV. COMMITTEE MEMBER COMMENTS

V. ADJOURN

Public records that relate to any item on the open session agenda for a regular 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 Committee. The Board of Directors has designated Clean Power Alliance, 555 W. 5th Street, 35th Floor, Los Angeles, CA 90013, for making those public records available for inspection. The documents are also available online at www.cleanpoweralliance.org.
MEETING of the Energy Planning & Resources Committee of the
Clean Power Alliance of Southern California
Wednesday, September 26, 2018, 12:15 p.m.

555 W. 5th Street
34th Fl, Room 34-E
Los Angeles, CA 90013

Arcadia Public Works Service Center
11800 Goldring Road, Arcadia, CA 91006

Carson City Hall
Executive Conference Room, 2nd Floor
701 E. Carson Street, Carson, CA 90745

Malibu City Hall
23825 Stuart Ranch Road, Malibu, CA 90265

Sierra Madre
555 W. 5th Street, Suite 3310
Los Angeles, CA 90013

Oxnard City Hall Annex
4th Floor, CONFERENCE Room
300 W. Third Street, Oxnard, CA 93030

Santa Monica City Hall
Room 209
1685 Main Street, Santa Monica, CA 90401

Thousand Oaks City Hall
Public Works Conference Room
2100 Thousand Oaks Blvd.,
Thousand Oaks, CA 91362

MINUTES

I. WELCOME & ROLL CALL

Chair Carmen Ramirez called the meeting to order. Jacquelyn C Betha, Board Secretary conducted roll call.

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<th>Roll Call</th>
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<th>Committee Alternate</th>
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<tbody>
<tr>
<td>1 Arcadia</td>
<td>Tom Tait</td>
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<td>Present</td>
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<td>2 Carson</td>
<td>Reata Kulcsar</td>
<td>Committee Member</td>
<td>Present</td>
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<td>3 Malibu</td>
<td>Craig Georg</td>
<td>Committee Alternate</td>
<td>Present</td>
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<td>4 Oxnard</td>
<td>Carmen Ramirez</td>
<td>Committee Chair</td>
<td>Present</td>
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<td>5 Thousand Oaks</td>
<td>Helen Cox</td>
<td>Committee Member</td>
<td>Present</td>
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<tr>
<td>6 Santa Monica</td>
<td>Kevin McKeown</td>
<td>Committee Member</td>
<td>Present</td>
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<td>7 Sierra Madre</td>
<td>John Harabedian</td>
<td>Committee Member</td>
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II. PUBLIC COMMENT
There were no public comments.

III. REGULAR AGENDA

1. Approved Minutes from August 22, 2018 Energy Planning & Resources Committee Meeting

   Motion: Santa Monica, Director McKeown. Second: Carson, Director Kulcsar.
   Vote: Item 1 was approved by a unanimous roll call vote.

2. Received Risk Management Team Report

   Matthew Langer, Chief Operating Officer, presented the second RMT update since its initial August meeting. The RMT is developing a concrete and permanent process for adopting credit limits and expects to seek approval of the process during the October Board meeting. The transaction validation checklist has also been approved that includes a thorough checkpoint review of all documents before the final signature is executed.

   The RMT reviewed CPA’s position and purchase needs, approved entering into some negotiations and transactions, and reviewed incoming RFO responses. CPA will begin purchasing block energy for 2018, 2019, and 2020 and is selling some excess block energy for the balance of 2018. We will also plan to purchase some Resource Adequacy for 2018 and 2019.

   Mr. Langer shared an explanation of an examined transaction during the month of October, where CPA purchased block energy that exceeded its needs. Because it presented a surplus, CPA sold the access energy. Lastly, the RMT discussed planned Resource Adequacy purchases for 2019 also exceed total need, which is contemplated under the ERMP, and that wherever possible, CPA will look to sell excess volumes to minimize total portfolio costs.

3. Received update on Voyager Wind Power Purchase Agreement (PPA) Opportunity

   Natasha Keefer, Director of Power Planning and Procurement, reported that staff has made significant progress since the initial review of the PPA at the August Energy Committee meeting, and has begun finalizing negotiations with the
counterparty. CPA will conduct a visit to the site on October 1, 2018. This will be an excellent opportunity to see an actual wind project under construction.

This project allows CPA to secure a new wind resource, which are limited opportunities, and this will improve the diversity of our portfolio since wind generation often takes place at night when our solar resources are not producing. This also will ensure that we meet our RPS compliance obligation, and meet our long-term obligation under SB 350. CPA expects this project to lower our costs by 25% compared to our estimated RPS cost for the year 2019. The project has an expectant completion time by the end of 2018.

The opportunity overall presents low risk. Once the contract ends, CPA is not required to renegotiate terms for another PPA from the supplier, which means CPA can either go back to the original seller or negotiate with a different resource vendor.

The Committee asked if there is a conflict of interest between obtaining energy from both Calpine and Terragen. Staff responded that, no there is not.

Committee Chair Ramirez inquired about workforce development components and the creation of jobs within our community and economy, so employees can transition as we move further into world of using clean energy. Ms. Keefer responded that this project will create 16 permanent jobs, some of which are high-skilled jobs that deal directly with working with the turbines.

4. Received update on Long-Term Request for Offers (RFO)

Natasha Keefer, Director of Power Planning and Procurement, presented an overview of CPA’s Long-Term clean energy RFO selection process, which is on track to launch the first week of October, and information is available on CPA’s website. A notification was sent out to developers on September 14, and the deadline for receiving RFO submissions is November 9, after which staff will work with Committee Chair Ramirez and Committee Member McKeown review project submittals and present a long list to the Committee. Individual projects will be ranked on the following criteria: REC value, developer risk, environmental stewardship, workforce development, location, benefits to disadvantaged communities, and supplier diversity.
The following individuals provided public comments on Item 4: Stephanie Dashiell (The Nature Conservatory), Jennifer Kropke (IBEW Local 11 / NECA), and Sarah Friedman (The Sierra Club).

IV. COMMITTEE MEMBER COMMENTS
Committee Chair Ramirez asked for an updated on the Community Advisory Committee, and Jennifer Ward, Head of Local Government Affairs, responded that staff received over 40 applications and is working on the review process with the Ad Hoc Committee.

V. ADJOURN
Committee Chair Ramirez adjourned the meeting.
KEY ACTIONS

- The Executive Director appointed CPA’s new Chief Financial Officer, David McNeil, to the Risk Management Team (RMT). Such an appointment was contemplated in the Energy Risk Management Policy.
- Reviewed financial model and discussed timing considerations for 2019 RPS and carbon free energy deliveries.
- Reviewed open positions and approved the following:
  - Requests for Offers (RFOs) to buy block energy quantities for 2019-2021 in accordance with the Energy Risk Hedging Strategy
  - RFO to sell excess block energy for December 2018 and January 2019

REGULATORY UPDATE

- On November 21, the California Public Utilities Commission (CPUC) issued a proposed decision (PD) in its Resource Adequacy (RA) proceeding. The PD would establish SCE, PG&E and SDG&E as central buyers for all local RA in their territories starting in 2020. If adopted, this would mean that CPA would no longer be responsible for procuring any local RA, but could sell local RA it holds to the
central buyer. CPA is continuing to monitor the proceeding and is coordinating a response through CalCCA.

**POLICY COMPLIANCE**

- No compliance issues were identified this month.
Long-term RFO Longlist Update

Thursday December 13, 2018
Executive Summary

• CPA launched its 2018 clean energy RFO on October 4th, with bids due on Nov. 9th
  - CPA targets procurement of 1-2 million MWh annually in this RFO
• CPA received a robust response from bidders for renewable, renewable + storage, and standalone storage offers
• The RFO review team, including Board members Carmen Ramirez and Kevin McKeown, met on Dec. 5th to review the offer longlist
  - Today’s presentation includes a summary of the longlist
• Projects will be evaluated and ranked by the RFO review team in early January. The Energy Committee will then select a preferred portfolio on Jan. 16th
Proposal Overview

- 234 facilities participated in the RFO, with 657 total pricing offers.
Facilities by Technology

• The majority of facilities (78.7%) are solar or solar + storage
Facilities by Location

- 32 projects are located within LA/Ventura counties (13%)
- 36 projects are located out-of-state (15%)
Implied REC Value (IRV)

- Projects are evaluated based on their implied renewable energy credit (REC) values, i.e. the premium or discount paid to conventional energy

- Implied REC value ($/MWh) =

\[
\text{Future PPA Payments} \div \text{MWh}
\]

\[
= (\text{PPA price} \times \text{generation profile})
\]

\[
\text{Energy Benefits} = (\text{Energy price forecast} \times \text{generation profile})
\]

\[
\text{RA Benefits} = (\text{RA price forecast} \times \text{capacity value})
\]
Capacity Factor

- Capacity factor is the ratio of actual output of a project over a period of time, compared to potential output if it were possible for the project to operate at full nameplate capacity continuously over the same period of time.

- Capacity factor =

\[
\text{Project annual expected generation profile} / 8760 \times \text{Project Total Capacity}
\]
Value by Technology

- Solar reflects the most competitive offers, and geothermal the least.
Pricing by Location / Technology

- SoCal has a significant concentration of competitively priced projects
Commercial Online Date (COD)

- CPA is required to procure long-term resources by 12/31/2021

- CPA received a robust response of offers meeting the 12/31/2021 requirement; however CPA may also explore nonconforming offers
Development Risk

- Development risk (100% best / 0% worst) is scored based on a number of factors
  - Site control
  - Interconnection status
  - Environmental screens
  - Land use and permitting
  - Project financing
Example Solar Capacity Factor Profiles

- Solar output is fairly predictable, as shown on the annual average 24-hour profile below:
Example Wind Capacity Factor Profiles

- Wind output is highly variable and location-dependent
Qualitative Evaluation Criteria

In addition to valuation and development risk, offers will be ranked either High, Medium, Low on the following criteria:

- Environmental Stewardship
- Workforce Development
- Benefits to Disadvantaged Communities
- Project Location
Next Steps

• CPA is wrapping up validation of project submissions, economic valuations, and qualitative rankings

• The RFO review team will reconvene in early January to review individual project rankings and prepare a number of portfolio scenarios for Energy Committee selection on Jan. 16th

• Once the Energy Committee selects a short-list portfolio, CPA will announce short-listed projects to move forward with PPA negotiations

• After negotiations are complete, the Board will consider final PPA proposals for execution in the Spring