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

Wednesday, January 16, 2019
11:45 a.m.

555 West 5th Street, 35th Floor
Los Angeles, CA 90013

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:

Arcadia Public Works Service Center
11800 Goldring Road
Arcadia, CA 910066

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

Santa Monica City Hall
Room 201
1685 Main Street
Santa Monica, CA 90401

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

Ventura County Government Center
Hall of Administration, 4th Floor
Channel Islands Conference Room
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 December 13, 2018 Energy Planning & Resources Committee Meeting
2. Select Shortlist of Providers for Long Term Renewable Energy Development and Storage Capacity
3. December 2018 Risk Management Team Report

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

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

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

MINUTES

I. WELCOME & ROLL CALL  
Committee Chair Carmen Ramirez called the meeting to order. Board Secretary  
Jacquelyn C. Betha conducted roll call.

| ROLL CALL |
|------------------|------------------|------------------|------------------|
| 1. Arcadia       | Tom Tait         | Committee Member | Absent           |
| 2. Carson        | Reata Kulcsar    | Committee Member | Present          |
| 3. Malibu        | Carmen Ramirez   | Committee Chair  | Absent           |
| 4. Oxnard        | Carmen Ramirez   | Committee Member | Present          |
| 5. Thousand Oaks | Helen Cox        | Committee Member | Present          |
| 6. Santa Monica  | Kevin McKeown    | Committee Member | Present          |
| 7. Sierra Madre  | James Carlson    | Alternate        | Present          |

II. PUBLIC COMMENT  
There were no public comments.

III. REGULAR AGENDA
1. **Approve Minutes from September 26, 2018 Energy Planning & Resources Committee Meeting**

   Motion: Santa Monica, Committee Member McKeown. Second: Thousand Oaks, Committee Member Cox. Vote: Item 1 was approved by a unanimous roll call vote.

2. **November 2018 Risk Management Team Report**

   Matt Langer, Chief Operating Officer, presented the Risk Management Team (RMT) Report for the month of November. Key Actions taken included: the appointment of CPA’s Chief Financial Officer to the RMT; review of financial models and discussion of timing considerations for 2019 RPS and carbon free energy deliveries; and approval of block energy transactions in accordance with the Energy Risk Hedging Strategy.

   Mr. Langer also provided a Regulatory Update on the November 21 CPUC proposed decision regarding Resource Adequacy, which would establish the IOUs as central buyers for all local RA in their territories staring in 2002. If adopted by the CPUC, this would mean that CPA would no longer be responsible for procuring any local RA, but could sell local RA back to the central buyer. Staff will continue to monitor this proceeding in conjunction with CalCCA, and provide updates to the Committee.

3. **Long Term Request for Offers (RFO) Update**

   Natasha Keefer, Director of Power Planning & Procurement, provided a presentation on the Long Term RFO process, including CPA’s longlist of projects. Bids were due on November 9, and CPA received a robust response from bidders for renewable energy, renewable plus storage, and standalone storage offers. The RFO Review Team, which included Directors Ramirez and McKeown, reviewed the longlist of offers on December 5, and staff will be bringing a preferred portfolio to the Energy Committee on January 16. Ms. Keefer reported that 234 facilities participated in the RFO, with 657 total pricing offers, with the majority of these facilities being solar or solar plus storage. She reported that 32 projects are located within the Los Angeles and Ventura County region. Once the Energy Committee selects a shortlist portfolio, CPA will announce short-listed projects to move forward with power purchase agreement (PPA) negotiations. After negotiations are complete, the Board will consider final PPA proposals for execution in the spring.
IV. COMMITTEE MEMBER COMMENTS

Committee member Kevin McKeown inquired about how we safeguard ourselves against competing contractors. Once projects are short-listed, contractors are required to submit a short-list deposit to maintain their place on the list and sign an exclusive enlistment agreement.

Committee member Kulcsar requested that short-list project load be shown on a map.

Committee Chair Ramirez introduced Karen Schmidt, Regional Affairs Manager serving Ventura County for CPA staff.

V. ADJOURN:

Committee Chair Ramirez adjourned the meeting.
Long-term RFO
Shortlist Review

January 16, 2019
Agenda

• Shortlist Overview
• RFO Schedule
• Project Evaluation
• Portfolio Considerations
• Portfolio Options
• Portfolio Comparison
• Summary
• Appendix
Shortlist Overview

- CPA received proposals from 234 facilities in the RFO, including 23 standalone storage projects
- Individual offers were evaluated on price and qualitative criteria
- CPA’s RFO Review Team met to review three portfolio options and developed a recommended portfolio for Energy Committee consideration
- The objective of today’s meeting is for the Energy Committee to select a preferred portfolio
- Due to RFO confidentiality requirements, project-specific information (e.g. project names and pricing) are not included
- Once the Energy Committee determination is made, CPA will notify bidders
RFO Schedule

- CPA’s RFO schedule includes an additional opportunity for developers to improve offers; some projects from the initial shortlist will not be invited to the final shortlist

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 8</td>
<td>Review Team selections shortlist portfolio options</td>
</tr>
<tr>
<td>January 8-15</td>
<td>Complete additional diligence on shortlisted projects</td>
</tr>
<tr>
<td>January 16</td>
<td>Energy Committee to select preferred portfolio for shortlisting</td>
</tr>
<tr>
<td>January 16</td>
<td>Initial Shortlist Notification</td>
</tr>
<tr>
<td><strong>January 22-30</strong></td>
<td><strong>Reopen RFO for initial shortlisted projects</strong></td>
</tr>
<tr>
<td>February 4</td>
<td>Final shortlist announced</td>
</tr>
<tr>
<td>February 15</td>
<td>Deadline for Shortlisted Bidders to sign Exclusivity Agreements</td>
</tr>
<tr>
<td>February – April</td>
<td>PPA Negotiations</td>
</tr>
<tr>
<td>April/May 2019</td>
<td>Board Approval of PPA</td>
</tr>
<tr>
<td>April/May 2019</td>
<td>PPA Execution</td>
</tr>
</tbody>
</table>
Project Evaluation

- Each project is considered based on 6 evaluation criteria:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation</td>
<td>$/MWh implied REC value (RPS)</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>$/kW value (standalone energy storage)</td>
</tr>
<tr>
<td>Development Risk</td>
<td>0 (Low) to 100 (High)</td>
</tr>
<tr>
<td>Environmental Stewardship</td>
<td>High, Medium, Neutral, Low</td>
</tr>
<tr>
<td>Workforce Development</td>
<td>High, Medium, Low</td>
</tr>
<tr>
<td>Benefits to Disadvantaged Communities (DACs)</td>
<td>High, Medium, Low</td>
</tr>
<tr>
<td>Project Location</td>
<td>High, Medium, Low</td>
</tr>
</tbody>
</table>

See Appendix for Evaluation Criteria Definitions
Portfolio Considerations
Success Rates

- It is anticipated that some selected projects may not successfully come online, either due to unsuccessful PPA negotiations or development failure\(^1\)
- To ensure that the selected portfolio meets the RFO’s volume target\(^2\), each project’s expected output has been adjusted using an industry-standard success factor:

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPS Only</td>
<td>70%</td>
</tr>
<tr>
<td>RPS + Storage</td>
<td>60%</td>
</tr>
<tr>
<td>Standalone Storage</td>
<td>50%</td>
</tr>
</tbody>
</table>

(1) CPA included financial penalties via the RFO process and PPA provisions to ensure CPA is compensated for project failure
(2) 1-2 million MWh of annual renewable generation
Approach to Portfolio Creation

- All portfolio options to include both competitively-priced, low-risk projects and a mix that score High on Qualitative Criteria
- Staff initially took three approaches to developing portfolios that meet critical objectives of CPA’s clean energy procurement:

1. **Value**
   - Projects fall within the top quartile of value

2. **Diversity**
   - Projects selected to ensure diverse resource mix

3. **Early Online Dates**
   - Includes projects with Q1 2021 and earlier online dates

4. The RFO Review Team developed a 4th **Recommended Portfolio**, taking the best selections from the initial three options
Portfolio Options
Value Portfolio Overview

Total number of projects | 9
Number of developers | 9
Projects located in LA/Ventura | 2
Early Online | 2
Value Rank (1=high, 4=low) | 1

Technology Mix
- Solar: 4
- Solar+Storage: 2
- Wind: 2
- EES: 1

Notes
- All projects except for wind are within the top quartile of value
- CPA received limited offers for wind; selected wind project is included for portfolio diversification
- Limited early online date projects

Qualitative Criteria
- Workforce Dev.: High: 4, Medium: 2, Neutral: 3
- Location: High: 2, Medium: 7
- Benefits to DACs: High: 3, Medium: 4, Neutral: 2
- Env. Stewardship: High: 5, Medium: 1, Neutral: 1, Low: 1
Value Portfolio Average Generation Profile
Diversity Portfolio Overview

<table>
<thead>
<tr>
<th>Total number of projects</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of developers</td>
<td>10</td>
</tr>
<tr>
<td>Projects located in LA/Ventura</td>
<td>2</td>
</tr>
<tr>
<td>Early Online</td>
<td>3</td>
</tr>
<tr>
<td>Value Rank (1=high, 4=low)</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes

- At least one project by technology was selected; geothermal, wind, and hydro were above-market on cost
- One out-of-state wind project was considered due to significantly better value versus in-state wind
- Least attractive portfolio on qualitative criteria

Technology Mix

- Solar
- Solar+Storage
- Wind
- EES
- Hydro
- Geothermal
- Wind+Storage

Qualitative Criteria

- Workforce Dev.
  - High: 3
  - Medium: 2
  - Neutral: 3
- Location
  - High: 2
  - Medium: 5
  - Neutral: 1
- Benefits to DACs
  - High: 2
  - Medium: 3
  - Neutral: 3
- Env. Stewardship
  - High: 5
  - Medium: 1
  - Neutral: 1
  - Low: 1
Diversity Portfolio Average Generation Profile
Early Online Portfolio Overview

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of projects</td>
<td>10</td>
</tr>
<tr>
<td>Number of developers</td>
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</tr>
<tr>
<td>Projects located in LA/Ventura</td>
<td>2</td>
</tr>
<tr>
<td>Early Online</td>
<td>4</td>
</tr>
<tr>
<td>Value Rank (1=high, 4=low)</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes

- CPA received limited offers for projects with early online dates; most were high-priced
- Highest amount of projects scoring Low on Workforce Development

Qualitative Criteria

- Workforce Dev.: 3 High, 2 Medium, 5 Low
- Location: 2 High, 8 Medium
- Benefits to DACs: 3 High, 5 Medium, 2 Low
- Env. Stewardship: 6 High, 2 Medium, 1 Low
Early Online Portfolio Average Generation Profile
Recommended Portfolio Overview

<table>
<thead>
<tr>
<th>Technology Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
</tr>
<tr>
<td>Solar+Storage</td>
</tr>
<tr>
<td>Wind</td>
</tr>
<tr>
<td>EES</td>
</tr>
<tr>
<td>Hydro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Recommended Portfolio is of similar composition to the value portfolio, with the addition of a hydro project and early online date project</td>
</tr>
<tr>
<td>• Strong on qualitative criteria</td>
</tr>
<tr>
<td>• Does not include out-of-state projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total number of projects</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of developers</td>
<td>11</td>
</tr>
<tr>
<td>Projects located in LA/Ventura</td>
<td>2</td>
</tr>
<tr>
<td>Early Online</td>
<td>3</td>
</tr>
<tr>
<td>Value Rank (1=high, 4=low)</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualitative Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Dev.</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>Benefits to DACs</td>
</tr>
<tr>
<td>Env. Stewardship</td>
</tr>
</tbody>
</table>

- Workforce Dev: 5 High, 2 Medium, 3 Neutral, 3 Low
- Location: 2 High, 8 Medium, 8 Neutral, 8 Low
- Benefits to DACs: 5 High, 3 Medium, 3 Neutral, 2 Low
- Env. Stewardship: 5 High, 2 Medium, 2 Neutral, 2 Low
4 Recommended Portfolio Average Generation Profile
The Recommended Portfolio is a good value from a pricing perspective, while offering strong qualitative benefits and balancing various procurement objectives.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Diversity</th>
<th>Early Online</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Portfolio Cost</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Technology Mix</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total number of projects</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>High on Workforce Dev.</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>High on Location</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>High on Benefits to DACs</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>High on Env. Stewardship</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Early Online</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
Summary

• The Recommended Portfolio achieves value, procurement objectives, and qualitative benefits

• The initial shortlist represents over $1.5B of potential clean energy commitments by CPA over the next 15 years

• Given the attractive pricing of long-term renewables, the initial shortlist has the opportunity to save CPA approx. $60m per year compared to short-term renewable procurement

• CPA will have additional opportunities to contract for attractive projects in the 2019 Clean Energy RFO
APPENDIX
Long-Term Procurement Requirement

SB 350 - Section 399.13¹

“A retail seller may enter into a combination of long- and short-term contracts for electricity and associated renewable energy credits. Beginning January 1, 2021, at least 65 percent of the procurement a retail seller counts toward the renewables portfolio standard requirement of each compliance period² shall be from its contracts of 10 years or more in duration or in its ownership or ownership agreements for eligible renewable energy resources.”

(1) The 65% requirement has not changed under SB100
(2) The 4-year compliance period is 2021-2024
Storage Mandate

AB 2514

• By 2020, each LSE is required to contract for storage capacity equal to 1% of its forecasted 2020 peak load

• Storage resources must be operational by no later than the end of 2024

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA Peak Load (MW)</td>
<td>2,559</td>
</tr>
<tr>
<td>Storage (% of Peak)</td>
<td>1%</td>
</tr>
<tr>
<td>CPA Installed Storage Target (MW)</td>
<td>26</td>
</tr>
</tbody>
</table>
Developer Risk

*Projects will ranked from highest to lowest score (0-100)*

- The developer risk metric is a composite score based on a number of factors impacting project risk:
  - Site control
  - Interconnection status
  - Environmental screens
  - Land use and permits
  - Project financing
Environmental Stewardship

Projects are ranked high, medium, neutral, and low based on the following prioritization:

- **HIGH**
  - Demonstrates multiple benefits (provides additional societal, health, economic, water saving, or environmental benefits beyond the climate and GHG reduction benefits of renewable energy)

- **MEDIUM**
  - Located in an area designated as a preferred renewable energy zone and received required land use entitlement permits

- **NEUTRAL**
  - Project does not demonstrate either preference or avoidance criteria

- **LOW**
  - Project is located in a high conflict area
Workforce Development

*Projects will be ranked high, medium, and low based on the following prioritization:*

**HIGH**
- The project will use targeted-hire, union labor, or multi-trade project labor agreements (including requirements for state-apprenticeship graduates)

**MEDIUM**
- The project does not have a labor agreement, but can demonstrate prevailing wage, union labor, and targeted hire commitments

**LOW**
- The project does not demonstrate prevailing wage, union labor, and targeted hire commitments
Project Location

Projects will be ranked high, medium, and low based on the following prioritization:

- **HIGH**
  - In Los Angeles and Ventura counties

- **MEDIUM**
  - Other counties within California

- **LOW**
  - Out of state projects
Benefits to DACs

Projects will be ranked high, medium, and low based on the following prioritization:

HIGH
- Located within a DAC and demonstrates DAC workforce and community development benefits

MEDIUM
- Project not located within a DAC but can demonstrate DAC benefits and has completed community outreach

LOW
- Project does not demonstrate DAC benefits
To: Clean Power Alliance (CPA) Energy Planning & Resources Committee

From: Matthew Langer, Chief Operating Officer

Approved by: Ted Bardacke, Executive Director

Subject: December 2018 Risk Management Team Report

Date: January 16, 2019

KEY ACTIONS

- Established a voting protocol for the Risk Management Team (RMT) to approve/reject potential transactions that fall within RMT approval authority per the Energy Risk Management Policy (ERMP). To approve a transaction, a majority of RMT members, including the Executive Director, must provide an affirmative vote. The Executive Director retains discretion to execute transactions under his authority pursuant to the limits defined in the ERMP.

- Reviewed 2018 year-end compliance with hedge targets by product. Deviations summarized below.

- Reviewed open positions and approved the following:
  - Purchase of energy hedges covering May through November 2019
**POLICY COMPLIANCE**

<table>
<thead>
<tr>
<th>Policy Deviation</th>
<th>Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA is short of procurement targets for PCC1 and PCC2 energy in 2020 and 2021. CPA ran a 2019-2023 clean energy RFO and has purchased enough PCC1 and PCC2 to meet 2019 targets but did not receive sufficient bids to meet 2020 and 2021 targets.</td>
<td>CPA will issue another short-term clean energy RFO in the beginning of 2019. CPA is also engaging in bilateral discussions with counterparties.</td>
</tr>
<tr>
<td>CPA is short of target for RA procurement in 2021.</td>
<td>CPA will issue an RA RFO in the beginning of 2019 for needs in 2021 and beyond; however, some regulatory uncertainty exists related to pending CPUC actions on RA procurement.</td>
</tr>
</tbody>
</table>