



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

**Wednesday, July 27, 2022**

**12:15 p.m.**

**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.

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\*There may be a streaming delay of up to 60 seconds. This is a view-only live stream.

**To Access the Meeting:**

<https://us06web.zoom.us/j/85975901993>

or

Dial: (720) 707-2699 Meeting ID: 859 7590 1993

**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](mailto: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](mailto: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 Committee 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.

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Clean Power Alliance Energy Planning & Resources Committee  
July 27, 2022

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**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.*

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## **CALL TO ORDER & ROLL CALL**

## **GENERAL PUBLIC COMMENT**

## **CONSENT AGENDA**

1. Approve Minutes from June 22, 2022, Energy Committee Meeting
2. Receive and File June 2022 Risk Management Team Report

## **REGULAR AGENDA**

3. Approve the Shortlisted Projects as Recommended by the Review Team for the 2021 Power Share RFO
4. Approve Entering into Bilateral Negotiations for Power Purchase Agreements for Two (2) Geothermal Resources as Recommended by the Review Team

## **COMMITTEE MEMBER COMMENTS**

## **ADJOURN – NEXT MEETING AUGUST 24, 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](http://www.cleanpoweralliance.org/agendas).*

## MINUTES

REGULAR MEETING of the Energy Planning & Resources Committee  
of the Clean Power Alliance of Southern California  
Wednesday, June 22, 2022, 12:15 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 conducted this meeting remotely.*

### **CALL TO ORDER & ROLL CALL**

Chair Parkhurst called the meeting to order at 12:15 p.m. and, Gabriela Monzon, Board Clerk, conducted roll call.

<b>ROLL CALL</b>			
<b>Alhambra</b>	Jeffrey Maloney	Committee Member	Remote
<b>Culver City</b>	Daniel Lee	Committee Member	Absent
<b>Oxnard</b>	Kathleen Mallory	Committee Member	Remote
<b>Sierra Madre</b>	Robert Parkhurst	Chair	Remote
<b>Thousand Oaks</b>	Helen Cox	Committee Member	Absent
<b>Ventura County</b>	Carmen Ramirez	Committee Member	Remote

Director Diana Mahmud, South Pasadena, was also in attendance.

All votes are unanimous, unless otherwise stated.

### **GENERAL PUBLIC COMMENT**

There was no public comment.

### **CONSENT AGENDA**

1. Approve Minutes from May 25, 2022 Energy Committee Meeting
2. Receive and File May 2022 Risk Management Team Report

**Motion:** Committee Member Ramirez, Ventura County  
**Second:** Committee Member Maloney, Alhambra  
**Vote:** The consent agenda was approved by a roll call vote.

### **REGULAR AGENDA**

3. Review and Recommend Approval of Proposed Energy Risk Management Policy (ERMP) Amendments to the Board of Directors  
David McNeil, Chief Financial Officer, invited questions from the Committee about any of the proposed changes to the ERMP. Committee Member Ramirez asked if insider trading is addressed on the ERMP. Natasha Keefer, Vice President, Power Supply, noted that Section 3 of the policy discusses business practices including the code of conduct and trading for personal accounts. Subsequent to any revisions made to the ERMP, all Board members are required to review and sign an acknowledgment indicating an understanding of obligations. Committee

Member Mallory pointed to Section 6.1 and inquired as to who approved modifications to standard credit terms and confirmations previously. Mr. McNeil clarified that the new language affirms current practice, as there are standard credit terms and conditions in all agreements that require approval from the CFO already. Chair Parkhurst requested confirmation that the two main changes to the ERMP are verbiage clarifications and a change in the maximum procurement for carbon free energy. Mr. McNeil agreed and added that a form was created to formalize the process by which the CEO delegates energy transaction execution authority. Chair Parkhurst inquired why the change in maximum procurement for carbon free energy was necessary, and Ms. Keefer explained that the market conditions for carbon free energy are tightening. Carbon free product requires the procurement of existing large hydro that contributes zero emissions product to CPA's portfolio. Ms. Keefer indicated there is little probability of any development of new hydroelectric facilities in California, and CPA is importing a high quantity of large hydro from the pacific northwest, but that supply is also becoming limited. Therefore, the increase in the maximum procurement availability ensures CPA can purchase supplies quickly as they become available. Director Mahmud suggested that a report of energy contracts executed pursuant to the CEO's authority would be a beneficial internal reporting process for the CEO. Ted Bardacke, CEO, agreed and added that all contracts are executed pursuant to conditions that the Risk Management Team has approved.

**Motion:** Committee Member Ramirez, Ventura County  
**Second:** Committee Member Mallory, Oxnard  
**Vote:** Item 3 was approved by a roll call vote.

4. Energy Procurement Update

Ms. Keefer provided a presentation on several procurement efforts and outlined details of the 2021 Mid-Term Reliability RFO and 2021 Power Share RFO. Two remaining projects are in negotiation from the 2021 MTR RFO, one standalone storage project, and one geothermal project. Other projects dropped out because of the industry-wide supply chain challenges that have impacted developers' ability to bring projects online at the prices originally bid for this RFO. CPA received eight bids from three unique developers for the two programs under the 2021 Power Share RFO, and staff is evaluating the offers. Ms. Keefer identified the focus of the 2022 MTR RFO is procuring additional conventional, baseload (geothermal), and long-duration storage resources, with the geothermal category posing the greatest difficulty primarily due to delivery and development challenges. The Power Ready RFO will launch later this summer and will install back-up power systems at member agency critical facilities during power outages. Ms. Keefer discussed issues impacting CPA's existing contracts, such as interconnection delays, ongoing pandemic-related supply chain impacts, rising commodity prices, and U.S. trade actions, including the Department of Commerce (DOC) investigation on solar panel tariff circumvention. On June 6, President Biden released an executive order to shield imported solar panels from duties imposed by the DOC during the next two years. Staff is working with developers to determine what impact this will have on solar supply chain pricing. CPA is in the process of negotiating amendments with existing contracts for solar and storage, critical for compliance and grid reliability, and the Board may consider amendments in July. The amendments would allow sellers to extend their guaranteed commercial online dates due to industry-wide challenges and include a reduction in solar plus storage capacity. CPA will request extensions of PPA terms, community benefits funding, and/or replacement products.

Committee Member Ramirez agreed with staff's course of action. Responding to Director Mahmud's question regarding the approximation of resources to a disadvantaged community (DAC), Ms. Keefer clarified that the DAC Green Tariff (DAC-GT) Program requires that the project be located in a disadvantaged community within SCE's service territory, but not necessarily CPA's. Director Mahmud asked how CPA determines who receives the energy from that program and whether there was any merit in contacting the respondents who dropped out of the 2021 MTR RFO, given the executive order. Ms. Keefer explained that enrollment into the DAC-GT Program is limited to CPA customers that meet low-income eligibility requirements. Additionally, because of the increase in pricing, the proposed approach is to have respondents rebid in the next RFO with the new price levels. Director Mahmud also inquired about the California Public Utilities Commission's (CPUC's) reconsideration of the compliance deadline, and staff noted that CPA has informed the CPUC and California Independent System Operator (CAISO) regarding the challenges and is awaiting a response and what financial penalties, if any, will be imposed. Committee Member Maloney asked if supply chain production and distribution would return to normal levels in the future even if energy pricing remained high. Staff stated that it's unknown, but there is a push to increase panel manufacturing capacity in the U.S. to mitigate these issues in the long term. Domestic supply might be more costly but less risky because there are no tariffs or forced labor issues. Chair Parkhurst inquired about the market's impact on long-duration storage. Ms. Keefer indicated that the last RFO yielded lithium-ion batteries as the major long-duration storage offer. Lithium and nickel prices have increased tremendously, particularly due to sanctions against Russia. Market changes provide the opportunity for other technologies to be more cost competitive; CPA may see other types of projects in the RFO that may be more price competitive. Chair Parkhurst asked clarifying questions regarding the Power Ready RFO. Matt Langer, Chief Operating Officer, indicated that staff is looking to have a certain number of MOUs signed and can include a caveat in the RFO that cities may need to drop off if they don't make it to the end of the process. Each city with a signed MOU will be included in the sites within the RFO package that developers will bid on. Director Mahmud inquired about the inclusion of the geothermal challenges in CPA's IRP filing and the sign-up response for DAC-GT customers. Staff confirmed the IRP will indeed address those challenges; there is 50% capacity left in the DAC-GT program. Staff is experimenting with modes of outreach to increase customer signups. Director Mahmud requested that an update on the DAC-GT program be included in the CEO report at the next Board meeting. Committee Member Mallory added that staff has been using social media posts to draw attention to the program in the City of Oxnard.

#### **COMMITTEE MEMBER COMMENTS**

Chair Parkhurst commented that the next few months would be busier than normal with the upcoming new and existing programs, contract updates and amendments, the IRP.

#### **ADJOURN**

Chair Parkhurst adjourned the meeting at 1:20 p.m.



## Staff Report – Agenda Item 2

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**To:** Clean Power Alliance (CPA) Energy Committee  
**From:** Geoff Ihle, Director of Market Risk  
**Approved by:** David McNeil, Chief Financial Officer  
**Subject:** June 2022 Risk Management Team Report  
**Date:** July 27, 2022

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### **June 2022 RMT REPORT**

#### **Key Actions**

- Reviewed May 2022 load forecast update
- Discussed May 2022 market performance
- Reviewed energy positions and approved 2022-2025 hedges
- Reviewed positions for RPS and carbon free products
- Reviewed Resource Adequacy (RA) positions. Approved a solicitation for 2023-2025 System RA via an RFO
- Reviewed proposed annual Energy Risk Management Policy revisions

#### **Policy Compliance**

The following policy deviation was reported:

<b>Policy Deviation</b>	<b>Required Action</b>
Due to an update to the load forecast (resulting in higher forecast energy usage) and a delay in commercial online date of two projects under long term contract (resulting in lower forecast supply), the Q2 2023 period did not meet the 85% Energy Risk Hedging Strategy minimum at the time of the June 26, 2022, measurement.	No immediate action required. Based on CPA's planned hedging activities over the next several months, the deviation is expected to be corrected by the end of September 2022.

#### **ATTACHMENT**

None.



### Staff Report – Agenda Item 3

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**To:** Clean Power Alliance (CPA) Energy Committee  
**From:** Natasha Keefer, Vice President, Power Supply  
**Approved by:** Matthew Langer, Chief Operating Officer  
**Subject:** 2021 Power Share Request for Offers (RFO)  
**Date:** July 27, 2022

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#### **RECOMMENDATION**

Approve the shortlisted projects as recommended by the Review Team for the 2021 Power Share RFO

#### **ATTACHMENT**

1. 2021 Power Share RFO Presentation

# 2021 Power Share Request for Offers (RFO) Shortlist Recommendation

July 27, 2022



# Executive Summary

- ⚡ Under two CPUC-approved programs (DAC-GT and CS-GT<sup>1</sup>), CPA may procure energy from small-scale renewable projects within Disadvantaged Communities (DACs)<sup>2</sup> in order to provide 100% renewable energy to low-income customers at a 20% bill discount
- ⚡ In December 2021, CPA launched the 2021 Power Share RFO, with bids due on June 1, 2022; this RFO is the second RFO supporting CPA's Power Share program
- ⚡ The RFO Review Team, which included three Board members, reviewed confidential offer information and developed a recommended shortlist
- ⚡ CPA intends to fill its program cap of 12.19 MW for DAC-GT and 3.37 MW for CS-GT over multiple RFOs
- ⚡ The recommended shortlist will fill 73% of the DAC-GT and 15% of the CS-GT program capacity caps
- ⚡ **ACTION REQUESTED:** The purpose of this meeting is to present the recommended shortlist to the Energy Committee for consideration and approval

(1) Disadvantaged Community Green Tariff (DAC-GT) and Community Solar Green Tariff (CS-GT)

(2) DACs are defined as communities that are identified in the CalEnviroScreen 3.0 as among the top 25 percent of census tracts statewide, plus the census tracts in the highest five percent of CalEnviroScreen's Pollution Burden that do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data.



# Agenda

- ⚡ Background
- ⚡ Disadvantaged Community Green Tariff Offers
- ⚡ Community Solar Green Tariff Offers
- ⚡ Recommendation



# Background



# Disadvantaged Communities (DAC) Programs

## Power Share – CPA Branded – Customer Facing

Promotes the development of renewable generation in and for underserved communities

**Disadvantaged Community  
Green Tariff  
(DAC-GT)**

**Community Solar  
Green Tariff  
(CS-GT)**

*Enrolled customers receive 100% renewable energy and a 20% bill discount*

# Regulatory Background

- ⚡ In June 2018, the CPUC approved D. 18-06-027 which created the DAC-GT and CS-GT programs
- ⚡ CPA was allocated a total of 12.19 MW for its DAC-GT program and 3.37 MW for its Community Solar program
  - This will provide ~8,600 income-qualified customers in disadvantaged communities with 100% renewable energy from new, DAC-located renewable energy resources
- ⚡ The CPUC will make CPA whole on program costs
  - CPUC funds the above-market procurement cost for these resources, the 20% discount on customers' total electric bill, and CPA's program implementation costs (administration, marketing, education, and outreach)
- ⚡ CPA must implement the programs consistent with CPUC guidelines
  - Customer and project eligibility
  - CPUC-approved program design and RFO solicitations, including PPA approval



# Current DAC Positions

- ⚡ The 2021 DAC RFO is CPA's second DAC RFO
- ⚡ In the 2020 DAC RFO, CPA received 3 offers:
  - DAC-GT – 1 offer from Radiant which was shortlisted and successfully made it through negotiations to contract execution
  - Community Solar – 2 offers which were shortlisted but did not make it through negotiations due to engineering design issues

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	CPA's Total Allocation (MW)	2020 DAC RFO Procured Capacity (MW)	CPA's Remaining Allocation (MW)
DAC-GT	12.19	3.00	9.19
Community Solar	3.37	0.00	3.37

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# RFO Overview

- ⚡ CPA expects to fill its eligible program capacity over multiple RFOs. The 2021 Power Share RFO was the second of CPA's DAC-GT and Community Solar program RFOs
- ⚡ The 2021 Power Share RFO for DAC-GT and Community Solar resources was released in December 2021, with offers due on June 1, 2022
- ⚡ CPA received 8 offers for projects:
  - 6 DAC-GT offers
  - 2 Community Solar offers
- ⚡ CPA is encouraged by the number of offers received in this year's RFO
  - CPA marketed the RFO to potential developers, community sponsors, and CBOs
  - CPA will continue to market the programs ahead of the next RFO to encourage participation



# Evaluation Criteria

⚡ Individual projects received a rank for each of the following criteria:



⚡ In addition, CPA included the following workforce development requirements for all projects:

- Prevailing wage requirements and targeted hire commitments for all projects, with a preference for Project Labor Agreements (PLAs)

(1) Other Preferences – CPA will prioritize projects that leverage other government funding, or that provide evidence of support or endorsements from local climate initiatives.



# Valuation Results

- ⚡ All 2021 Power Share RFO offers were priced under the CPUC-designated price cap
  - The CPUC funds any above-market costs that CPA incurs for the procured power
- ⚡ In addition, the RFO Review Team evaluated the offer prices against historical offer prices for relevant solicitations, and deemed them reasonable
  - Utility-scale solar offer prices are lower, but are not a good benchmark for Power Share RFO offer prices
  - Offers in the RFO were compared to rooftop and small-scale ground-mounted solar from the 2020 Power Share RFO and 2019 Distributed Track RFO

# DAC-GT

## Disadvantaged Community Green Tariff

# DAC-GT Program Description

- ⚡ DAC-GT customers will receive energy from new Renewable Portfolio Standard (RPS)-eligible projects located within a DAC in Southern California Edison (SCE) territory
- ⚡ Project eligibility:
  - In-front-of-the meter and 500 kW -13 MW in size
  - New solar, wind, hydroelectric, or biomass/biogas RPS-eligible generating facility
  - PPA price must fall within CPUC-designated price cap (confidential)
- ⚡ Enrolled customers must be eligible for the CARE or FERA low-income programs and live within a DAC in CPA territory
  - Enrolled customers will receive 100% renewable energy based on their monthly usage at a 20% bill discount
  - ~3,000 current Power Share (DAC-GT) customers are being served by interim resources acquired from Southern California Edison

# DAC-GT Offers Results Summary

- ⚡ CPA received offers for rooftop solar PV projects totaling 5.92 MW of capacity (Projects B-F) located in Carson, Hawthorne, and Whittier (same developer)
  - CPA recommends shortlisting all 5 offers since their PPA prices are underneath the CPUC price cap, are local projects, and have good qualitative scores
  - The developer has committed to paying Prevailing Wage on the projects which put union-affiliated contractors on an equal playing field in bidding (similar to a Public Works project), and the developer and its EPC routinely use NECA (e.g., union-affiliated) contractors
- ⚡ CPA received 1 offer from a second developer for ground mounted solar PV in Cantil, CA (Project A)
  - While the PPA price was the lowest offer received, CPA does not recommend shortlisting due to a low environmental stewardship score

Recommendation	Project	Capacity (MW)	Technology	COD	Location	Environmental Stewardship	Benefits to DACs	Workforce Development	Project Location	Development Score	Average Generation (MWh/year)
Don't Shortlist	A	4	Solar PV – Ground-mount	8/1/2023	Cantil, CA - Kern County	Low	High	High	Medium	High	11,606
Shortlist	B	1.8	Solar PV - Rooftop	6/30/2023	Carson	High	High	Medium	High	High	4,048
Shortlist	C	1.92	Solar PV - Rooftop	6/30/2023	Whittier	High	High	Medium	High	High	4,676
Shortlist	D	0.64	Solar PV - Rooftop	6/30/2023	Hawthorne	High	High	Medium	High	High	1,408
Shortlist	E	0.6	Solar PV - Rooftop	6/30/2023	Carson	High	High	Medium	High	High	1,457
Shortlist	F	0.96	Solar PV - Rooftop	6/30/2023	Carson	High	High	Medium	High	High	2,380

# Recommended DAG-GT Projects

## ⚡ Development Risk

- The five projects are sited on rooftops of industrial properties involved in warehousing and logistics
- The developer owns the property on which the five projects are sited
- Structural review and building permits will be required, environmental permitting is not required
- All five projects have received positive determination of Fast Track eligibility from SCE

## ⚡ Developer Experience

- The developer is a global leader in logistics real estate and has a dedicated Global Energy team to deploy energy projects
- To date, the developer has permitted and built 54 solar rooftop projects within Los Angeles, Riverside, and San Bernardino counties
- The planned engineering, procurement, and construction (EPC) contractor for the projects has installed over 420 MW of onsite solar at over 200 facilities in 30 utility territories

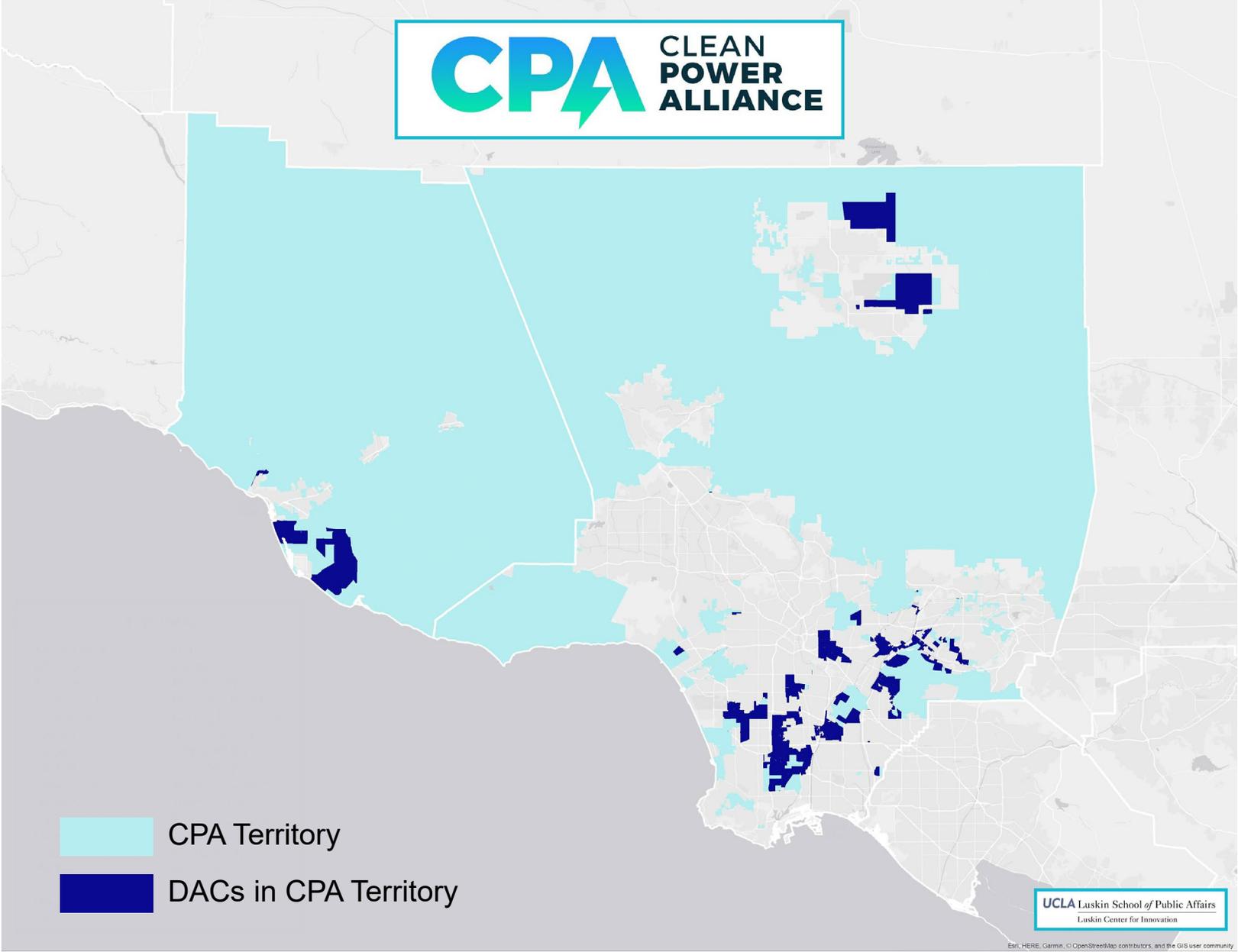
# CS-GT

## Community Solar Green Tariff

# Community Solar Program Description

- ⚡ Community Solar customers will receive a portion of the renewable energy output from a local community solar project sized at 3 MW or less
- ⚡ Project eligibility:
  - Projects located within a DAC that is within 5 miles of CPA customers' DAC census tract
  - New, RPS-eligible solar, in-front-of-the-meter generating facility
  - PPA price must fall under CPUC-designated price cap (confidential)
  - Community Solar projects require a Community Sponsor<sup>1</sup> who assists with customer enrollment and ensures project development is consistent with community priorities
- ⚡ Enrolled customers will subscribe to a portion of the Community Solar project capacity based on their historical energy usage

(1) Community sponsors must be a non-profit community-based organization (CBO) or local government entity



# Community Solar Offer Results Summary

- ⚡ CPA received 2 offers for rooftop solar PV projects located in Pico Rivera
  - Both projects were shortlisted in CPA’s 2020 Power Share RFO but failed to receive PPAs when developer identified concerns with project engineering
  - Project engineering concerns have been addressed in the 2021 Power Share RFO offer
  - CPA recommends shortlisting both offers since their PPA prices are underneath the CPUC price cap and have good qualitative scores

Recommendation	Project Name	Capacity (MW)	Technology	COD	Location	Environmental Stewardship	Benefits to DACs	Workforce Development	Project Location	Development Score	Average Generation (MWh/year)
Shortlist	G	0.265	Solar PV - Rooftop	12/1/2023	Pico Rivera	High	High	High	High	Medium	542
Shortlist	H	0.24	Solar PV - Rooftop	12/1/2023	Pico Rivera	High	High	High	High	Medium	417

# Recommended Community Solar Projects

## ⚡ Development Risk

- The projects have begun the interconnection process and have received Fast Track status from SCE
- A roof lease between the developer and the projects' site host has been executed
- The projects require no land use permitting; building and electrical permits will be requested upon construction start
- CPA has confirmed there are numerous eligible customers within the vicinity of the projects for program enrollment

## ⚡ Developer Experience

- Founded in 2009, the developer is headquartered in Denver, Colorado and has extensive expertise in community solar with 261 MW installed to-date across 27 states

# Recommendations

# Recommendations

- ⚡ The RFO Review Team recommends shortlisting all projects except Project A
  - All recommended projects are compliant with the RFO and program eligibility guidelines
  - All recommended projects are underneath the CPUC price cap
  - All recommended projects have good qualitative scores, reasonable project timelines and experienced developers

Program	Project Name	Capacity (MW)	COD	Location
DAC-GT	B	1.80	6/30/2023	Carson
DAC-GT	C	1.92	6/30/2023	Whittier
DAC-GT	D	0.64	6/30/2023	Hawthorne
DAC-GT	E	0.60	6/30/2023	Carson
DAC-GT	F	0.96	6/30/2023	Carson
CS-GT	G	0.265	12/1/2023	Pico Rivera
CS-GT	H	0.24	12/1/2023	Pico Rivera

- ⚡ PPA execution with all recommended projects will make incremental progress towards filling CPA’s program allocation for CS-GT and DAC-GT:

	CPA’s Total Allocation	CPA’s Remaining Allocation After 2020 RFO	2021 DAC RFO Shortlist Recommendation	CPA’s Remaining Allocation after Recommendation	CPA’s Remaining Allocation (%)
DAC-GT	12.19 MW	9.19 MW	5.92 MW	3.27 MW	27%
CS-GT	3.37 MW	3.37 MW	0.505 MW	2.865 MW	85%

# Next Steps

Date	Action
July 27, 2022	Energy Committee shortlist consideration
August 1, 2022	Bidders notified of shortlist status
August 2022 – November 2022	PPA negotiations
November 2022 – January 2023	Board consideration of PPAs
January 30, 2023	Executed PPAs submitted to CPUC for approval*
TBD	Next Power Share RFO Release

\*CPA is required to submit PPAs for CPUC approval within 180 days of bidders' receipt of shortlist notification

# Action Requested

The RFO Review Team is seeking Energy Committee approval of the recommended shortlist for the 2021 Power Share RFO



## Staff Report – Agenda Item 4

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**To:** Clean Power Alliance (CPA) Energy Committee  
**From:** Natasha Keefer, Vice President, Power Supply  
**Approved by:** Matthew Langer, Chief Operating Officer  
**Subject:** Bilateral Offers for Long-term Geothermal Resources  
**Date:** July 27, 2022

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### **RECOMMENDATION**

Approve entering into bilateral negotiations for power purchase agreements for two (2) geothermal resources as recommended by the Review Team.

### **ATTACHMENT**

1. Bilateral Offers for Long-Term Geothermal Resources

# Bilateral Offers for Long-term Geothermal Resources

July 27, 2022



# Executive Summary

- ⚡ Per the CPUC Decision Requiring Procurement to Address Mid-Term Reliability (2023-2026)<sup>1</sup> CPA is required to procure a total of 59 MW of new baseload renewables, which is limited to biomass and geothermal resources
- ⚡ Geothermal capacity is difficult to procure due to the scarcity of potential sites and lack of available transmission
- ⚡ CPA has the opportunity to enter into two bilateral power purchase agreements with an in-state geothermal project to procure geothermal capacity and energy
  - **First Offer:** 18 MW of new incremental capacity coming online in 2025 that would count towards Mid-Term Reliability compliance requirements
  - **Second Offer:** 100 MW from an existing resource starting in June 2027 (not eligible for compliance)
- ⚡ On July 14th, the MTR RFO Review Team (including Board members) met to consider these two offers and is recommending the offers for Energy Committee consideration today

[1. D.21-06-035 under Rulemaking 20-05-003](#)





# Agenda

- ⚡ Background
- ⚡ Offer Overview
- ⚡ Recommendation



# Background



# CPA's Procurement Need

- ⚡ Under the Mid Term Reliability (MTR) decision, CPA is required to procure 59 MW of new build (“incremental”) capacity for Baseload Renewables
- ⚡ Baseload/Firm Renewable Energy is 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
- ⚡ Only biomass and geothermal resources can meet the Baseload Renewable requirement



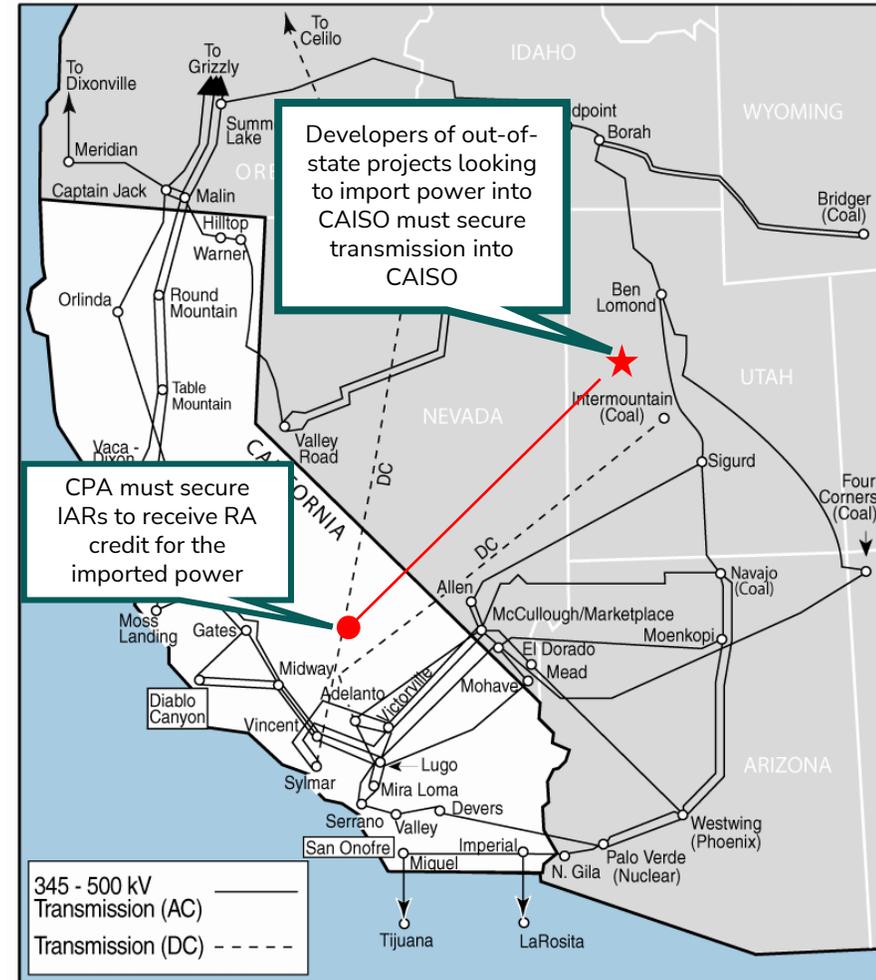
# Availability of Incremental Baseload Renewables

- ⚡ Opportunities for new biomass facilities are virtually non-existent due to the high cost, technology risk, and/or permitting/pollution considerations
- ⚡ Opportunities for new geothermal resources are more viable, but are also constrained due to resource-dependent siting potential (mostly outside of CAISO and out of state) and lack of transmission capacity into CAISO



# Import Resource Risks

- ⚡ For an import resource to count for MTR compliance and Resource Adequacy (RA), it needs both transmission to CAISO and Import Allocation Rights (IARs)
- ⚡ Securing transmission to CAISO is the responsibility of the developer; securing IARs are the responsibility of the load-serving entity
- ⚡ IARs are awarded annually to load-serving entities by CAISO and can be difficult to obtain. Because IARs are awarded annually, CPA will not know if it can acquire IARs for a project until its COD approaches
- ⚡ The uncertainty of IAR awards creates risk for CPA because CPA must make long-term procurement decisions with uncertainty around whether the resource will count towards RA compliance
- ⚡ Geothermal capacity located within CAISO does not require IARs or transmission into CAISO which makes these resources extremely valuable and expensive



# Offer Evaluation

- ⚡ Per CPA's Energy Risk Management Policy, CPA is able to evaluate and negotiate bilateral offers for long-term PPAs
- ⚡ The approval process follows a similar process as long-term PPA offers from solicitations in that CPA evaluates bilateral offers based on the same six criteria and evaluation methodology:
  - Value, Environmental Stewardship, Workforce Development, Development Score, Project Location, Benefits to Disadvantaged Communities
- ⚡ The RFO Review Team compared the two new offers discussed today to projects and pricing received in the 2021 MTR RFO as well as a recent bilateral offer for new geothermal
- ⚡ For context, in the 2021 MTR RFO, CPA received 7 geothermal offers, all of which were imports into CAISO and 4<sup>th</sup> quartile in value
  - CPA shortlisted and entered into negotiations with two projects; one negotiation already terminated due to import-related risk



# Offer Overview



# First Offer: Incremental Capacity

- ⚡ CPA has the opportunity to purchase 18 MW of new, incremental geothermal capacity from an in-state geothermal resource (i.e. not an import) located in a well-developed and reliable geothermal area
- ⚡ The bilateral offer comes by way of another CCA that is unable to take full offtake of the available incremental resource
  - CPA would purchase 18 MW of capacity and the other CCA would purchase the remaining 7 MW of capacity<sup>1</sup>
- ⚡ CPA would receive all the Resource Adequacy, RECs, and energy associated with the incremental capacity

1) This is not a joint procurement; CPA and the CCA would execute separate and standalone PPAs for each offtaker's respective output of the facility

# First Offer Evaluation (Incremental Capacity)

## ⚡ Offer summary:

Location	Capacity (MW)	Annual Energy (MWh)	COD	Term (Yrs)	NPV Quartile	Environmental Stewardship	Workforce Development	Development Score	Project Location	Benefits to DACs
Within CA	18	157,680	6/1/2025	20	4	High	Medium	High	Medium	Neutral

- ⚡ The offer price is higher than the geothermal offers received in the 2021 MTR RFO, however, pricing reflects the scarcity of incremental geothermal resources available to meet the CPUC’s procurement order
  - The price is lower than a bilateral offer that CPA recently received for an incremental geothermal import project, which is higher risk
  - Limited transmission into CAISO and higher demand due to the CPUC procurement order has created scarcity pricing for incremental geothermal resources; CPA expects to receive higher pricing for geothermal in its upcoming 2022 MTR RFO compared to its 2021 MTR RFO
- ⚡ Development risk is low as the project has a developed geothermal resource, site control, and will utilize existing interconnection and transmission infrastructure

# MTR Compliance Position

- ⚡ CPA will be short on its Baseload Renewable MTR compliance requirement regardless of the outcome of 2021 MTR RFO negotiations and the proposed offers
- ⚡ CPA will launch its 2022 MTR RFO on August 1<sup>st</sup> to procure additional Baseload Renewable capacity

CPA MTR Compliance Position	
MTR Baseload Renewable Procurement Requirement	59.0 MW
2021 MTR Offer Under Negotiation	32.7 MW
Proposed Incremental Offer	18.0 MW
<b>Remaining MTR Compliance Need</b>	<b>8.3 MW</b>

# Second Offer: Existing Capacity

- ⚡ The same seller is also offering CPA the opportunity to purchase 100 MW of existing geothermal capacity; this offer is not contingent on the incremental capacity
- ⚡ This capacity already exists and will be made available to CPA on 6/1/2027 when the existing offtaker's agreement expires
  - This capacity is not incremental and will not count towards CPA's MTR compliance requirements but will provide valuable benefits to CPA including adding technology diversity to CPA's portfolio and a consistent, baseload generation profile
- ⚡ CPA would receive all the Resource Adequacy, RECs, and energy associated with the 100 MW of capacity

# Second Offer Evaluation (Existing Capacity)

⚡ Offer summary:

Location	Capacity (MW)	Annual Energy (MWh)	COD	Term (Yrs)	NPV Quartile	Environmental Stewardship	Workforce Development	Development Score	Project Location	Benefits to DACs
Within CA	100	876,000	6/1/2027	10	4	High	Medium	High	Medium	Neutral

- ⚡ Given the CPUC’s proposed Resource Adequacy program reform, it’s expected that baseload renewable resources will become highly valuable for RA
- ⚡ Pricing is in line with current market pricing for geothermal and forecasted revenues exceed forecasted costs; geothermal will become more and more scarce as LSEs seek to fill their RA requirements with 24 x 7 renewable resources
- ⚡ Development risk is extremely low since the capacity is already online, and therefore not subject to development or construction risks
- ⚡ While no new construction jobs will be created, ~250 people are employed full-time at the facility and local residents fill the majority of the independent contractor jobs, which average another 150 full time positions

# Recommendation



# Recommendation

The RFO Review Team recommends that Energy Committee approve CPA entering negotiations for both the incremental and the existing geothermal offers

- ⚡ The incremental offer will contribute 18 MW towards meeting CPA's MTR compliance requirement for Baseload Renewable resources
  - Additional procurement of new, incremental geothermal or biomass capacity will be required to meet the MTR compliance requirement of 59 MW of Baseload Renewable resources
  - Although higher-priced, the project is the least risky incremental geothermal resource available in the market given the already proven geothermal resource, existing generation and transmission infrastructure, developer track record, and location within CAISO
- ⚡ The offer for existing capacity will not count towards MTR compliance but will provide long-term renewable energy and capacity 24 x 7 and contribute to CPA's future compliance requirements for Resource Adequacy