SPECIAL NOTICE: Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID19, the Energy Planning & Resources Committee will conduct this meeting remotely.

To Listen to the Meeting:
https://us06web.zoom.us/j/93530657960
or
Dial: (720) -707-2699 Meeting ID: 935 3065 7960

PUBLIC COMMENT: Members of the public may submit their comments by one of the following options:

- **Email Public Comment:** Members of the public are encouraged to submit written comments on any agenda item to clerk@cleanpoweralliance.org up to four hours before the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.

- **Provide Public Comment During the Meeting:** Please notify staff via email at clerk@cleanpoweralliance.org at the beginning of the meeting but no later than immediately before the agenda item is called.
  - You will be asked for your name and phone number (or other identifying information) and agenda item similar to filling out a speaker card so that you can be called on when it is your turn to speak.
  - You will be called upon during the comment section for the agenda item on which you wish to speak on. When it is your turn to speak, a staff member will unmute your phone or computer audio.
  - You will be able to speak to the Board for the allotted amount of time. Please be advised that all public comments must otherwise comply with our Public Comment Policy.
  - Once you have spoken, or the allotted time has run out, you will be muted during the meeting.

If preferred, you may also submit written comments during the meeting via email to clerk@cleanpoweralliance.org. The written comments will be shared with the Board of Directors.

*While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click “start from your browser.”*
Clean Power Alliance Energy Planning & Resources Committee
January 26, 2022

Meetings are accessible to persons 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 the Clerk of the Board at least two (2) working days before the meeting at clerk@cleanpoweralliance.org or (323) 640-7664. 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.

PUBLIC COMMENT POLICY: The General Public Comment item is reserved for persons wishing to address the Board on any Clean Power Alliance-related matters not on today’s agenda. Public comments on matters on today’s Consent Agenda and Regular Agenda shall be heard at the time the matter is called. Comments on items on the Consent Agenda are consolidated into one public comment period. Members of the public who wish to address the Board are requested to contact the Board Clerk, as specified above, at the beginning of the meeting but no later than immediately prior to the time an agenda item is called. Each speaker is limited to two (2) minutes (in whole minute increments) per agenda item with a cumulative total of five 5 minutes to be allocated between the General Public Comment, the entire Consent Agenda, or individual items in the Regular Agenda. Please refer to Policy No. 8 – Public Comment for additional information.

CALL TO ORDER & ROLL CALL

GENERAL PUBLIC COMMENT

CONSENT AGENDA

1. Approve Minutes from December 16, 2021 Special Energy Committee Meeting

2. Receive and File November and December 2021 Risk Management Team Report

REGULAR AGENDA

3. Approve Shortlist Projects as Recommended by the Review Team for the 2021 Mid-Term Reliability RFO

COMMITTEE MEMBER COMMENTS

ADJOURN – NEXT MEETING FEBRUARY 23, 2022

Public Records: Public records that relate to any item on the open session agenda for a Committee 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, or a majority of, the members of the Committee. Those documents are available for inspection online at www.cleanpoweralliance.org/agendas.
MINUTES
SPECIAL MEETING of the Energy Planning & Resources Committee
of the Clean Power Alliance of Southern California
Wednesday, December 16, 2021, 1:00 p.m.

Pursuant to the Proclamation of the State of Emergency by Governor Newsom on
March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread
of COVID19, the Energy Planning & Resources Committee will conduct this meeting remotely.

CALL TO ORDER & ROLL CALL
Chair Parkhurst called the meeting to order at 12:16 p.m. and Interim Clerk of the Board,
Raynette Tom, conducted roll call.

<table>
<thead>
<tr>
<th>City</th>
<th>Member</th>
<th>Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alhambra</td>
<td>Jeffrey Maloney</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Carson</td>
<td>Reata Kulcsar</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Culver City</td>
<td>Daniel Lee</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Oxnard</td>
<td>Kathleen Mallory</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Sierra Madre</td>
<td>Robert Parkhurst</td>
<td>Chair</td>
<td>Remote</td>
</tr>
<tr>
<td>Thousand Oaks</td>
<td>Helen Cox</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Ventura County</td>
<td>Carmen Ramirez</td>
<td>Committee Member</td>
<td>Absent</td>
</tr>
</tbody>
</table>

All votes are unanimous, unless otherwise stated.

GENERAL PUBLIC COMMENT
There was no public comment.

Chair Parkhurst welcomed Kathleen Mallory as the newest member of the Energy
Committee and congratulated Dr. Lee for becoming the new Mayor of Culver City.

CONSENT AGENDA
1. Approve Minutes from October 27, 2021, Energy Committee Meeting
2. Receive and File November 2021 Risk Management Team Report

Motion: Committee Member Kulcsar, Carson
Second: Committee Member Cox, Thousand Oaks
Vote: The consent agenda was approved by a roll call vote.

REGULAR AGENDA
3. Mid-Term Reliability RFO Longlist
   Natasha Keefer, Vice President, Power Supply, provided a presentation on the
   item. In 2021, the California Public Utilities Commission (CPUC) issued a decision
   requiring all Load Serving Entities to undertake new procurement to address mid-
   term reliability; this decision ordered CPA to procure a total of 679 MW of new
reliable capacity between 2023-2026, of which a portion must be Long-Lead Time (LLT) resources. The capacity is intended to replace the capacity retiring from the Diablo Canyon Power Plant and other power plants, including two in CPA territory. CPA released an RFO to address this additional requirement, which closed in November 2021; CPA received a robust response to the Renewable Energy plus Storage and Standalone Storage product categories and a limited response to the Baseload/Firm product category. Ms. Keefer reviewed CPA’s compliance position in years 2023-2025, noting that in 2026, CPA must also procure 118 MW LLT resources. Ms. Keefer discussed the availability of baseload resources, which include firm, zero-emitting generation resources, generally referring to biomass and geothermal. Both of these technologies are expensive compared to other sources of renewable power and may have other adverse environmental impacts. Furthermore, geothermal capacity is limited by geography, and no new biomass resources are in the CAISO interconnection queue, which is indicative of the number of projects being developed. The CPUC designed the procurement mandate to be resource-neutral to encourage the development of a diverse set of storage technologies, however, the RFP results indicate that CPA will likely meet long duration storage requirements with lithium-ion batteries. Ms. Keefer summarized the RFO requirements, noting that CPA sought three types of eligible resources: (1) renewable generation plus storage; (2) standalone storage; and, (3) baseload/firm renewable energy. Ms. Keefer provided an overview of the offers submitted; then reviewed the offers received by technology and resource type, location and county, commercial online date, and ranked offers by generation capacity. Ms. Keefer also discussed pricing trends, noting that for storage, pricing is nearly the same as last year and baseload/firm continues to be expensive. Lastly, Ms. Keefer provided a summary of the RFO schedule and the takeaways from the RFO, specifically that opportunities to procure geothermal resources is limited; pricing on power purchase agreements is slightly higher compared to last year, largely due to global supply chain challenges, commodities, and labor; staff will continue to focus on conducting procurement in a way that protects CPA from too much exposure in any one year; and, opportunities to procure early online date projects by 2023 or sooner are very limited.

In response to Committee Member questions, Ms. Keefer clarified the following: CPA will have enough resources to meet its June 2025 compliance requirement; the CPUC defines baseload/firm category as requiring an 80-capacity factor, which solar plus storage does not meet. Additionally, hydropower could potentially qualify if it reached at least 80% capacity, but the opportunity to build new hydro in California is very limited. Other resources like biogas-fired plants could be considered if they qualified as renewable portfolio standard eligible technologies and run at 80% capacity. Ms. Keefer also explained that CPA is technology-neutral and hopes to see diversity in storage technologies, but there are still limited alternative technologies to lithium-ion batteries. Due to the tight timeframe, CPA has to contract for what is technologically viable in the 2023-2026 timeframe. Ted Bardacke, Executive Director, added that alternate technologies could be developed, and CPA will procure for it in the future, but currently had to focus on the compliance mandates. Ms. Keefer also noted that it is important for CPA to have geographic diversity to minimize market risk, hence why CPA has imposed project size limits.

Chair Parkhurst congratulated the procurement team for their efforts in launching an effective RFO with 88 out of 92 conforming offers.

4. Power Share/Community Solar RFO Schedule
Ms. Keefer reminded the Committee that the 2021 Power Share RFO was launched on December 8, 2021 and briefly reviewed the RFO schedule and staff activities leading up to the end of the RFO on June 1, 2022.

Responding to Chair Parkhurst’s request, Jack Clark, Director of Customer Programs, explained that multiple CPA departments has been involved in doing outreach to stakeholders, city staff, developers, and CAC members.

COMMITTEE MEMBER COMMENTS
None.

ADJOURN
Chair Parkhurst adjourned the meeting at 2:02 p.m.
To: Clean Power Alliance (CPA) Finance Committee

From: Geoff Ihle, Director of Market Risk

Approved by: Ted Bardacke, Chief Executive Officer

Subject: Risk Management Team Report

Date: January 26, 2022

November 2021 RMT REPORT

Key Actions
• Discussed October 2021 market performance
• Reviewed energy positions and approved 2021-2025 hedges
• Reviewed positions for RPS, carbon free, and Resource Adequacy
• Reviewed 2022 Congestion Revenue Right (CRR) Annual Auction results.

Policy Compliance
There were no policy deviations reported for November.

December 2021 RMT Report

Key Actions
• Discussed November 2021 market performance
• Reviewed energy positions and approved 2021-2024 hedges
• Reviewed positions for RPS, carbon free, and Resource Adequacy

Policy Compliance
There were three policy deviations reported for December:

<table>
<thead>
<tr>
<th>Policy Deviation</th>
<th>Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022 renewables maximum hedge target was exceeded due to budget action taken</td>
<td>CPA will continue to assess its 2022 load forecast and seek opportunities to sell additional length, if appropriate.</td>
</tr>
<tr>
<td>to reduce 2021 and 2022 renewable and carbon free purchases.</td>
<td></td>
</tr>
<tr>
<td>2025 and 2026 renewables maximum hedge targets were slightly exceeded due</td>
<td>No action recommended at this time. Forecasted positions may be change with</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>to contracted long-term resources expected to come online.</td>
<td>new load and generation forecasts (e.g. scenarios assuming project delays or failure rates).</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2022 carbon free maximum hedge target was exceeded due to transactions necessary to achieve CPA’s 2022 product content targets.</td>
<td>CPA will continue to assess its 2022 load forecast and seek opportunities to sell additional length, if appropriate.</td>
</tr>
</tbody>
</table>

**ATTACHMENT**

None.
Staff Report – Agenda Item 3

To: Energy Planning & Resources Committee
From: Natasha Keefer, Vice President, Power Supply
Approved by: Ted Bardacke, Chief Executive Officer
Subject: Approve Shortlist Projects as Recommended by the Review Team for the 2021 Mid-Term Reliability RFO
Date: January 26, 2022

Staff will provide a presentation on the item.

ATTACHMENT

1) 2021 Midterm Reliability RFO Shortlist
2021 Midterm Reliability RFO Shortlist

January 26, 2022
**Executive Summary**

- On June 24, 2021, the CPUC issued its Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026)*, which ordered CPA to procure a total of 679 MW of new reliable capacity between 2023-2026.

- To comply with the order, CPA launched its 2021 Midterm Reliability Request for Offers (RFO) on September 29 with bids due on November 10.

- On January 18th, the RFO Review Team reviewed confidential offer information and developed a recommended shortlist and waitlist.

**ACTION REQUESTED:** The purpose of this meeting is to present the recommended shortlist and waitlist to the Energy Committee for consideration and approval.

---

*D.21-06-035 under Rulemaking 20-05-003*
Agenda

- Background
- Offer Overview
- Valuation
- Shortlisting Approach
- Recommendation
- Next Steps
Background
RFO Process

- **Launch RFO**
  - Announce RFO to market

- **Receive, QC, and Value Offers**
  - Intake all offers in partnership with Ascend Analytics
  - Perform quality control (QC) on all offers
  - Perform valuation

- **RFO Review Team**
  - Staff presents **confidential** valuation results to RFO Review Team
  - Review Team meets to develop shortlisting approach and recommended shortlist for Energy Committee consideration

- **Energy Committee**
  - Recommended shortlist presented to Energy Committee for approval
  - Confidential information is removed

- **Exclusivity and Negotiations**
  - Shortlisted bidders are invited to enter exclusivity
  - Negotiations begin for bidders in exclusivity

- **Board Approval**
  - PPAs brought to full Board for approval on a rolling basis
CPA’s Procurement Need

- Under the decision, CPA is required to procure new build (“incremental”) capacity for three different product types.

- Based on CPA’s procurement to date, the table below shows CPA’s remaining procurement need for compliance:

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Volume (Reliable MW)</th>
<th>Online By</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Conventional” Renewable plus storage / standalone storage</td>
<td>46 MW</td>
<td>June 1, 2025</td>
</tr>
<tr>
<td>Baseload Renewables</td>
<td>59 MW</td>
<td>June 1, 2026</td>
</tr>
<tr>
<td>Long-Duration Storage (8+hrs duration)</td>
<td>59 MW</td>
<td>June 1, 2026</td>
</tr>
</tbody>
</table>
Current Long-term PPAs

Number of Projects by Technology

- Geothermal, 2
- Hydro, 2
- Solar, 2
- Wind, 2
- Solar plus Storage, 11
- Standalone Storage, 2

Generation MW by Technology

- Geothermal, 64
- Wind, 322
- Hydro, 32
- Solar, 43
- Solar plus Storage, 1,443
RFO Project Eligibility

Eligible Project Types

- **Renewable Generation Plus Storage Contracts**: Renewable generation paired with storage projects (40 MWh – 800 MWh in storage capacity). The storage duration must be at least 4 hours.

- **Standalone Storage Contracts**: Standalone storage projects with a storage capacity of 40 MWh – 800 MWh. The storage duration must be at least 4 hours.

- **Baseload/Firm Renewable Energy Contracts**: Generation capacity that has no on-site emissions or is eligible under the requirements of the RPS program and has at least an 80% capacity factor. Projects in this category should have a generation size of 5 MW – 100MW. No storage qualifies (per CPUC requirements).

Projects must come online by June 1, 2026
Evaluation Criteria

CPA evaluates projects based on six criteria:

- $ Value
- Environmental Stewardship
- Workforce Development
- Development Score
- Project Location
- Benefits to DACs

Descriptions of each criteria and rankings are found in the Appendix.
Offer Overview
## Offer Overview

<table>
<thead>
<tr>
<th>Summary Stats</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of offers submitted</td>
<td>92</td>
</tr>
<tr>
<td>Number of conforming offers</td>
<td>88</td>
</tr>
<tr>
<td>Number of unique facilities offered</td>
<td>78</td>
</tr>
<tr>
<td>Number of sellers submitting offers</td>
<td>39</td>
</tr>
<tr>
<td>Counties spanned by submissions</td>
<td>23</td>
</tr>
<tr>
<td>States represented by offers</td>
<td>AZ, CA, ID, NM, NV, UT</td>
</tr>
<tr>
<td>Number of new build offers</td>
<td>85</td>
</tr>
<tr>
<td>Number of existing facility offers</td>
<td>7</td>
</tr>
<tr>
<td><strong>Number of RPS baseload offers</strong></td>
<td>7</td>
</tr>
<tr>
<td>Number of offers from local storage only projects</td>
<td>14</td>
</tr>
<tr>
<td>Number of offers from local RPS projects</td>
<td>0</td>
</tr>
<tr>
<td><strong>Long-duration storage offers</strong></td>
<td>9</td>
</tr>
<tr>
<td>Earliest online date</td>
<td>6/30/2022</td>
</tr>
<tr>
<td>Latest online date</td>
<td>6/1/2026</td>
</tr>
</tbody>
</table>
Offers by Location and County

Number of Offers by Region

- Other: 2
- Central/North Coast: 5
- Sierra South: 6
- AZ/NV: 12
- Central Valley: 12
- Inland Empire: 14
- Transverse Range: 18
- South Coast: 19

Number of Offers per County

- Kern, Los Angeles, Riverside, Clark, NV, San Bernardino, San Diego, Tulare: 12
- Imperial, Merced, Orange, NV, Yolo, Madera, AZ: 6
- Kings, Imperial, Fresno, Tulare: 4
- Kern, Los Angeles, Riverside, Clark, NV, San Bernardino, San Diego, Tulare, Imperial, Merced, Orange, NV, Yolo, Madera, AZ: 2
- Kern, Los Angeles, Riverside, Clark, NV, San Bernardino, San Diego, Tulare, Imperial, Merced, Orange, NV, Yolo, Madera, AZ: 1

Agenda Page 20
### Qualitative Range of Offers

#### All Offers

<table>
<thead>
<tr>
<th></th>
<th>Environmental Stewardship</th>
<th>Benefits to DACS</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>8%</td>
<td>39%</td>
<td>97%</td>
<td>16%</td>
<td>70%</td>
</tr>
<tr>
<td>Medium</td>
<td>26%</td>
<td>34%</td>
<td>1%</td>
<td>67%</td>
<td>24%</td>
</tr>
<tr>
<td>Neutral</td>
<td>48%</td>
<td>27%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Low</td>
<td>18%</td>
<td>0%</td>
<td>2%</td>
<td>17%</td>
<td>6%</td>
</tr>
</tbody>
</table>

#### Standalone Storage Offers Only

<table>
<thead>
<tr>
<th></th>
<th>Environmental Stewardship</th>
<th>Benefits to DACS</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2%</td>
<td>39%</td>
<td>98%</td>
<td>26%</td>
<td>70%</td>
</tr>
<tr>
<td>Medium</td>
<td>35%</td>
<td>28%</td>
<td>2%</td>
<td>74%</td>
<td>22%</td>
</tr>
<tr>
<td>Neutral</td>
<td>57%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Low</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>7%</td>
</tr>
</tbody>
</table>

#### RPS Generation + Storage Offers Only

<table>
<thead>
<tr>
<th></th>
<th>Environmental Stewardship</th>
<th>Benefits to DACS</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>22%</td>
<td>41%</td>
<td>100%</td>
<td>0%</td>
<td>70%</td>
</tr>
<tr>
<td>Medium</td>
<td>11%</td>
<td>41%</td>
<td>0%</td>
<td>63%</td>
<td>30%</td>
</tr>
<tr>
<td>Neutral</td>
<td>26%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Low</td>
<td>41%</td>
<td>0%</td>
<td>0%</td>
<td>37%</td>
<td>0%</td>
</tr>
</tbody>
</table>

#### Baseload/Firm Offers Only

<table>
<thead>
<tr>
<th></th>
<th>Environmental Stewardship</th>
<th>Benefits to DACS</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
<td>0%</td>
<td>71%</td>
</tr>
<tr>
<td>Medium</td>
<td>14%</td>
<td>57%</td>
<td>0%</td>
<td>29%</td>
<td>14%</td>
</tr>
<tr>
<td>Neutral</td>
<td>57%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Low</td>
<td>29%</td>
<td>0%</td>
<td>29%</td>
<td>71%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Valuation
Quantitative Valuation Approach

Offers were valued and rated based on their Net Present Value (NPV) per MW of reliable capacity.

Offers were categorized into first through fourth quartiles (Q1-Q4).

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Costs</th>
</tr>
</thead>
</table>
| • **Energy Revenue** ($/kWh)  
  Earnings from selling energy generation from facility | • **PPA Energy Cost** ($/MWh)  
  Energy price CPA pays the counterparty |
| • **Resource Adequacy** ($/kW-month)  
  Replaces RA CPA would otherwise have to purchase | • **Storage Only:** **PPA Storage Cost** ($/kW-month)  
  Capacity price CPA pays the counterparty |
| • **Renewables Only:** **Renewable Energy Credit (REC)** ($/kWh)  
  Replaces RECs CPA would otherwise have to purchase | • **Storage Only:** **Grid Charging Energy Costs** ($/kWh)  
  CPA pays to charge storage with energy from the grid (if applicable) |
| • **Storage Only:** **Ancillary Services (AS)** ($/kWh)  
  Earnings from selling ancillary services | |
| • **Storage Only:** **Energy Discharge Revenue** ($/kWh)  
  Earnings from selling energy (from discharging the battery) | |

Value (NPV) = Benefits – Costs
Valuation by Technology

RA Normalized NPV ($/Average MW RA)

Higher NPV

Biomass
Geothermal
Long Duration Storage
Solar + Storage
Standalone Storage
Wind + Storage

Baseload Renewables
Long-Duration
Conventional

Lower NPV
Shortlisting Approach
Shortlisting Approach

- The shortlist will target filling CPA’s compliance need by product type (conventional, baseload renewables, long-duration storage).

- The Review Team recommends shortlisting\(^1\) a portion of its compliance requirement up to 2-3x its procurement need, depending on the product type and opportunities for future procurement.

- The Review Team recommends using a targeted waitlist\(^2\) as appropriate to ensure enough projects are approved to account for shortlisting and negotiation fallout.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Online By</th>
<th>Procurement Need (MW)</th>
<th>Shortlist Target (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Renewables/Storage</td>
<td>June 1, 2025</td>
<td>46 MW</td>
<td>150-250 MW</td>
</tr>
<tr>
<td>Baseload Renewables</td>
<td>June 1, 2026</td>
<td>59 MW</td>
<td>30-100 MW</td>
</tr>
<tr>
<td>Long-Duration Storage</td>
<td>June 1, 2026</td>
<td>59 MW</td>
<td>30-100 MW</td>
</tr>
</tbody>
</table>

(1) Shortlisted means CPA will immediately notify bidders of a Shortlist status award; CPA will ask for exclusivity and enter into negotiations with the shortlisted bidder.

(2) Waitlisted means CPA will immediately notify bidders they are on the Waitlist; CPA will not ask for exclusivity or enter negotiations. If projects in the Shortlist drop out, Waitlist projects will be invited to enter the Shortlist at CPA staff discretion.
Key Considerations – Baseload Renewables

- All geothermal offers are imports into CAISO (mix of in-state and out of state)
  - Import allocation rights must be obtained for imports into CAISO in order to count resources towards CPA’s RA obligations
- Offers included new built facilities as well as existing facilities with incremental MW additions
  - Only incremental MW will fulfill CPA’s compliance requirements
- Several geothermal facilities ranked Low on Environmental Stewardship
- All baseload renewables were ranked in the 4th Quartile
Key Considerations – Long-duration Storage

- CPA is still seeking clarification from the CPUC on how 4-hour batteries may count towards the long-duration storage procurement requirement
  - For shortlisting, we are assuming that 8-hour batteries are needed for compliance

- Long-duration offers included 8 lithium-ion batteries and 1 compressed air energy storage (CAES) technology
  - The CAES project ranks Low on environmental stewardship

- All long-duration storage is ranked in the 3rd and 4th quartile
Key Considerations – Conventional

- The conventional renewables/renewables+storage product category is an opportunity to secure high value, 1st quartile projects
  - The 1st quartile includes a mix of solar + storage and standalone storage projects
- There is an opportunity to contract with high value local projects
- The 1st quartile also includes several projects with Low Environmental scores, including high value out of state projects
Recommendation
Recommended Shortlist/Waitlist

- Total of 5 projects for shortlist; 5 projects for waitlist:
  - The shortlist includes 1 local project and 1 out of state project; 2 are located in DACs
  - All shortlisted projects rank High on Workforce Development
  - There are no Low Environmental Stewardship projects selected

### Shortlisted Projects by Project Type

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Procurement Need</th>
<th>Shortlist</th>
<th>Waitlist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Renewables/Storage</td>
<td>46 MW</td>
<td>210 MW</td>
<td>135 MW</td>
</tr>
<tr>
<td>Baseload Renewables</td>
<td>59 MW</td>
<td>25 MW</td>
<td>63 MW</td>
</tr>
<tr>
<td>Long-Duration Storage</td>
<td>59 MW</td>
<td>20 MW</td>
<td>125 MW</td>
</tr>
</tbody>
</table>

### Shortlisted Projects by Online Date

- **2023**: 2 Projects
- **2024**: 1 Project
- **2025**: 2 Projects

- Baseload/Firm Renewable Energy
- RPS Generation + Storage
- Standalone Storage
### Recommended Shortlist

<table>
<thead>
<tr>
<th>NPV Qtr</th>
<th>Online</th>
<th>Technology</th>
<th>MW Gen Range</th>
<th>MW Storage</th>
<th>Environmental Stewardship</th>
<th>Benefits to DACs</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 A</td>
<td>Q2 2024</td>
<td>Solar + Storage</td>
<td>0-49</td>
<td>0-49</td>
<td>Neutral</td>
<td>Neutral</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Kern, CA</td>
</tr>
<tr>
<td>1 B</td>
<td>Q3 2023</td>
<td>Standalone Storage</td>
<td>50-100</td>
<td>Neutral</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Tulare, CA</td>
</tr>
<tr>
<td>1 C</td>
<td>Q4 2023</td>
<td>Standalone Storage</td>
<td>50-100</td>
<td>Neutral</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>3 D</td>
<td>Q1 2025</td>
<td>Long-Duration Storage</td>
<td>0-49</td>
<td>Neutral</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Riverside, CA</td>
</tr>
<tr>
<td>4 E</td>
<td>Q4 2025</td>
<td>Geothermal</td>
<td>0-49</td>
<td>Neutral</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Eureka County, NV</td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Waitlist

<table>
<thead>
<tr>
<th>NPV Qtr</th>
<th>Online</th>
<th>Technology</th>
<th>MW Gen Range</th>
<th>MW Storage</th>
<th>Environmental Stewardship</th>
<th>Benefits to DACs</th>
<th>Workforce Development</th>
<th>Project Location</th>
<th>Development Score</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 F</td>
<td>Q1 2025</td>
<td>Standalone Storage</td>
<td>100-149</td>
<td>Neutral</td>
<td>Neutral</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Ventura, CA</td>
<td></td>
</tr>
<tr>
<td>4 G</td>
<td>Q2 2025</td>
<td>Long-Duration Storage</td>
<td>50-100</td>
<td>Medium</td>
<td>Neutral</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>San Diego, CA</td>
<td></td>
</tr>
<tr>
<td>4 H</td>
<td>Q2 2026</td>
<td>Long-Duration Storage</td>
<td>50-100</td>
<td>Neutral</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Riverside, CA</td>
<td></td>
</tr>
<tr>
<td>4 I</td>
<td>Q2 2026</td>
<td>Geothermal</td>
<td>0-49</td>
<td>Neutral</td>
<td>Neutral</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Beaver, UT</td>
<td></td>
</tr>
<tr>
<td>4 J</td>
<td>Q2 2025</td>
<td>Geothermal</td>
<td>0-49</td>
<td>Neutral</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Imperial, CA</td>
<td></td>
</tr>
</tbody>
</table>
NEXT STEPS
## RFO Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 18, 2022</td>
<td>RFO Review Team Reviewed Offers</td>
</tr>
<tr>
<td>January 26, 2022</td>
<td>Energy Committee shortlist consideration</td>
</tr>
<tr>
<td>January/February 2022</td>
<td>Bidders notified of shortlist status</td>
</tr>
<tr>
<td>January/June 2022</td>
<td>Power Purchase Agreement (PPA) and Energy Storage Agreement (ESA)</td>
</tr>
<tr>
<td></td>
<td>negotiations and awards</td>
</tr>
<tr>
<td>May-July 2022</td>
<td>Board Consideration of PPAs</td>
</tr>
</tbody>
</table>

Staff is seeking Energy Committee approval of the 2021 Mid-term Reliability RFO recommended shortlist at today’s meeting
Questions
Local Procurement

Via the Local Programs Strategic Plan and other procurement and planning efforts, the 175 MW goal for new energy and storage resources in Los Angeles and Ventura Counties by 2025 has been met and will be exceeded.

<table>
<thead>
<tr>
<th>Local Procurement Opportunity</th>
<th>Target Capacity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Share (Community Based)</td>
<td>3 MW</td>
<td>Power Share Program has been approved by the CPUC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RFO was released on 12/23/20</td>
</tr>
<tr>
<td>Power Share (CPA Wide)</td>
<td>13 MW</td>
<td></td>
</tr>
<tr>
<td>Utility-Scale Solar &amp; Storage</td>
<td>150 MW Local</td>
<td>184 MW of solar &amp; storage contracted</td>
</tr>
<tr>
<td>Commercial Rooftop</td>
<td>2 MW</td>
<td>2019 Distributed Track projects no longer in negotiations</td>
</tr>
<tr>
<td>Power Ready</td>
<td>~10 MW</td>
<td>Member RFI completed; Site selection process underway</td>
</tr>
<tr>
<td>Behind the Meter Resource Adequacy</td>
<td>TBD</td>
<td>Evaluating product and contract structures</td>
</tr>
</tbody>
</table>

(1) 56 MW solar + 28 MW storage Estrella project and 100 MW Luna storage project, both located in LA County
Development Score

Projects will be ranked from high (good) to low (bad)

The development risk metric is a composite rank based on a number of factors impacting project risk:

- Site control
- Interconnection status
- Environmental screens
- Land use and permits
- Project financing
- Developer experience
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 are 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
Benefits to Disadvantaged Communities

Projects are ranked high, medium, neutral, 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

- **NEUTRAL**
  - Project does not demonstrate DAC benefits

- **LOW**
  - Project is inconsistent with community priorities
Project Location

Projects are 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