REGULAR MEETING of the Board of Directors of the
Clean Power Alliance of Southern California
Thursday, July 12, 2018
2:00 p.m.
REVISED AGENDA
Metropolitan Water District of Southern California
700 North Alameda Street
Room 1-102
Los Angeles, CA 90012

Meetings are accessible to people with disabilities. Individuals who need special assistance or a
disability-related modification or accommodation to participate in this meeting, or who have a
disability and wish to request an alternative format for the meeting materials, should contact
Jacquelyn Betha, at least two (2) working days before the meeting at
jbetha@cleanpoweralliance.org or (213) 269-5870, ext.1001. Notification in advance of the
meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting
and the materials related to it.

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

Calabasas City Hall – Council Conference Room
100 Civic Center Way, Calabasas, CA 91301

Ventura County Hall of Administration – 4th Floor Channel Island Conference Room
800 South Victoria Avenue, Ventura CA 93009

Whittier City Hall – Admin. Committee Room
13230 Penn Street, Whittier, CA 90602
I. WELCOME & ROLL CALL

II. PUBLIC COMMENT

This 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 agenda shall be heard at the time the matter is called.

As with all public comment, members of the public who wish to address the Board are requested to complete a speaker’s slip and provide it to Clean Power Alliance staff. If you have anything that you wish to be distributed to the Board and included in the official record, please hand it to a member of the staff who will distribute the information to the Board members and staff. Speakers are customarily limited to two minutes, but an extension can be provided at the discretion of the Board Chair.

III. CONSENT AGENDA

1. Approve Minutes from June 7, 2018 Board of Directors Meeting
2. Approve Minutes from June 22, 2018 Board of Directors Retreat
3. Adopt Resolution 18-008 Authorizing CPA to Access Department of Justice Criminal History Information

IV. REGULAR AGENDA

4. Review 2019 Ratemaking Schedule and Phase-In Scenarios
5. Approve Selection of Calpine Energy Solutions for Data Management and Call Center Services and Authorize Executive Director to Execute Contract with Calpine Energy Solutions
6. Update on 2018 Integrated Resource Plan

7. Approve Energy Risk Management Policy (ERMP) and Adopt Resolution 18-009 Delegating Procurement Authority to the Executive Director pursuant to the ERMP

V. LEGISLATIVE & REGULATORY UPDATE

VI. REPORT FROM THE EXECUTIVE DIRECTOR

VII. BOARD MEMBER COMMENTS

VIII. REPORT FROM THE CHAIR

IX. ADJOURN – TO AUGUST 16, 2018

Public records that relate to any item on the open session agenda for a regular Board Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all members, or a majority of, the members of the Board. The Board has designated the County of Los Angeles, Chief Sustainability Office, Kenneth Hahn Hall of Administration, Room 493, 500 West Temple Street, Los Angeles, CA 90012, for making those public records available for inspection. The documents are also available on our internet website at www.cleanpoweralliance.org.
REGULAR MEETING of the Board of Directors of the
Clean Power Alliance of Southern California
Thursday, June 7, 2018, 2:00 p.m.

Los Angeles County Hall of Administration – Room 140
500 West Temple Street, Los Angeles, California 90012

Calabasas City Hall – Council Conference Room
100 Civic Center Way, Calabasas, CA 91301

Ventura County Hall of Administration – 4th Floor Channel Island Conference Room
800 South Victoria Avenue, Ventura CA 93009

City of Whittier – Admin. Committee Room
13230 Penn Street, Whittier, CA 90602

MINUTES

I. WELCOME & ROLL CALL

Chair Diana Mahmud called the meeting to order at 2:10 p.m. Board Secretary Jacquelyn C. Betha conducted roll call.

<table>
<thead>
<tr>
<th>Roll Call</th>
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<tbody>
<tr>
<td>1  Agoura Hills</td>
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<td>3  Arcadia</td>
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<td>7  Carson</td>
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<td>Corey Calaycay</td>
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## Clean Power Alliance Board of Directors
**Minutes June 7, 2018**

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<td>West Hollywood</td>
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<td>31</td>
<td>Whittier</td>
<td>Josuè Alvarado</td>
<td>Director</td>
<td>Remote</td>
</tr>
</tbody>
</table>

### II. PUBLIC COMMENT

Harvey Eder, spoke as private citizen on behalf of PSPC Power Coalition.
III. CONSENT AGENDA

1. Approved Minutes from May 2, 2018 Board of Directors Meeting

2. Approved Minutes from April 5, 2018 Board of Directors Meeting

3. Approved Administrative Policies and Procedures Regarding Customer Confidentiality and Data Security

4. Approved, with noted amendments, Master Agreement for Specialized Services and Authorized Executive Director to Execute Master Agreement and Task Orders

Chair Mahmud pulled Item 4 to direct the Board’s attention to changes on the Master Agreement noted by a Board Member in advance of the meeting and stated that copies of the requested changes were made available at both the in person and remote locations.

Motion: Los Angeles County, Director Sheila Kuehl. Second: Downey, Director Sean Ashton. Vote: The Consent Agenda, with noted changes to Item 4, was approved by a unanimous roll call vote.

IV. CLOSED SESSION

5. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
   Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: (1)

No action was taken during closed session.
V. REGULAR AGENDA

6. Reviewed Draft Fiscal Year 2018-19 (FY18-19) Budget

7. Approved Contact with Maher Accountancy for Financial Operating Support, Oversight and Auditing Services through June 2019

Motion: Hawthorne, Director Angie Reyes English. Second: Hawaiian Gardens, Director Myra Maravilla. Vote: Item 7 was approved by a unanimous roll call vote.

8. Authorized Board Chair & Vice-Chairs, Legislative & Regulatory Committee Chair, and Executive Director to Timely Respond on CPA's Behalf on Urgent Legislative and Regulatory Matters

Motion: Manhattan Beach, Alternate Director Dana Murray. Second: Culver City, Director Meghan Sahli-Wells. Vote: Item 8 was approved by a unanimous roll call vote.

9. Delegated Authority to Energy Committee for Approval of Final 2018 Integrated Resource Plan

Motion: Claremont, Director Corey Calaycay. Second: Carson, Director Jawane Hilton. Vote: Item 9 was approved by a unanimous roll call vote.

10. Approved Formation of Community Advisory Committee and Authorized Staff to Open Application Process for Committee Membership
Motion: Carson, Director Jawane Hilton. Second: Claremont, Director Corey Calaycay. Vote: Item 10 was approved by a unanimous roll call vote.

VI. LEGISLATIVE & REGULATORY UPDATE

There was no discussion on Item VI.

VII. REPORT FROM THE EXECUTIVE DIRECTOR

Executive Director Ted Bardacke reported that to date, opt-out rates have been low, only about 80 out of 32,000 customers have opted out. This is a relatively low rate in terms of numbers, but in terms of load it is somewhat larger. CPA is notifying all eligible customers and conducting targeted outreach to the top 100 largest customers in its service territory.

Mr. Bardacke also reported that some customers within certain cities who are not eligible for Phase II are receiving pre-enrollment notices. Cities were instructed to contact CPA when they receive calls regarding these notices. Monique Edwards, Director of Technology & Data Integration, provided an update on CPA’s efforts to cross check eligibility data received from Southern California Edison with information received from customers.

CPA received a grant from CivicSpark (through the Local Government Commission and AmeriCorps) to bring on a staff person beginning in September for 11 months. The goal of the staff person is to develop an equity and supplier diversity roadmap for CPA.

VIII. BOARD MEMBER COMMENTS
Members of the Board of Directors provided general comments.

**IX. REPORT FROM THE CHAIR**

Chair Mahmud provided a reminder of the Board Retreat on June 22, 2018. Chair Mahmud encouraged greater participation by the Board members on the various committees. Chair Mahmud stated that we will need to schedule an August Board Meeting, and we will try to schedule a date for the third week in August. Chair Mahmud also strongly encouraged that any proposed revisions to the agenda should be submitted at least 24 hours, but preferably 48 hours in advance of the Board meeting.

**X. ADJOURN – TO JULY 12, 2018**

Chair Mahmud adjourned the meeting to July 12, 2018.
SPECIAL MEETING of the Board of Directors of the
Clean Power Alliance of Southern California
Friday, June 22, 2018, 8:30 a.m.

Wallis Annenberg Building at Exposition Park
700 Exposition Park Drive, Los Angeles, CA 90037

REVISED MINUTES

I. WELCOME & ROLL CALL

Chair Diana Mahmud called the meeting to order. Roll call was conducted by the Board Secretary, Jacquelyn C. Betha.

<table>
<thead>
<tr>
<th>Roll Call</th>
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</thead>
<tbody>
<tr>
<td>1 Agoura Hills</td>
<td>Linda Northrup</td>
<td>Alternate</td>
<td>Present</td>
</tr>
<tr>
<td>2 Alhambra</td>
<td>Ray Martin</td>
<td>Alternate</td>
<td>Present</td>
</tr>
<tr>
<td>3 Arcadia</td>
<td>Sho Tay</td>
<td>Director</td>
<td>Present</td>
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<tr>
<td>4 Beverly Hills</td>
<td>Julian Gold</td>
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<td>5 Calabasas</td>
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<tr>
<td>6 Camarillo</td>
<td>Tony Trembley</td>
<td>Director</td>
<td>Present</td>
</tr>
<tr>
<td>7 Carson</td>
<td>Jawane Hilton / Cedric Hicks Sr. / Reata Kulcsar</td>
<td>Director / Alternates</td>
<td>Present</td>
</tr>
<tr>
<td>8 Claremont</td>
<td>Corey Calaycay / Roger Bradley</td>
<td>Director / Alternate</td>
<td>Present</td>
</tr>
<tr>
<td>9 Culver City</td>
<td>Meghan Sahli-Wells / Daniel Lee</td>
<td>Director / Alternate</td>
<td>Present</td>
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<tr>
<td>10 Downey</td>
<td>Sean Ashton</td>
<td>Director</td>
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<td>Myra Maravilla</td>
<td>Director</td>
<td>Present</td>
</tr>
<tr>
<td>12 Hawthorne</td>
<td>Angie Reyes English / Doug Krauss</td>
<td>Director / Alternate</td>
<td>Present</td>
</tr>
<tr>
<td>13 Los Angeles County</td>
<td>Sheila Kuehl</td>
<td>Director</td>
<td>Present</td>
</tr>
</tbody>
</table>
## II. PUBLIC COMMENT

There were no public comments.

## III. AGENDA

1. **Approved Fiscal Year 2018-2019 (FY18-19) Budget**

   Motion: Malibu; Director Skylar Peak. Second: Redondo Beach; Director Christian Horvath. Vote: Item 1 was approved by a unanimous vote.
2. Clean Power Alliance Board Retreat

The Board of Directors conducted its retreat.

IV. ADJOURN

Chair Mahmud adjourned the meeting.
To: Clean Power Alliance (CPA) Board of Directors
From: Ted Bardacke, Executive Director
Subject: Adopt Resolution 18-008 Authorizing CPA to Access Department of Justice Criminal History Information for Employees
Date: July 12, 2018

RECOMMENDATION
Adopt the attached Resolution 18-008, authorizing CPA to receive criminal history information from the California Department of Justice.

SUMMARY
CPA, due to the nature of its business and as a matter of responsible employment practice, is requesting authorization to secure criminal history information maintained by the California Department of Justice for CPA employees, including volunteers and contract employees. Pursuant to State law, the Board of Directors, as the governing body of the Joint Powers Authority (JPA), must grant this authorization, and staff is requesting it do so through the attached Resolution. Once approved, CPA staff will undergo a standard background check process, including a live scan, and moving forward CPA management will incorporate this step into the organization’s human resources procedures as a condition of employment with CPA.

Attachment: Resolution 18-008 Authorization for Criminal History Information
RESOLUTION NO. 18-008

RESOLUTION OF THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA AUTHORIZATION FOR CRIMINAL HISTORY INFORMATION FROM THE DEPARTMENT OF JUSTICE

THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, Clean Power Alliance of Southern California (formerly known as Los Angeles Community Choice Energy Authority) ("Clean Power Alliance" or "CPA") was formed on June 27, 2017;

WHEREAS, Penal Code Sections 11105(b)(11) and 13300(b)(11) authorizes a joint powers authority to access state and local summary criminal history information for employment, licensing or certification purposes;

WHEREAS, Penal Code Sections 11105(b)(11) and 13300(b)(11) require that there be a requirement or exclusion from employment, licensing, or certification based on specific criminal conduct on the part of the subject of the record; and

WHEREAS, Penal Code Sections 11105(b)(11) and 13300(b)(11) requires the governing body of a joint powers authority to specifically authorize access to summary criminal history information for employment, licensing, or certification purposes.

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD OF DIRECTORS OF THE CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA:

1. Clean Power Alliance is hereby authorized to access state summary criminal history information for employment (including volunteers and contract employees), licensing, or certification purposes and may not disseminate the information to a private entity.

2. The Executive Director shall be designated as Clean Power Alliance's Custodian of Records who is responsible for the hiring decisions, and for the security, storage, dissemination, and destruction of the criminal records furnished to Clean Power Alliance, and who serves as the primary contract for the California Department of Justice for any related issues.

ADOPTED AND APPROVED this ___ day of __________ 2018.

__________________________________________
Chair

ATTEST:

__________________________
Secretary
2019 Schedule: Ratemaking & Customer Phasing
Overview

- Clean Power Alliance plans a 2018-2019 schedule that coordinates ratemaking and customer phase ins.

- The schedule will:
  - Mitigate risk in the rate setting process
  - Minimize customer confusion across CPA’s vast service territory
  - Maximize cash flow in the critical late spring / early summer period
  - Avoid customer transitions during months when SCE is implementing other key IT and billing system projects
Considerations – Rates and Cash Flow

● SCE forecasts a 6% reduction in 2019 generation rates

● Forecast updated in early November, with final rates filed in late-December. Actual rates will be different than the forecast.

● Risky for CPA to set 2019 rates before knowing SCE rates, particularly for complex/TOU commercial rates:
  o Risk of setting rates that are higher than SCE – opt-out and public perception risk
  o Risk of setting rates that are too low – unnecessary financial risk, loss of opportunity to accumulate reserves

● Based on cost of service and rate seasonality, it is financially advantageous to phase in residential customers in winter / spring and commercial customers at the beginning of summer
Considerations – Customers and SCE Coordination

- Pre-enrollment notices released 60 days prior to customer enrollment
- Rates need to be set before pre-enrollment notices are released so customers know what they will be getting
- Member agencies need a window of time to select default options with adequate and best available information
- CPA/SCE need at least one month interval between each phase of enrollment for system clean up and a high volume of customer interaction
- March 2019 is a black-out month for CCA enrollment in SCE territory due to system-wide TOU Peak Pricing migration
- SCE billing system upgrade in January 2020 creates operational risks for any CCA enrollments after July 1, 2019
## Coordinated Customer Phasing and Ratemaking Plan

<table>
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<th>Date</th>
<th>Action</th>
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<tr>
<td>August 16 Board Meeting</td>
<td>Finalize rate options (e.g. 36% RPS, 50% RPS, 100% RPS)</td>
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<tr>
<td>August – October</td>
<td>Members select default rate option with conservative guidance on savings vs. SCE</td>
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<tr>
<td>Early November</td>
<td>SCE files updated rate forecast</td>
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<tr>
<td>Mid November Board Meeting</td>
<td>Set Residential rates (in time for Dec pre-enrollment notice)</td>
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<tr>
<td>Late December</td>
<td>SCE Advice Letter setting final rates (effective January 1)</td>
</tr>
<tr>
<td>January Board Meeting</td>
<td>Calibrate Residential rates if necessary (esp. TOU rates)</td>
</tr>
<tr>
<td>February Board Meeting</td>
<td>Set Commercial rates (in time for Mar pre-enrollment notice)</td>
</tr>
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To: Clean Power Alliance (CPA) Board of Directors

From: Ted Bardacke, Executive Director

Subject: Approval of the Selection of Calpine Energy Solutions to Provide Data Management and Call Center Services and Authorize Executive Director to Execute Contract with Calpine

Date: July 12, 2018

RECOMMENDATIONS
Approve the selection of Calpine Energy Solutions (Calpine) to provide data management and call center services and authorize the Executive Director to execute a four-year contract with Calpine commencing August 1, 2018.

BACKGROUND
One of the core and critical needs for CPA to serve its customers and protect its financial viability is to manage customer data, ensure accurate billing of customers for energy use, and be the first point of contact for customers through a call center and other digital communication means. These functions are particularly important during the customer transition phases that CPA intends to complete over the course of 2019. All CCAs use an outside vendor to provide these services.

On March 21, 2018, the Board approved a Scope of Work with Calpine to provide these services through December 2018 to have a vendor in place to transition Phase II customers (non-residential accounts in unincorporated LA County, Rolling Hills Estates, and South Pasadena) from Southern California Edison (SCE) to CPA. This scope built on a legacy contract between the County of Los Angeles (County) and Calpine, which was subsequently assigned to CPA. As part of that Board action, CPA staff committed to issue
a new competitive solicitation for similar services by May 2018, with an added emphasis on advanced data management for distributed energy resources (DER) and customer engagement for local DER solutions such as grid services, microgrids, demand response, energy efficiency, and distributed generation.

Using its existing Memorandum of Understanding with the County, CPA requested the County issue the Request for Proposals (RFP) on behalf of the CPA, prepare the RFP and manage the solicitation process. The proposed selection of Calpine is the outcome of that process.

**RFP PROCESS**

Prior to issuing the RFP, the County’s Chief Executive Office (CEO) compiled recent Data Management and Call Center RFPs from other CCAs in California, in particular using RFPs issued by San Jose Clean Energy and Monterey Bay Community Power as examples. These RFPs were recent and resulted in different companies winning the contracts. A draft RFP was sent to CPA’s Energy Planning and Resources Committee requesting comment and feedback, which was received and largely incorporated.

The RFP was widely distributed to potential vendors and the CEO received four responses. These proposals were received and formally evaluated by a review panel comprised of two representatives from CPA staff, one CPA Board representative from the Energy Committee and one senior representative from the Los Angeles Department of Water & Power.¹ Each member of the evaluation committee scored the proposals separately but according to the same criteria specified in the RFP. CPA staff also did reference checks for all four proposers. Pricing was scored according to a weighted formula routinely used by the County whereby the lowest priced bidder is awarded the maximum number of points and then other bidders are given fewer points based on how

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¹ All members of the evaluation committee were prohibited from seeing or commenting on the draft RFP, so as to maintain a separation of functions between those preparing the RFP documents and those evaluating the proposals.
far they deviate from the lowest price. The evaluation, reference and pricing scores were then combined and averaged to arrive at a final score.

**SCORE RESULTS**

Below is a table showing the sum total of the points awarded by the evaluation committee to each of the four proposers, broken out by each scoring category specified in the RFP. The average final score is also shown. Calpine was the highest ranked responsible proposer based on the criteria set forth in the RFP. Accordingly, it is recommended that the contract be awarded to Calpine.

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<tr>
<td><strong>Sub Total</strong></td>
<td><strong>400</strong></td>
<td><strong>350.6</strong></td>
<td><strong>274</strong></td>
<td><strong>178.8</strong></td>
<td><strong>201.6</strong></td>
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<td>Number of Evaluators</td>
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<td>4</td>
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<tr>
<td><strong>Final Average Score</strong></td>
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<td><strong>87</strong></td>
<td><strong>68</strong></td>
<td><strong>44</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

**CALPINE EXPERIENCE AND TEAM**

Calpine provides similar data management and call center services to more than a dozen CCAs in California, has vast experience with large customer transitions, and is the only data management vendor with start-up and operational CCA experience in SCE territory. All of this is reflected in the strength of the score Calpine earned in the background section of the evaluation.

However, to meet CPA’s specific requirements, deliver on the scope of services requested in the RFP, and provide additional value to CPA, Calpine proposed to partner with:
CLEAN POWER ALLIANCE BOARD OF DIRECTORS

AGENDA ITEM 5

- Olivine, Inc to provide both high-level assessment and strategic advice on DER program evaluation as well as implementation services for DER programs that CPA may offer to its customers and/or member agencies. This includes DER Program and Rate Design with single point administration for CAISO scheduling, settlements, customer service, site assessments, regulatory compliance and program branding. Olivine is a leading provider of services which enable DER to offer grid services and is the first third-party to integrate battery storage and demand-side technologies into California’s wholesale energy markets.

- The Local Government Commission (LGC) to provide education and technical assistance services – under the banner of a “Clean Power Incubator” – for Board members, member agencies, the Community Advisory Committee, and CPA’s broad customer base to enhance the technical knowledge of California’s energy issues and promote the adoption of clean energy strategies that CPA can help facilitate. LGC will also provide customized reports to member agencies seeking help in identifying grant funding that could be combined with future CPA programs and rate offerings to advance low carbon development in transportation and buildings. LGC is a 501(c)(3) non-profit organization that has been providing technical assistance to local jurisdictions, including many CPA member agencies, for over 35 years in California on a wide variety of energy and sustainability issues.

- Workforce Development Boards in LA and Ventura Counties to link local residents with job opportunities. Calpine’s call center operator anticipates hiring at least 40 new call center staff here in Southern California.

CALPINE SERVICES

A full description of services is attached to this report and covers the following items:

1. **Electronic Data Exchange Services**, including customer enrollment, billing individual customers, receiving and maintaining all data related to payment transactions for CPA charges, and participation in “Smart Meter” data programs.

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2 Each member agency will receive up to two customized reports during the contract period.
2. **Data Confidentiality and Ownership**, including: maintaining customer privacy; daily backup processes; ensuring customer data is owned and accessible by CPA; and provisions for software source code and licenses should CPA need to take over or transfer data management functions.

3. **DER Services**, including: acquiring and making available to CPA interval level data from SCE to support DER; identification of customers that would most benefit from DER programs; technical services to analyze, aggregate, schedule, dispatch, settle, and report on DER loads; call center agents with the skills and data to provide customer support on DER questions; and providing CPA with a software tool to analyze and evaluate potential DER opportunities and/or projects in its service territory or with its member agencies.

4. **Qualified Reporting Entity Services**, for local renewable energy programs, associated billing services related to these programs, and compliance reporting for California’s Renewable Portfolio Standard.

5. **Establishment and Maintenance of a Customer Information System**, including maintenance of a database of all eligible accounts located in CPA’s service area; each account’s enrollment status, smart meter status, rate tariff election(s) and applicable riders, payment history, collection status, and on-site generating capacity. Calpine will also co-design with CPA a Business Intelligence tool analyze and effectively use customer-specific interval data for optimizing CPA operations and programming and a Bill Comparison tool that allows CPA staff and call center agents to compare the bill impact of CPA rates versus SCE rates for customers.

6. **Customer Call Center**, including: establishment of a call center in LA County, and potentially Ventura County, staffed by union-represented agents, with specific performance metrics for call wait times and responses, and procedures for skill-based routing of complex customer inquiries to CSRs with additional training and experience. Multiple languages, an online chat function, and communications for the hearing impaired will all be offered.

7. **Billing Administration**, including coordination with SCE to bill customers at the proper rate and assistance with overdue bill noticing.
8. **Settlement Quality Meter Data**, including aggregating usage data for T+8 and T+48 CAISO settlement, either directly or through CPA’s designated scheduling coordinator.

9. **Reporting**, including 15 required weekly or monthly reports related to revenue, customers and CAISO settlements.


11. **Clean Power Incubator**, including quarterly in-person seminars, an educational web portal, and individualized technical service consulting for member agencies.

**PRICING**

Pricing is based on a monthly fee per active service account, also known as a per meter fee. Consistent with CPA’s potential economies of scale, Calpine proposed a tiered pricing formula of:

- $1.03 0-500,000 active service accounts
- $0.93 Over 500,000 active service accounts

Assuming a CPA customer count of one million customers, this is equivalent to a weighted average of $0.98 per meter per month. Calpine also proposed to waive the $250,000 initiation fee CPA would be required to pay for the start of Phase III service.

In subsequent negotiations, Calpine agreed to lower its greater than 500,000 active service account price to $0.90, resulting in a weighted average of $0.965 per active service account. It also agreed to reduce, effective August 2018, the monthly per meter charges for Phase II customers from the current $1.10 per meter to the new assumed long term weighted average of $0.965 per active service account. Calpine also agreed to a “Most Favored Nation” clause that would automatically lower the 0-500,000 active service account charge should Calpine enter into a contract in SCE territory for similar services at cost of less than $1.03.

For comparison, the chart below shows the average per meter price of other CCAs, those proposed and agreed to by Calpine and other respondents to the CPA RFP.
Staff believes Calpine’s pricing is both highly competitive and adequate for Calpine to properly resource its CPA-dedicated team to meet the needs of a large customer transition and serve the largest CCA in California with a strong set of services backed by experience in start-up and steady-state CCA operation in SCE territory.

The attached Contract has been negotiated by CPA’s Executive Director, with input from General Counsel, the County’s CEO and senior staff. The proposed contract and scope of work attached to this staff report are substantially similar as those provided in the RFP, with modifications to terms based on Calpine’s proposal.

Attachments: Agreement between Clean Power Alliance and Calpine Energy Solutions

CPA Calpine Agreement Exhibits
   Exhibit A: Description of Services
   Exhibit B: Payments and Rates
   Exhibit C: Joint Review
This Agreement ("Agreement") dated and effective as of ______________ (the "Effective Date"), is made by and between:

CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA, ("CPA") and

Calpine Energy Solutions, LLC ("Consultant").

CPA and Consultant are sometimes collectively referred to herein as the "Parties" and each individually as a "Party." In consideration of the terms of this Agreement, and for other good and valuable consideration, the Parties make the following acknowledgments and agreements:

RECITALS

WHEREAS, CPA may contract with independent contractors for the furnishing of data management services to or for CPA; and

WHEREAS, the purpose of this Agreement is to set forth the terms and conditions upon which Consultant shall provide to the CPA.

NOW, THEREFORE, it is agreed by the parties to this Agreement as follows:

AGREEMENT

1. Exhibits and Attachments

The following exhibits and attachments are attached to this Agreement and incorporated into this Agreement by this reference:

Exhibit A – Description of Services
Exhibit B – Payments and Rates
Exhibit C – Joint Review

Should a conflict arise between language in the body of this Agreement and any exhibit or attachment to this Agreement, the language in the body of this Agreement controls, followed by Exhibit A, B, and C, in that order.

2. Services to be Performed by Contractor.

In consideration of the payments set forth in this Agreement and in Exhibit B, Contractor shall perform services for CPA in accordance with the terms, conditions, and specifications set forth in this Agreement and in the Description of Services set forth in Exhibit A ("Services"). As provided by Exhibit B, Contractor shall perform the Services described in Exhibit A but will not invoice CPA nor will CPA owe payments to Contractor sooner than sixty (60) calendar days following the date on which the first CPA customer meter becomes active ("Meter Activation Date").
3. Payments

CPA agrees to compensate Consultant as follows:

a. In consideration of the Services provided by Contractor in accordance with all terms, conditions and specifications set forth in this Agreement and Exhibit A, CPA shall make payment to Contractor based on the rates and in the manner specified in Exhibit B. Contractor shall not invoice CPA nor will CPA owe payments to Contractor sooner than sixty (60) calendar days following the Meter Activation Date.

b. Unless otherwise indicated in Exhibit B, Contractor shall invoice CPA monthly for all fees related to Services performed during the previous month, or two months in the case of the first and second months' invoices. Payments shall be due within thirty (30) calendar days after the date of invoice. All payments must be made in U.S. dollars.

4. Term

Subject to compliance with all terms and conditions of this Agreement, the term of this Agreement shall be from the Effective Date through ____________ ("Initial Term").

5. Termination

a. Termination for Default. Party defaults in the observance or performance by a Party of any such Party's material covenants or agreements in this Agreement (other than a default in a payment obligation) and such default continues uncured for thirty (30) Business Days after written notice is given to such Party failing to perform its covenants or agreements under this Agreement, provided, however, that for such events which require more than thirty (30) business days to cure, then the defaulting Party shall have such additional time as may reasonably be required to effect such cure provided that the defaulting Party diligently and continuously pursues such cure; or (iii) either Party makes an assignment or any general arrangement for the benefit of creditors or files a petition or otherwise commences, authorizes or acquires in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors or has such a petition filed against it or otherwise becomes bankrupt or insolvent (however evidenced) or is unable to pay its debts as they fall due.

b. Effect of Termination. Upon the effective date of expiration or termination of this Agreement: (i) Contractor may immediately cease providing Services hereunder; (ii) any and all payment obligations of CPA under this Agreement will become due immediately; and (iii) each Party will promptly either return or destroy (as directed by the other Party) all Confidential Information of the other Party in its possession as well as any other materials or information of the other Party in its possession. Upon such expiration or termination, and upon request of CPA, Contractor shall reasonably cooperate with CPA as described in Section 5 below to ensure a prompt and efficient transfer of all data, documents and other materials to CPA or a new service provider in a manner such as to minimize the impact of expiration or termination on CPA's customers. CPA agrees to pay Contractor compensation for Services performed in connection of such transfer, to the extent not contemplated in the Agreement.

c. Transition At Time Of Termination Or Expiry
i. In the event of termination or expiry of this Agreement, in whole or in part, Contractor and CPA shall, subject to the other terms of this Section 5, take commercially reasonable steps sufficient to ensure the orderly and effective transition of Services to CPA and/or a successor contractor ("Transition Assistance").

ii. All references in this Section 5 to termination or expiry shall include partial and complete termination or expiry, cancellation or cessation unless the context otherwise requires. In relation to any partial termination or expiry, the provisions of this Section 5 shall apply only to those parts of the Services subject to such partial termination or expiry.

iii. Each reference to an obligation of Contractor under this Section 5 shall be deemed to include an obligation on Contractor to require all relevant subcontractors to comply with such obligation.

d. Transition Assistance Period

The "Transition Assistance Period" means a period of such duration as is determined by CPA in consultation with Contractor but in no event longer than one hundred eighty (180) calendar days commencing on the earlier of:

i. service of notice to terminate this Agreement;

ii. in case of a repudiatory breach of this Agreement, the date on which the non-defaulting party accepts such repudiatory breach as terminating this Agreement; or

iii. the expiry of the Initial Term or any Renewal Term (as the case may be).

e. Transition Assistance Election

During the Transition Assistance Period, Services will be discontinued or transitioned to CPA or a successor contractor at CPA's discretion and such transition shall then be performed in accordance with the Transition Plan required by subsection 5(f) below and with this Section 5. All applicable terms, conditions and specifications of this Agreement will remain in effect during the Transition Assistance Period (including but not limited to rates and charges, discounts, credits, waivers, service levels and key personnel) unless otherwise set forth in the Transition Plan.

f. Transition Assistance Planning

Promptly following the commencement of the Transition Assistance Period (and in any event within fourteen (14) calendar days of notice by either Party), or earlier at the request of CPA in consultation with Contractor, Contractor shall develop, together with CPA, a written transition assistance plan specifying in detail all activities, and the corresponding timing of such activities, necessary to facilitate an orderly and effective transition of Services ("Transition Plan"). The Transition Plan shall include detailed language describing how Contractor will satisfy the specific obligations described in
subsection 5(i) below. The Transition Plan will also include all applicable fees requested by Contractor for provision of the Transition Services.

g. **Transition Assistance Obligations for Call Center Services**

The Transition Assistance provided by Contractor for terminated or expired Call Center Services during the Transition Assistance Period shall include the following services at no additional charge to CPA (unless otherwise agreed in the Transition Assistance Plan):

i. providing CPA or its designees with all proprietary information (including personally identifiable information, whether provided by CPA or SCE), materials and documents, electronic or otherwise, provided by CPA to Contractor in connection with this Agreement ("CPA Information") and CPA Materials, defined below, in Contractor's possession in a format mutually agreed by the Parties, as well any additional documentation relating to the Call Center Services which Contractor believes may be necessary or useful to enable the orderly and effective transition of such Call Center Services to CPA and/or a successor contractor;

ii. following consultation with Contractor, allowing CPA to observe Contractor's provision of the Call Center Services;

iii. providing CPA and/or a successor contractor with reasonable access to relevant Contractor staff in order to facilitate knowledge transfer related to the provision of the Call Center Services, which may include explanations from such staff who provided the Call Center Services, the manner of their provision and reasonably related documentation and providing answers to reasonable questions from CPA on the same;

iv. Contractor shall provide Transition Assistance in such a manner as to facilitate the uninterrupted performance of the Call Center Services either by CPA or a successor contractor.

h. **Transition Assistance Obligations for Data Manager Services**

Contractor shall provide to CPA all any and all data created by Contractor specifically for CPA in the performance of the Services pursuant to this Agreement ("CPA Materials"), in a format or formats acceptable to CPA, and will cooperate with CPA to provide other information reasonably requested by CPA in connection with the transition of the Data Manager Services to CPA or a successor contractor in order to facilitate the transition of the Data Manager Services.

6. **Contract Materials**

CPA owns all right, title and interest in and to all CPA Materials. Upon the expiration of this Agreement, or in the event of termination, CPA Materials and all CPA Information, in whatever form and in any state of completion, shall remain the property of CPA and shall be promptly returned to CPA. Upon termination, Contractor may make and retain a copy of such contract materials if permitted by law.
For the avoidance of doubt, Consultant's intellectual property, including but not limited to Consultant's internal systems, know-how, programs and work product shall remain the exclusive property of Consultant, and, with regard to any reports specifically for CPA, CPA shall have a perpetual, non-exclusive, royalty free (exclusive of payments made under this Agreement) license to use any such reports on an "as is" basis thereafter.

7. Payments of Permits/Licenses

Contractor bears responsibility to obtain any license, permit, or approval required for it to provide the Services to be performed under this Agreement at Contractor's own expense prior to commencement of the Services.

8. Relationship of Parties

CPA is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.) pursuant to the Joint Powers Agreement and is a public entity separate from its constituent members. CPA shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of CPA's constituent members in connection with this Agreement.

9. Confidential Information.

a. Consultant agrees that Consultant will hold all confidential information in confidence, and will not divulge, disclose, or directly or indirectly use, copy, digest, or summarize, any confidential information, except to the extent necessary to carry out Consultant's responsibilities as directed or authorized by CPA.

b. Confidential information shall not include: (1) information that is generally available to the public or in the public domain at the time of disclosure; (2) information that becomes publicly known other than through any breach of this Agreement by Consultant or its Representatives; (3) information which is subsequently lawfully and in good faith obtained by Consultant or its Representatives from a third party, as shown by documentation sufficient to establish the third party as the source of the confidential information; provided that the disclosure of such information by such third party is not known by Consultant or its Representatives to be in breach of a confidentiality agreement or other similar obligation of confidentiality; (4) information that Consultant or its Representatives develop independently without use of or reference to confidential information provided by Consultant; or (5) information that is approved for release in writing by CPA.

c. Notwithstanding the foregoing to the contrary, Consultant may, without being deemed to violate this Section 9, make such disclosures as are required in the ordinary course of its business to regulatory agencies (e.g. FERC, Cal-ISO, etc.)

10. Insurance

All required insurance coverages shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to CPA. The general liability
policy shall be endorsed naming Clean Power Alliance of Southern California and its employees, officers and agents as additional insureds. The certificate(s) of insurance and required endorsement shall be furnished to CPA prior to commencement of work. Each certificate shall provide for thirty (30) days advance written notice to CPA of any cancellation or reduction in coverage. Said policies shall remain in force through the life of this Agreement and shall be payable on a per occurrence basis only, except those required by paragraph (d) below which may be provided on a claims-made basis consistent with the criteria noted therein.

Nothing herein shall be construed as a limitation on Consultant's obligation under paragraph 11 of this Agreement. CPA agrees to timely notify the Consultant of any negligence claim.

Failure to provide and maintain the insurance required by this Agreement will constitute a material breach of the Agreement. In addition to any other available remedies, CPA may suspend payment to the Consultant for any services provided during any time that insurance was not in effect and until such time as the Consultant provides adequate evidence that Consultant has obtained the required coverage.

(a) General Liability

The Consultant shall maintain a commercial general liability insurance policy in an amount of no less than one million ($1,000,000) with a two million dollar ($2,000,000) aggregate limit. CPA shall be named as an additional insured on the commercial general liability policy and the Certificate of Insurance shall include an additional endorsement page.

(b) Auto Liability

Where the services to be provided under this Agreement involve or require the use of any type of vehicle by Consultant in order to perform said services, Consultant shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit ($1,000,000.00).

(c) Workers' Compensation

The Consultant acknowledges the State of California requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Consultant has employees, a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to CPA prior to commencement of work.

(d) Professional Liability Insurance

Coverages required by this paragraph may be provided on a claims-made basis with a “Retroactive Date” either prior to the date of the Agreement or the beginning of the contract work. If the policy is on a claims-made basis, coverage must extend to a minimum of twelve (12) months beyond completion of contract work. If coverage is cancelled or non-renewed, and not replaced with another claims made policy form with a “retroactive date” prior to the Agreement effective date, the Consultant must purchase “extended reporting” coverage for a minimum of twelve (12) months after completion of contract work. Consultant shall maintain a policy limit of not less than
$1,000,000 per incident. If the deductible or self-insured retention amount exceeds $100,000, CPA may ask for evidence that Consultant has segregated amounts in a special insurance reserve fund or Consultant's general insurance reserves are adequate to provide the necessary coverage and CPA may conclusively rely thereon.

Consultant shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Agreement. Consultant shall monitor the safety of the job site(s) during the project to comply with all applicable federal, state, and local laws, and to follow safe work practices.

11. Indemnification

The Consultant shall, to the extent permitted by law, indemnify, defend and hold harmless the CPA, its employees, officers, agents and volunteers, from and against, any and all liability, including but not limited to demands, claims, actions, fees, costs and expenses (including attorney and expert witness fees), (collectively "CPA Claims") arising from and/or relating to this Agreement but only to the extent that such CPA Claims to the extent caused by Consultant's negligent acts, errors or omissions, or the negligent acts, errors or omissions of Consultant's employees, agents, or subcontractors while in the performance of the terms and conditions of the Agreement, except for such loss or damage arising from the sole negligence or willful misconduct of CPA, elected and appointed officers, employees, agents and volunteers.

This Indemnification shall apply only to the extent of the Consultant's acts and omissions, which shall be deemed to include any contractor, subcontractor, agent, and/or employee of the Consultant. In addition to the stated parties, the Consultant shall include any other person or entity under Consultant's direction and control.

12. Independent Contractor

a. As an independent contractor, Consultant acknowledges that Consultant will not be deemed to be an employee of Consultant for any purpose whatsoever, including, but not limited to: (i) eligibility for inclusion in any retirement or pension plan that may be provided to employees of Consultant; (ii) paid non-working holidays; (iv) paid vacations or personal leave days; (v) sick pay; (vi) paid vacations or personal leave days; (v) participation in any plan or program offering life, accident, or health insurance for employees of Consultant; (vi) participation in any medical reimbursement plan; or (vii) any other fringe benefit plan that may be provided for employees of Consultant.

b. Consultant declares that Consultant will comply with all federal, state, and local laws regarding registrations, authorizations, reports, business permits, and licenses that may be required to carry out the work to be performed under this Agreement. Consultant agrees to provide CPA with copies of any registrations or filings made in connection with the work to be performed under this Agreement.

c. CPA agrees and understands that Consultant may provide the same or similar services to other parties.

13. Force Majeure
a. Neither party shall be liable for such party's failure to perform its obligations under and in accordance with this Agreement, if such failure arises out of fires, floods, epidemics, quarantine, restrictions, or other natural occurrences, strikes, lockouts (other than a lockout by such party or any of such party's subcontractors), freight embargoes, or other similar events to those described above, but in every such case the failure to perform must be totally beyond the control and without any fault or negligence of such party (such events are referred to in this sub-paragraph as "force majeure events").

b. Notwithstanding the foregoing, a default by a subcontractor of Consultant shall not constitute a force majeure event, unless such default arises out of causes beyond the control of both Consultant and such subcontractor, and without any fault or negligence of either of them. In such case, Consultant shall not be liable for failure to perform, unless the goods or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit Consultant to meet the required performance schedule. As used in this sub-paragraph, the term "subcontractor" and "subcontractors" mean subcontractors at any tier.

c. In the event Consultant's failure to perform arises out of a force majeure event, Consultant agrees to use commercially reasonable efforts to obtain goods or services from other sources, if applicable, and to otherwise mitigate the damages and reduce the delay caused by such force majeure event.

14. Compliance with Applicable Laws

The Consultant shall comply with any and all applicable federal, state and local laws and resolutions affecting services covered by this Agreement.

15. Nondiscriminatory Employment

Consultant and/or any permitted subcontractor, shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, age or condition of disability. Consultant and/or any permitted subcontractor understands and agrees that Consultant and/or any permitted subcontractor is bound by and will comply with the nondiscrimination mandates of all federal, state and local statutes, regulations and ordinances.

16. Notices

Any notice, request, demand, or other communication required or permitted under this Agreement shall be deemed to be properly given when both: (1) transmitted via facsimile to the telephone number listed below or transmitted via email to the email address listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of CPA, to:

Name/Title: Theodore Bardacke, Executive Director
Address: 555 W 5th Street, 35th Floor, Los Angeles, CA 90013
Telephone: (213) 269-5870
Email:           tbardacke@cleanpoweralliance.org

In the case of Contractor, to:

Name/Title:   Calpine Energy Solutions, LLC;
Attn:  Legal Department
Address:  401 W A Street, Suite 500. San Diego, CA 92101
Telephone:  619-684-8251
Email:         Sean.White@calpinesolutions.com

17. Assignment

Consultant shall not assign this Agreement or any portion of it to a third party without the prior written consent of CPA, which shall not be unreasonably withheld. Any such assignment without CPA's prior written consent shall give CPA the right to automatically and immediately terminate this Agreement without penalty or advance notice. Notwithstanding the foregoing to the contrary Consultant may assign this Agreement to an Affiliate upon prior written consent of the CPA. "Affiliate" shall mean any person or entity that controls, is controlled by, or is under common control with Consultant.

18. Subcontracting

Consultant may not subcontract Services to be performed under this Agreement without the prior written consent of CPA, which shall not be unreasonably withheld. If the CPA's written consent to a subcontract is not obtained, Consultant acknowledges and agrees that CPA will not be responsible for any fees or expenses claimed by such subcontractor.

CPA acknowledges that Consultant utilizes Energy Choice California, Olivine, Local Government Commission, & Integral Analytics as a subcontractor for the services provided herein and agrees that Consultant's use of Energy Choice California, Olivine, Local Government Commission, & Integral Analytics as a subcontractor, in and of itself, does not violate this Section 18.

19. Retention of Records and Audit Provision

Consultant and any subcontractors authorized by the terms of this Agreement shall keep and maintain on a current basis full and complete documentation and accounting records, employees’ time sheets, and correspondence pertaining to this Agreement. Such records shall include, but not be limited to, documents supporting all income and all expenditures. CPA shall have the right, during regular business hours, to review and audit all records relating to this Agreement during the Agreement period and for at least five (5) years from the date of the completion or termination of this Agreement. Any review or audit may be conducted on Consultant's premises or, at CPA's option, Consultant shall provide all records within a maximum of fifteen (15) days upon receipt of written notice from CPA. Consultant shall refund any monies erroneously charged. Consultant shall have an opportunity to review and respond to or refute any report or summary of audit findings, and shall promptly refund any overpayments made by CPA based on undisputed audit findings.

20. Conflict of Interest
a. No CPA employee whose position with the CPA enables such employee to influence the award of this Agreement or any competing Agreement, and no spouse or economic dependent of such employee, shall be employed in any capacity by the contractor or have any other direct or indirect financial interest in this Agreement. No officer or employee of the Consultant who may financially benefit from the performance of work hereunder shall in any way participate in the CPA's approval, or ongoing evaluation, of such work, or in any way attempt to unlawfully influence the CPA's approval or ongoing evaluation of such work.

b. The Consultant shall comply with all conflict of interest laws, ordinances, and regulations now in effect or hereafter to be enacted during the term of this Agreement. The Consultant warrants that it is not now aware of any facts that create a conflict of interest. If the Consultant hereafter becomes aware of any facts that might reasonably be expected to create a conflict of interest, it shall immediately make full written disclosure of such facts to CPA. Full written disclosure shall include, but is not limited to, identification of all persons implicated and a complete description of all relevant circumstances. Failure to comply with the provisions of this paragraph shall be a material breach of this Agreement.

21. Governing Law, Jurisdiction, and Venue

This Agreement shall be governed by, and construed in accordance with, the laws of the State of California. The Consultant agrees and consents to the exclusive jurisdiction of the courts of the State of California for all purposes regarding this Agreement and further agrees and consents that venue of any action brought hereunder shall be exclusively in the County of Los Angeles.

22. No Third Party Beneficiaries

This Agreement is intended for the benefit of the Parties hereto and is not intended and shall not be construed as conferring any interest or rights with respect to or in connection hereto, except as otherwise expressly provide for herein.

23. Amendments

None of the terms and conditions of this Agreement may be changed, waived, modified or varied in any manner whatsoever unless in writing duly signed by the Parties.

24. Severability

Should any provision of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, such invalidity will not invalidate the whole of this Agreement, but rather, the remainder of the Agreement which can be given effect without the invalid provisions, will continue in full force and effect and will in no way be impaired or invalidated.

25. Complete Agreement

This Agreement constitutes the entire Agreement between the parties. No modification or amendment shall be valid unless made in writing and signed by each party. Failure of either party to enforce any provision or provisions of this Agreement will not waive any enforcement of any
continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

26. Counterparts

This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement.

27. Limitation of Liability

For breach or default arising from any provision for which an express remedy is provided herein, such remedy or measure of damages shall be the sole and exclusive remedy and all other remedies or damages at law or in equity are waived. If no remedy or measure of damages is expressly provided herein, liability shall be limited to direct, actual damages only, such direct, actual damages shall be the sole and exclusive remedy, and all other remedies or damages at law or in equity are waived. Except as may be included in an express remedy provided for herein, neither party shall be liable to the other party for any indirect, special, consequential, punitive or exemplary damages arising out of or related to this agreement, including lost profits or business interruption damages, whether based on statute, contract, tort, or otherwise, without regard to cause or the negligence of any Party, whether sole, joint, active or passive, and each Party hereby releases the other Party from any such liability, even if during the term hereof it advises the other of the possibility of such damages. Notwithstanding the foregoing to the contrary, but expressly subject to the limitation on types of damages in the foregoing sentence, it is the intent of the Parties for CPA to have the full benefit of the indemnity of Article 11, above. To the extent any damages required to be paid hereunder are liquidated, the Parties acknowledge that the damages are difficult or impossible to determine, or otherwise obtaining an adequate remedy is inconvenient and the damages calculated hereunder constitute a reasonable approximation of the harm or loss. The provisions of this Section 27 shall apply to the fullest extent permitted by law.

[Signatures on the following page]
**IN WITNESS WHEREOF,** the parties have executed this Agreement on the date first above written.

Calpine Energy Solutions, LLC

By: __________________________
Title: _________________________

Clean Power Alliance of Southern California

By: __________________________
Title: Executive Director

APPROVED AS TO FORM:

MARY C. WICKHAM
County Counsel

By _________________________________

Senior Deputy County Counsel
Exhibit A – Description of Services

Standard Services
Under the direction of the Clean Power Alliance Project Manager, Contractor shall provide all the following standard services:

1. Electronic Data Exchange Services
   a. Process and manage CCA Service Requests (“CCASRs”) from/to SCE which specify the changes to a customer's choice of service(s) such as enrollment in CCA programs, customer initiated returns to bundled utility service or customer initiated returns to direct access service (Electronic Data Interchange Files).
   b. Obtain all customer usage data at the shortest available time interval (i.e., 15-minute intervals) for each customer class and at billing level quality, from SCE's Meter Data Management Agent (“MDMA”) server to allow for timely billing (according to SCE requirements), inquiry, and reporting of each Alliance customer.
   c. Calculate, maintain, send, and communicate the amount to be billed by SCE for services provided by the Alliance (Electronic Data Interchange Files).
   d. Receive and maintain all data related to payment transactions toward CCA charges, as received from SCE, after payment is received by SCE from CCA customers (820 Electronic Data Interchange Files).
   e. Contractor shall participate in any Customer Data Acquisition Program (“CDA”) for SmartMeter data sharing, including beta testing, as the Alliance's Data Manager.

2. Data Confidentiality and Ownership
   a. Maintain all customer data according to the Alliance's customer privacy policy and the requirements of all applicable laws, including but not limited to California Public Utilities Commission Decisions.
   b. Ensure completion of a daily backup process and perform periodic testing to ensure the backup process continuously functions as expected.
   c. All the Alliance data, regardless of form, including originals, images and reproductions, prepared by, obtained by or transmitted to Contractor in connection with this Agreement, are confidential, proprietary information owned by the Alliance. Except as specifically provided in this Agreement, Contractor shall not disclose data generated in the performance of the Services to any third party, nor use the Alliance data and information outside of the services provided under the Agreement, without the prior, written consent of the Executive Director or authorized designee.
   d. Personal identifying information, financial account information, or restricted information, whether in electronic format or hard copy, must be secured and protected at all times to avoid unauthorized access. At a minimum, Contractor must encrypt or
password-protect electronic files when transmitting such data outside of its firewalls. This includes data saved to laptop computers, computerized devices, and removable storage devices. When personal identifying information, financial account information, and/or restricted information, regardless of its format, is no longer required by Contractor to execute the work contracted by the Alliance, the information must be redacted or destroyed through appropriate and secure methods, to ensure the information cannot be viewed, accessed, and reconstructed.

e. Maintain a Data Management Provider Security Breach Policy.

f. In the event that data collected or obtained by the Contractor in connection with this Agreement is believed to have been compromised, Contractor shall notify the Alliance Executive Director, or authorized Alliance designee, immediately. Contractor agrees to reimburse the Alliance for any costs incurred by the Alliance to investigate potential breaches of this data by the Contractor and, where applicable, the cost of assisting individuals who may be impacted by the Contractor’s breach.

g. If Contractor ceases to operate, ends support of, or otherwise divests its interest in any software and materials for which it is contracted by the Alliance, Contractor shall provide the Alliance a copy of current source code, provide licenses, or otherwise ensure the services the Alliance is contracted for shall continue. The Alliance agrees it shall only use such code and materials to support the Alliance’s use of the software.

h. In the event the contract is terminated by either party, Contractor agrees to confer back to the Alliance all of its data, in usable and normalized format, within 30 days of notice of contract termination. There shall be no charge for the return of the Alliance data to the Alliance.

i. All Alliance specific phone numbers, web domains, customer data, program-related data, data reports, and call center scripting are property of the Alliance and shall be made available to the Alliance at any time.

3. Distributed Energy Resource (“DER”) Services, Including Demand Response

a. Receive, store, maintain and provide Alliance with access to all interval level data available from Southern California Edison, including the shortest time interval data available for each customer account to support Alliance DER programs, including but not limited to, grid services, microgrids, demand response, energy efficiency, and distributed generation.

b. Identify customers that would most benefit from DER programs based on parameters provided by Alliance and including recommendations made by Contractor, and analyze, aggregate, schedule, dispatch, settle, and report on DER loads.

c. Develop DER benefit-cost framework that offers a full accounting of the benefits and costs related to these services.
d. Integrate customer participation data in Alliance DER service offerings into Alliance Customer Relationship Management solution to support and enhance customer participation in these efforts.

e. Provide call center with skill-based customer service agents ("CSRs"), with access to all needed data, including rates, billing, load, grid/microgrid services and other information, to provide customer support for DER questions and issues.

f. Provide interval level meter data to any Alliance-directed Distributed Energy Resource aggregator for CAISO settlement.

g. Present DER-related charges and credits onto Alliance bills to customers participating in DER program(s).

h. Provide DER operational and business intelligence reports on DER program(s) and other topics as requested by Alliance.

i. Support DER rate structures with hourly interval level pricing.

j. Upon request by the Alliance, provide a flexible, reliable and scalable platform for planning, managing and optimizing the use of DER for multiple purposes, including:

   - Using the interval data, the provider should be able to visualize and organize (filtering, grouping, etc.) data;
   - Aligning DER Incentives and compensation based on the flexibility and measured performance of the DER, and market prices based on the needs of the system;
   - Accurately representing DER impacts.

k. Provide access to a software tool that allows the Alliance to analyze and evaluate potential DER opportunities and/or projects for feasibility and financial impact or benefit. Access to the tool and any associated training to be mutually agreed upon and scheduled.

In addition to the services described in sections 3(a) through 3(k) above, additional DER services will be provided to the Alliance under a separate DER Management Agreement between the Alliance, Calpine Energy Solutions, and Olivine, Inc., which will set forth requirements and statement of work for a future DER program (the "DER Program") jointly developed by the Alliance, Calpine Energy Solutions, and Olivine, Inc. Work performed under the DER Management Agreement to support the DER Program of reasonable scope and complexity will be provided to the Alliance at no incremental cost over a four-year term starting no later than January 1, 2020. The DER Management Agreement will include a statement of work to perform customary services related to the deployment and operation of the DER Program:

- Program and Rate Design with Single Point Administration;
- Registered DR Provider or DER Provider with CAISO for DER Program;
- DER Scheduling Coordinator services for DER Program including RA, bids, dispatch, and settlement;
- DER Program Customer Service Tiers 1, 2 and 3;
- Site assessment program management for Commercial & Industrial customers using local partners hired by the Alliance;
- DER Program regulatory compliance advisory;
  - End-to-end operational platform to onboard, dispatch, monitor and settle the DER Program resources;
  - As desired by the Alliance, co-branded mobile application for residential customers and a web store for customer access to DER technologies;
  - Pilot program, and following successful pilot, launch and operation of Alliance DER Program.

4. Qualified Reporting Entity (“QRE”) Services
   a. Consistent with terms and conditions included in the Qualified Reporting Entity Services Agreement(s) between the Alliance and Contractor, serve as QRE for certain locally situated, small-scale renewable generators supplying electric energy to the Alliance through its feed-in tariff (FIT) and/or other local renewable generation programs, including microgrids or other customer aggregation, once enacted.
   b. Submit a monthly generation extract file to the Western Renewable Energy Generation Information System (“WREGIS”) on the Alliance’s behalf, which will conform to the characteristics and data requirements set forth in the WREGIS Interface Control Document for Qualified Reporting Entities.
   c. Contractor shall receive applicable electric meter data from SCE for projects participating in the Alliance’s FIT, microgrid, energy efficiency, demand response, and other similar programs, once enacted, consistent with SCE’s applicable meter servicing agreement, and shall provide such data to the Alliance for purposes of performance tracking and invoice creation (manage receipt of specified meter data and payment processes).
   d. Provide the Alliance with a copy of the Contractor’s intended form of QRE Services Agreement, which shall be subject to the Alliance’s review and prospective, mutually agreeable revisions.

5. Customer Information System
   a. Establish and maintain an operational Customer Relationship Management (“CRM”) system and establish an operational Customer Information System.
   b. With the data available as provided by SCE, maintain an accurate database of all eligible accounts located in the Alliance service area and identify each account’s enrollment status (opt out, program enrollment), smart meter status, rate tariff election(s) and applicable riders, payment history, collection status, on-site generating capacity (NEM status), if applicable, access to .pdf copies of customer bills and any
correspondence with customer as well as other information that may become necessary to effectively administer the Alliance Program as mutually agreed to by parties from time to time.

c. Ensure that the CRM system established per 5.a above is accessible to and integrated with any internal CRM system that the Alliance may operate (through open source software, electronic data exchange, etc.) so that the Alliance has full and functional access to the online database to add customer interactions and other account notes, to view customer email or written correspondence within online databases, and view SCE bills for the Alliance customers.

d. Maintain and provide historical usage data on all customers for a time period equal to the lesser of either (a) the start of customer service to present or (b) seven years.

e. Prior to the start of the Phase 3 noticing period, provide a Business Intelligence tool to access and analyze the Alliance program data that enables Alliance staff to access and analyze customer-specific interval usage for Alliance programs. Contractor will work with Alliance staff to scope out minimum viable product (MVP) features for Phase 3 noticing, as well as additional features that will be phased in over the course of the contract.

f. Contractor will store all SmartMeter historical usage data, as received by the MDMA, for a period of up to seven years and will provide access to such data by the Alliance for purposes of conducting data analytics and other purposes.

g. Maintain viewing access, available to appropriate Alliance staff, to view SCE bills for the Alliance customers, including supporting the intuitive parsing and labeling of SCE provided files. Maintain accessible archive of billing records for all the Alliance customers from the start of the Alliance Service or a period of no less than five years.

h. Maintain and communicate records of customers who were eligible for service with the Alliance but have elected to opt out, either before or after starting service with the Alliance.

i. Maintain and communicate records of Net Energy Metering credits and generation data for customers to be posted on bill and settled on a schedule determined by the Alliance.

j. When requested by the Alliance, place program charges on the relevant customer account, identified by Service Agreement ID (“SAID”), or any subsequent ID codes established by SCE.

k. Identify customers participating in various Alliance programs in the database.

l. Include various program payment information in all relevant reports.

m. Perform quarterly Alliance program reviews to assess appropriate customer charge levels.
n. CPA data contained within the CRM database will be transferred to the Alliance within 30 days of written request, or in the shortest time period possible (not to exceed 45 days) as may be required resulting from the size and data transfer methodology restrictions occasioned by the data.

o. Contractor shall be able to sort data by each member agencies and programs and provide monthly (high level aggregated data) reports to the Alliance in line with consumer protections and security protocols.

p. Develop and implement a bill comparison tool, prior to the start of the Phase 3 noticing period, that allows Alliance staff and CSR agents to perform bill comparisons for customers, comparing the charges that would apply to a customer under Alliance rates and comparable SCE rates. Periodic milestones will be established by mutual agreement to establish, review and enhance tool functionality and alignment with the Alliance’s needs. As an interim measure to support customer inquiries while the bill comparison tool is implemented, provide the following:
   
   i) Under the direction of Alliance staff and with the data available as provided by SCE, Contractor personnel will respond to bill comparison requests within 2 business days, making commercially reasonable efforts to complete the requested comparisons as soon as possible.

   ii) No later than October 1, 2018 provide Alliance staff with Excel-based templates and functionality within the CRM they can use to perform bill comparisons, providing, directly or through self-service reports, the required data for the templates that is available as provided by SCE.

6. Customer Call Center

a. Establish a call center in Los Angeles County and, if a second call center location is needed, within Ventura County, by the beginning of Phase 3 noticing period.

b. Provide professional Interactive Voice Response (“IVR”) recordings for the CCA customer call center.

c. Provide an option for IVR self-service and tracking of how many customers start and complete self-service options without live-agent assistance.

d. Staff a call center, during any CCA statutory enrollment period, 24 hours a day, 7 days a week to process opt out requests.

e. Staff a call center during Non-Enrollment Periods between the hours of 8 AM and 6 PM Pacific Time Monday through Friday, excluding Alliance and SCE holidays (“Regular Business Hours”).

f. Provide sufficient call center staffing to meet the requirements set forth herein, including designating the Alliance specific agents, to the extent needed to provide for full call center functionality, and a call center supervisor that will serve as the main point of contact between the Alliance and the customer call center staff.
g. Train agents and provide tiered support with escalation path. Implement skill-based routing to guide incoming customer calls to an agent trained to address the inquiry

I. Tier 1 agents meet minimum quality requirements for CCA customer service and program changes.
II. Tier 2 agents meet minimum quality requirements for complex billing and NEM questions.
III. Tier 3 agents provide complex billing, programs, DER, Demand Response, Energy Efficiency, and large commercial customer service support.
IV. Agents at each tier level are able to escalate customer concerns or complex questions to a data manager expert or contact center lead or supervisor.

h. Ensure that a DER, Demand Response, and Energy Efficiency specialist is available within the call center during Regular Business Hours.

i. Provide a sufficient number of Data Manager Experts available to manage escalated and complex calls during Regular Business Hours.

j. Provide callers with the estimated hold time, if applicable. Provide an automated ‘call back’ option for callers who will be put on hold for an estimated five minutes or longer. Ensure at least two ‘call backs’ are attempted in case customer misses first call back.

k. Record all inbound calls and make recordings available to the Alliance staff upon request. Maintain an archive of such recorded calls for a minimum period of 24 months. Disclose to caller that their calls may be recorded in accordance with applicable state and federal law.

l. Track call center contact quality with criteria including:
   i) Use of appropriate greetings and other call center scripts
   ii) Courtesy and professionalism
   iii) Capturing key customer data
   iv) Providing customers with correct and relevant information
   v) First-contact resolution
   vi) Accuracy in data entry and call coding
   vii) Grammar and spelling in text communication (email and chat)

m. Evaluate customer satisfaction through voluntary customer surveys that ask general questions about call quality, call resolution, and how satisfied the customer was with the service received.

n. Respond to customer inquiries received through email, or web-based form submission. Implement an online chat system prior to the start of the Phase 3 noticing period. Chat communications shall be logged and stored for a minimum of 24 months.
CLEAN POWER ALLIANCE BOARD OF DIRECTORS  AGENDA ITEM 5 – ATTACHMENT 2

o. Receive calls from the Alliance customers referred to Contractor by SCE and receive calls from the Alliance customers choosing to contact Contractor directly without referral from SCE.
p. Provide the call center number on all SCE invoices. Collect and/or confirm current email, mailing address and phone number of customers and add to or update database during inbound call.
q. Collect permission (via voice recording, email request, or electronic form submittal) from customers to send electronic correspondence instead of printed mail.
r. Develop and provide scripts for key interaction types including but not limited to opt-outs, billing inquires, NEM to Alliance staff for review and approval. Script should be updated quarterly.
s. Respond to telephone inquiries from the Alliance customers using an Alliance approved script. For questions not addressed within the script, refer inquiries either back to SCE or to the Alliance. Provide a monthly report of common inquiries not addressed in the script as needed.
t. Respond to customer inquiries within 24 hours, excluding weekends and holidays, including inquiries received either through telephone calls, email, online chat system, or web-based submission.
u. Offer cross training to SCE call center in coordination with the Alliance.
v. Participate in coordination meetings, at the Alliance’s request, to promote the resolution of any customer service issues. Such meetings may include Alliance management/staff and may require on-site participation by Contractor’s management/staff.
w. Ensure monthly status reports are provided during the first week of each month.
x. Provide weekly status reports during Statutory Enrollment Periods.
y. Make Spanish speaking call center staff available to customers during Regular Business Hours.
z. Provide translation services for inbound calls for at least the following languages: Mandarin, Korean, Tagalog, and Vietnamese. Note that the Alliance may add additional languages every six months based on need.
aa. Create and maintain online and downloadable forms for the Alliance website so that customers may perform program related tasks including but not limited to changing their account status to enroll or opt out of various Alliance programs. Integrate these program changes into the Customer Relationship Management system during an hourly sync process.
bb. Host Alliance meetings with call center management and representatives as requested by the Alliance and at a frequency of no less than one per month or other frequency determined by the Alliance.
cc. Establish communication options for the hearing impaired prior to the start of Phase 3 noticing.

7. Billing Administration
   a. General
      i) Maintain a table of rate schedules offered by the Alliance to its customers and provide to SCE for use in billing.
      ii) Monitor pending SCE rate changes, and adjust Alliance rates to maintain relative rate levels, subject to the Alliance approval.
      iii) Assist with settlement process for Net Energy Metering customers on at least an annual basis and potentially monthly by identifying eligible customers, ensuring that SCE provides accrued charges and credits, and providing mailing list to the Alliance designated printer.
      iv) Review application of the Alliance rates to customer accounts to ensure that rates are properly applied to such accounts.
      v) Conduct Rate analysis should customer want to transfer to new rate on the rate table and/or transition between renewable tiers.
      vi) Use commercially reasonable efforts to remedy billing errors for any customer in a timely manner, within no more than one billing cycle.
      vii) Provide customer mailing list to the Alliance designated printer, or in the absence of an Alliance designated printer at a printer of Contractor’s choosing that is a union shop within Los Angeles or Ventura County, for new move-in customer notices and opt out confirmation letters within 7 days of receiving an enrollment or opt out request.
      viii) Identify overdue accounts and support noticing processes (i.e. send an Alliance provided letter to customers that are overdue. If no payment is received from the customer after a certain amount of time (consistent with applicable Alliance policy), issue a CCASR to return customer to SCE.

8. Settlement Quality Meter Data
   a. Contractor shall aggregate usage for T+8, T+48 submissions by performing the following:
      i) Receive interval reads
      ii) Work with IOU to remedy missing or incorrect data
      iii) Apply loss adjustments
   b. Assist with T+172 resettlement process if/when needed.
   c. Contractor shall provide the Alliance and the Alliance’s designated Scheduling Coordinator (“SC”) with Settlement Quality Meter Data (“SQMD”) as required from SC’s by the California Independent System Operator (“CAISO”).
d. Upon the Alliance’s request, Contractor shall submit the SQMD directly to the CAISO on behalf of the Alliance or the Alliance’s designated SC.

e. Contractor shall provide a SQMD analytic connectivity system to support downstream (customer) services and reporting.

9. Reporting

a. Contractor shall provide the following reports:

<table>
<thead>
<tr>
<th>Report</th>
<th>Frequency</th>
<th>Delivery Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aging</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Billing Errors</td>
<td>Weekly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Call Center Statistics (per Section 5 above)</td>
<td>Weekly, Monthly</td>
<td>Email</td>
</tr>
<tr>
<td>Cash Receipts</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Days to Invoice</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Program Opt-Up or Opt-Down with Address, email address, phone number and reason if known</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Utility User Tax (UUT) where applicable</td>
<td>Monthly</td>
<td>SFTP or Email</td>
</tr>
<tr>
<td>Invoice Summary Report</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Monthly Transaction Summary</td>
<td>Monthly</td>
<td>SFTP or Email</td>
</tr>
<tr>
<td>Program Opt-Out with Rate Class and known reasons</td>
<td>Weekly, Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Retroactive Returns</td>
<td>Monthly</td>
<td>Email</td>
</tr>
<tr>
<td>Sent to Collections</td>
<td>Monthly</td>
<td>Email</td>
</tr>
<tr>
<td>Snapshot, including Addresses</td>
<td>Weekly</td>
<td>SFTP</td>
</tr>
<tr>
<td>Overdue and Unbilled Usage</td>
<td>Monthly</td>
<td>SFTP</td>
</tr>
<tr>
<td>CAISO SQMD by Load Profile and Customer Class</td>
<td>Monthly</td>
<td>SFTP</td>
</tr>
</tbody>
</table>

b. Contractor shall also assist the Alliance, as needed, in compiling various customer sales and usage statistics that may be necessary to facilitate the Alliance’s completion of requisite external reporting activities. Such statistics will likely include annual retail sales statistics for the Alliance customers, including year-end customer counts and retail electricity sales (expressed in kilowatt hours) for each retail service option offered by the Alliance. Mutually agreed upon requirements and proper notice will accompany each such request.

c. Contractor shall provide necessary financial reports to the Alliance for transmittal to creditors, suppliers, credit rating agencies, auditors, compliance and risk management consultants, and others as requested by the Alliance, with proper notice and mutually agreed upon requirements.
d. Contractor shall be able to sort data by member agencies and provide monthly (high level aggregated data) reports to the Alliance, with proper notice and mutually agreed upon requirements.

10. Performance Standards
   a. Adhere to the following performance standards during Non-Enrollment Periods:
      i) A minimum of 75% of all calls must be answered within 20 seconds.
      ii) A minimum of 90% of all calls must be answered within 3 minutes.
      iii) 100% of voicemail messages must be answered within one (1) business day.
      iv) 100% of emails must receive an immediate automated acknowledgement.
      v) 95% of emails must receive a customized response within one (1) business day.
      vi) 100% of emails must receive a customized response within three (3) business days.
      vii) Must achieve a no greater than 5% abandon rate for all calls.
   
   b. Adhere to the following performance standards during Enrollment Periods:
      i) A minimum of 75% of all calls must be answered within 60 seconds.
      ii) A minimum of 85% of all calls must be answered within 3 minutes.
      iii) 100% of voicemail messages must be answered within one (1) business day.
      iv) 100% of emails must receive an immediate automated acknowledgement.
      v) 95% of emails must receive a customized response within one (1) business day.
      vi) 100% of emails must receive a customized response within three (3) business days.
      vii) Must achieve a no greater than 10% abandon rate for all calls.
   
   c. Contractor shall maintain an accuracy rate of 99% or higher in billing the Alliance charges on a monthly basis.
   
   d. Provide monthly reports in accordance with Section 9 above that demonstrate whether performance standards have been met.
   
   e. At the start of the Phase 3 noticing period, if these performance levels are not met, Contractor shall implement a mutually agreed upon set of remedial actions to which Contractor shall be bound. For any month in which CPA believes Consultant has
substantially failed to meet the performance standards specified in Exhibit A, Sections 10(a)-10(d), CPA shall have the right to reduce payment of any invoice by $100,000 as liquidated damages as provided in this section. Prior to exercising this right, CPA shall provide written notice to Consultant that identifies the performance standard(s) that have not been met and states CPA's intent to invoke this subsection if the substantial failure(s) to achieve such performance standard(s) are not remedied within thirty (30) calendar days. The Parties shall then confer to establish a plan to remedy such substantial failure, which may provide a different deadline for remedying of the substantial failure(s) at the mutual agreement of the Parties. In the event that Consultant is unable to achieve such remedy within the thirty 30 calendar days of notification, or within the deadline established by the Parties, CPA may exercise its rights under this subsection to reduce payment of each subsequent invoice by $250,000 until the substantial failure(s) is remedied. The foregoing liquidated damages payment shall be limited to $250,000 per month regardless of how many performance standards are not met. CPA and Consultant agree that Consultant's substantial failure to comply with these standards will cause CPA to incur substantial economic damages and losses of types and in amounts which are impossible to compute and ascertain with certainty as a basis for recovery by CPA of actual damages, including increased opt-out rates, reputational harm and general customer dissatisfaction, and these liquidated damages represent a fair, reasonable and appropriate estimate thereof. Such liquidated damages are intended to represent estimated actual damages and are not intended as a penalty and Consultant agrees to pay such liquidated damages in the form of a reduction in invoice payment if it substantially fails to meet the performance standards without limiting CPA's right to terminate this Agreement for default as provided by Article 5 of this Agreement.

11. Sustainable Energy Incubator
Contractor will develop and launch a multi-year “Clean Power Incubator” in the Alliance service territory in partnership with the Local Government Commission (LGC). This program will build the engagement and capacity of Clean Power Alliance (CPA) board members, staff, local member agencies, CSR representatives, and other stakeholders to address emerging energy issues through educational forums and direct support. An Advisory Group comprised of Board members, member agency staff, CPA staff, Community Advisory Committee members, and other Southern California CCA and environmental stakeholders will advise Contractor and LGC on the topics, format, and overall strategic direction of the Clean Power Incubator.

The Incubator will, at a minimum, implement the following services:

a. Clean Power Seminars and Online Education Center: LGC will increase awareness of emerging energy issues, available tools, resources and best practices including:

   1. Quarterly in person seminars (with a recorded webinar option) with experts covering a range of energy and climate topics, to be determined in partnership
with Calpine and Clean Power Alliance staff and the Advisory Group. The first seminar will start in Q4, 2018. Topics could include:

- Role of Local Governments in Energy
- Energy Efficiency Industry Overview
- Equity in Energy
- Energy Resilience
- Grid Stability and Reliability
- Renewable Energy Credits
- Community Programs
- Customer Discount Programs
- Building and Transportation Electrification
- Aggregation of Services
- Advanced Energy Technologies
- Funding and Financing Opportunities
- CPUC public purpose charges and programs
- Title 24 Compliance
- Energy Markets and Risk Management

2. **Clean Power Online Education Center:** A dedicated website where CPA Board members, CPA staff, member agency staff and other stakeholders could access information on emerging energy issues, local projects, best practices, funding, and technical assistance resources available throughout the region. Recordings of quarterly forum presentations will also be made available on the website.

   - **Landing page will be developed by end of Q3 2018 and full website launched by the end of Q4 2018, including integration with the Alliance website**

   - **As part of their ongoing training and professional development, CSR agents will be required to view quarterly forum presentations online within one month of their posting**

b. **Clean Power Hotline and Support Service**

Further assistance will be offered for local jurisdictions interested in pursuing clean power programs or projects, including but not limited to those covered within the seminars and the online education center. LGC staff will provide individualized assistance to help local jurisdictions design energy initiatives and identify funding, tools and other resources. This service will be offered to every member agency, up to 2 times per member agency, over the course of the contract and will consist of the following:

1. **Opportunity Assessment:** LGC staff will work with local jurisdictions to assess community needs and project goals through an assessment form and conference call, help with project scoping, and make initial recommended next steps.
2. Customized Local Reports and Assistance: LGC will then develop a customized recommendations report matching funding sources, opportunity areas (from energy atlas, SCAG Green Region Map etc.), models, templates, available funding sources, and additional technical assistance (ClearPath, Beacon, ARCCA, CalTrans, CivicSpark, Statewide Energy Efficiency Collaborative, etc.) tailored to the local jurisdiction specific initiative identified in the Opportunity Assessment.
Exhibit B – Payments and Rates

Initiation Fee
Provider agrees to waive the one-time start-up fee of $250,000 included in the current Phase 2 contract with the Alliance.

Pricing
Contractor will bill the Alliance using a weighted cost per active service account formula, utilizing the following formula:

- $1.03  0-500,000 per active service account
- $0.90  Over 500,000 per active service account

Pricing will be updated monthly and will be calculated to the 3rd decimal place and be based on the number of active service accounts.

Effective August 1, 2018, or the effective date of this agreement, the Alliance’s current active service accounts will receive a discounted pricing of $0.965 per active meter per month. This pricing discount will be in effect until the start of power flow for the Alliance’s Phase 3 enrollment.

Should Contractor enter into contract to provide similar services to another CCA in SCE’s territory, for a per meter amount less than $1.03, Contractor shall notify Alliance and, within 3 months, reduce the specified 0-500,000 active service account price to a price equal to that paid by the other CCA.
Exhibit C – Joint Review

Joint Review

Parties recognize and agree that these services are offered in an evolving market and as such, the Alliance’s needs may change over time. Parties agree to meet quarterly to jointly evaluate, and by mutual agreement, adjust the alignment of services being provided in Exhibit A.
2018 Integrated Resource Plan
Overview

• IRP Status Update
• Trends Seen in the Modeling Results
  ○ Storage and GHG reduction have an impact on cost
  ○ In-state renewable premiums are high compared to other emissions-free resources
  ○ Customer program penetration rates matter
• Scenarios and Preliminary Results
• Key Takeaways
• Appendix – IRP Survey Results
IRP Status Update

● On August 1, CPA is required to file Integrated Resource Plan (IRP) with the CPUC showing CPA will meet its portion of statewide 2030 GHG emissions reductions goals

● CPA must submit a “Conforming Portfolio” using CPUC-directed assumptions

● CPA engaged E3 as its IRP modeling consultant; E3 developed CPUC’s IRP modeling tool

● Initial modeling results were shared with the Energy Committee on June 27. Final IRP will be presented to the Energy Committee for approval on July 25

● CPA received a robust response rate to the IRP survey - approx. 200 responses. Survey remains open

● Once the CPUC compliance IRP is submitted, CPA will continue to use the E3 modeling tool to develop internal procurement plans with CPA-developed price assumptions and more details on local/community programs
Price Trends – Storage and GHG Reductions

- The IRP model provides insight into a future with high renewables penetration and the need for integration of storage
  - By 2022, increased penetration of solar reflects depressed mid-day energy prices and increased evening peak prices; however, energy storage is not yet economic
  - By 2026, energy storage is economic and helps reduce mid-day solar curtailment
  - By 2030, energy prices increase, reflecting further GHG emissions constraints
In-State Renewable Premiums

- In-state renewables (PCC1) are projected to be more expensive than and other emissions-free resources:
  - 3x more costly than out-of-state renewables (PCC2)
  - 4x more costly than Carbon Free energy (large hydropower)
- CPA’s clean energy portfolio must balance cost, emissions reductions, and other procurement objectives

**Graph:**
- REC premium estimated using net costs for a new in-state solar resource with CPUC IRP RESOLVE model cost and revenue assumptions.
- Bucket 2 prices expected to be cheaper than Bucket 1 RECs by a constant factor of 67%.
- Clean power attribute expected to be 1/4th of the price of a Bucket 1 REC.
Customer Programs

- The Confirming Portfolio uses CEC customer adoption rate assumptions for energy efficiency, electric vehicle penetration, and distributed energy resources (DER)
- Community and local programs are excluded from the CPUC IRP analysis
- The IRP submission only requires Disadvantaged Communities to be addressed qualitatively

<table>
<thead>
<tr>
<th>Load Modifications as % of CPA Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPA Load (TWh)</td>
</tr>
<tr>
<td>NEM Solar</td>
</tr>
<tr>
<td>Energy Efficiency</td>
</tr>
<tr>
<td>Electric Vehicles</td>
</tr>
</tbody>
</table>
Scenarios

- E3 developed three Compliance Portfolios for the required 18-year modeling period, with simplified assumptions for renewable PPA procurement strategies:
  - Scenario 1 – Initial short-term contracting (2-year + 10-year + 6-year)
  - Scenario 2 – Phased-in PPA procurement (10-year + 8-year)
  - Scenario 3 – Immediate full long-term PPA commitments (18-year)

- Initial scenario results were presented to the Energy Committee on June 27 and have been updated since due to the following modeling updates:
  - Less solar + storage in early years – reduced storage sizing as % of capacity
  - More geothermal potential in later years due to increased solar curtailment – displaces natural gas at night
Preliminary Results

- Staff proposes to use Scenario 2, which balances overall cost, emissions reduction, and most mimics CPA’s recommended phased-in procurement strategy approach in the ERMP.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>NPV 2019 - 2036 ($MM)</th>
<th>2030 Emissions from IRP Model</th>
<th>2030 Emissions from CPUC GHG Calc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1 (2 + 10 + 6)</td>
<td>$8,766</td>
<td>1.97 MMT (1% lower than benchmark)</td>
<td>1.77 MMT (11% lower than benchmark)</td>
</tr>
<tr>
<td><strong>Scenario 2</strong> (10 + 8)</td>
<td><strong>$8,740</strong></td>
<td><strong>1.82 MMT</strong> (9% lower than benchmark)</td>
<td><strong>1.54 MMT</strong> (22% lower than benchmark)</td>
</tr>
<tr>
<td>Scenario 3 (18)</td>
<td>$8,271</td>
<td>1.97 MMT (1% lower than benchmark)</td>
<td>1.77 MMT (11% lower than benchmark)</td>
</tr>
</tbody>
</table>
Key Takeaways

- Modeling results show CPA’s Conforming Portfolio emissions will be in compliance.
- Modeling implications for future CPA procurement decision-making:
  - The large difference between in-state and out-of-state renewables will have a material impact on procurement costs.
  - Due to future high penetration of solar resources, energy storage is not far from being economical – this will impact long-term contract solicitations.
  - 65% of CPA’s RPS obligations need to be in long-term contracts by 2021; however, given uncertainty about future long-term energy pricing and resource costs, CPA should be cautious in making too many long-term commitments by phasing contracts in over time.
Key Takeaways (continued)

- Once the CPUC submission is complete, CPA plans to use E3’s model to run internal planning scenarios to inform future procurement strategies
  - Use internally developed, market-based price assumptions
  - Incorporate CPA-specific customer, community, and local program penetration assumptions based on Board-directed policies and community stakeholder feedback

- The Board should consider timing of its local programs, strategically planning in the context of the next CPUC IRP cycle (May 1, 2020)
APPENDIX
IRP Survey Respondents

- 194 respondents as of June 25, 2018 (the survey is still open: cleanpowerallianceadmin.org)
- Communities responding thus far (CPA member jurisdictions in **BOLD**):

<table>
<thead>
<tr>
<th><em>Agoura Hills</em></th>
<th>Los Angeles</th>
<th>Santa Barbara</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Alhambra</em></td>
<td><em>Malibu</em></td>
<td>Santa Clarita</td>
</tr>
<tr>
<td>Aliso Viejo</td>
<td>Newbury Park</td>
<td><em>Santa Monica</em></td>
</tr>
<tr>
<td><em>Arcadia</em></td>
<td><em>Ojai</em></td>
<td>Santa Rosa Valley</td>
</tr>
<tr>
<td><em>Calabasas</em></td>
<td><em>Oxnard</em></td>
<td><em>Thousand Oaks</em></td>
</tr>
<tr>
<td><em>Culver City</em></td>
<td>Palmdale</td>
<td>Torrance</td>
</tr>
<tr>
<td>Encinitas</td>
<td><em>Redondo Beach</em></td>
<td>Venice</td>
</tr>
<tr>
<td>Glendale</td>
<td><em>Rolling Hills Estates</em></td>
<td><em>Ventura</em></td>
</tr>
<tr>
<td><em>Hawthorne</em></td>
<td>Sacramento</td>
<td>Westlake Village</td>
</tr>
<tr>
<td>Hermosa Beach</td>
<td>San Diego</td>
<td></td>
</tr>
<tr>
<td>Irvine</td>
<td>San Francisco</td>
<td></td>
</tr>
</tbody>
</table>
Q: Please check which of the following describes you:
Q: Please select which of the following region-wide programs, funded by the Community Investment Fund, you would like to see CPA implement:
Q: Please rank the likelihood that you would personally take advantage of the following customer programs funded by the Community Investment Fund:

- Rates that incentivize demand reduction
- Rebate for energy efficiency in home/business
- Rebate for building electrification
- Rebate for electric vehicle charging infrastructure
- Shared community solar project
- Enhanced Net Energy Metering (NEM)

Answers ranked on a weighted average
Q: Describe other projects/programs for the Community Investment Fund:

- Programs to directly lower rates
- Electric / alternative fuel vehicle infrastructure
- Solar for schools
- Incentives for rooftop solar
- Public solar (e.g. parking lots)
- Partnership with solar leasing companies
- Community solar for low income
- Wind / solar farms

- Small scale wind turbines
- Customer energy saving incentives
- Battery storage
- Cool roofs
- Feed in tariffs
- Net metering
- Backup reliability during natural disasters
- Incentives for home energy improvements
Q: Please rank your preference for the following programs targeting disadvantaged communities:

- Transportation electrification
- Incentive for clean technology investments
- Job training and workforce development
- Rate design for vulnerable / disadvantaged communities

Answers ranked on a weighted average
Q: Please provide feedback on other ideas/programs:

- Free high-speed EV chargers for renters
- Incentivize rooftop solar for homes/businesses
- Sponsor home energy audits
- Microgrids
- Explore “solar roofing”
- Community solar for low income
- EV battery storage
- Virtual net energy metering
- Smart thermostats integrated into DR programs
- Integrate with Nest thermostats
- Water-related energy savings programs
- Life cycle assessment on all programs
- Increase community outreach and education
- Pursue CPUC public purpose funds
- Expand service territory
- GHG calculators for communities
- Partner with research institutions
Q: Please provide recommendations on local permitting/zoning changes:

- Reduce setback for solar panels
- Solar permit streamlining
- Require rooftop solar on high-cube facilities
- Require solar ready rooftops
- Partnership with HOA/POAs to remove restrictions for multi-unit
- Streamline permit approval process for energy efficiency projects
- Building permit fee waivers
- Adopt energy infrastructure as permitted use in zoning ordinance table
- Incentivize above code upgrades
- Reduce parking minimums
- Electrify municipal fleet
- Increase community education on renewables
- Implement 2500 ft buffer on oil fields
Q: Please provide your preferred way that CPA should continue to select ongoing community feedback for long-term resource planning.
Staff Report – Agenda Item 7

To: Clean Power Alliance (CPA) Board of Directors

From: Matt Langer, Chief Operating Officer
Natasha Keefer, Director of Power Planning & Procurement

Approved By: Ted Bardacke, Executive Director

Subject: Approval of the Energy Risk Management Policy (ERMP) and Resolution 18-009 Delegating Procurement Authority to the Executive Director pursuant to the ERMP

Date: July 12, 2018

RECOMMENDATIONS
Approve adoption of the CPA Energy Risk Management Policy (ERMP). Adopt Resolution 18-009 delegating procurement authority to the Executive Director, in consultation with the Risk Management Team, pursuant to the ERMP.

BACKGROUND
Over the course of the next two fiscal years, CPA expects to purchase over $1 billion of energy products to serve its growing customer base. In order to do this in a prudent and organized fashion, CPA needs to establish an ERMP that governs the framework by which the Board, staff, and consultants will conduct power procurement and related business activities. The ERMP is supplemented by an Energy Risk Hedging Strategy, which establishes the minimum and maximum procurement amounts CPA will undertake for various energy products. The FY18-19 Procurement Schedule describes the timing of the various procurement activities necessary to meet the needs of CPA’s customers while remaining in compliance with the ERMP.
The ERMP partially amends and supersedes the Executive Director’s existing procurement authority previously delegated by the Board (through Resolution 18-006, adopted on April 5, 2018) with a more robust procurement authority framework. The Board, by adopting the ERMP, sets limits on the Executive Director’s procurement authority related to transaction execution, counterparty credit, annual hedging targets, and approved transaction types. The Board may also grant the Executive Director procurement authority outside of these documents for particular program needs.

**ERMP – KEY ELEMENTS**

CPA exists to supply energy for the benefit of its customers. CPA recognizes that certain risks are incidental to normal power supply operations and hedging activities. The purpose of the ERMP is to provide CPA with a framework to identify, monitor, and manage risks for operating in wholesale energy markets.

In developing the ERMP, staff and its Portfolio Manager, The Energy Authority (TEA), reviewed a wide range of risk management policy styles adopted by other Community Choice Aggregators (CCAs) and Load Serving Entities (LSEs), in particular a very recent risk management policy adopted by East Bay Community Energy and the long-standing one in place at Northern California Power Agency (NCPA). CPA’s ERMP addresses high-level risk management principles, robust operational controls and conduct, risk measurement and reporting, and other risk management best practices.

**Risk Overview**

The ERMP describes a number of risks that must be managed to ensure the success of CPA. These include:

- Opt-out Risk
- Market Risk
- Regulatory and Legislative Risk
- Volumetric Risk
- Model Risk
- Operational Risk
• Counterparty Credit Risk
• Reputation Risk

Some of these risks are easily quantified, while others are qualitative in nature. By explicitly laying out these risks, staff and the Board can more effectively manage them.

Business Practices
The ERMP lays out a number of business practices that CPA should follow. These include adherence to all applicable laws and regulations, controls around adding new transaction types, establishing a system of record for transactions, and valuation and trading practices. Together, these practices provide a strong foundation for risk management across CPA’s various procurement and portfolio management activities.

Organizational Structure
Effective internal controls require an appropriate separation of duties between various functions. The ERMP outlines a separation of duties between the front, middle and back office functions. The front office, managed by the CPA Director of Power Planning & Procurement and staffed by TEA, is responsible for trading and other transactions. The middle office, overseen by the CPA Chief Operating Officer, is tasked with risk management. The back office, overseen by the CPA Director of Power Planning & Procurement and staffed by a separate team at TEA, manages payments and contract administration. As CPA adds staff, some of the back-office functions may be moved under the oversight of a Chief Financial Officer or Finance Manager.

Staff Risk Management Team
As reflected in the ERMP, it is common practice for CCA Executive Directors to seek counsel from a Risk Management Team (RMT) in implementing the Board’s risk management policies. The creation of an RMT, as described in the ERMP, ensures the Executive Director has an organized framework to assess risk prior to making procurement decisions.
Delegation of Authority
The ERMP outlines certain delegation of authority to CPA staff. The ERMP specifically delegates short-term transaction execution authority to the Executive Director within limits set by the Board. Specifically, in calendar year 2019, the ERMP would authorize the Executive Director to execute transactions with a cumulative value up to $25 million, provided that no individual transaction exceeds $5 million or one year in duration. The Executive Director, in consultation with the RMT, would be granted additional authority up to the limits specified in the ERMP such that CPA is able to fill open positions in a timely manner. Any transactions outside of the authority delegated to the Executive Director, in consultation with the RMT, would be subject to approval by the Board.

These limits are consistent with those adopted by other CCAs, including East Bay Community Energy which adopted its ERMP earlier this year. Many CCAs delegate full authority to their Executive Director to execute short-term transactions to meet their customers’ energy capacity needs. CPA’s ERMP is relatively conservative in this respect, since the Executive Director’s authority is limited and RMT consultation is required for larger transactions.

The ERMP is designed to incorporate CPA’s long-term compliance requirements. However, long-term procurement, defined as greater than 5-year contract terms, is subject to approval by the Board.

Through approval of Resolution 18-009, the Board delegates the authority as described in the ERMP.

Energy Risk Hedging Strategy
Appendix B of the ERMP is the Energy Risk Hedging Strategy (Hedging Strategy). The Hedging Strategy describes the strategy and framework that CPA will use to hedge the power supply requirements of its customers during the prompt (i.e. the year after the current) calendar year plus the following four calendar years. Specific focus is on procurement of the following products:
• Fixed Priced Energy
• Portfolio Content Category 1 (PCC1) Renewable Energy\(^1\)
• Portfolio Content Category 2 (PCC2) Renewable Energy\(^2\)
• Carbon Free Energy
• Resource Adequacy Capacity

**Hedge Schedule Ranges**

Annual hedging minimums and maximums are specified in the Hedging Strategy, but generally the Hedging Strategy calls for CPA to hedge a large portion of its exposure for the prompt (i.e. the month after the current) month and prompt year, with a declining range of hedge values in successive years. The ranges are provided to allow for flexibility in responding to market conditions while providing prudent limits on procurement authority. Any proposed deviations from the Hedging Strategy would be brought to the Board for consideration.

**Impact of Long-Term RPS Procurement on Hedging**

An important aspect of the Hedging Strategy is that it accounts for the long-term RPS procurement requirements contained within SB 350. Specifically, starting in 2021, 65% of the portion of RPS energy CPA procures for compliance purposes must come from contracts of ten years or greater in length. This mandate is reflected in the Hedging Strategy by increasing the minimum hedges for PCC1 procurement, beginning in 2021. Additionally, the Hedging Strategy accounts for the fact that long-term PCC1 contracts include energy deliveries, and sometimes Resource Adequacy, that act as a hedge and are accounted for as such in the hedge calculations. This is why the Fixed Price Energy hedge is set at a maximum of 40% in the fourth and fifth years of the hedge schedule.

\(^1\) Renewable energy that can either be directly delivered to the CAISO grid or delivered from outside of California without electricity from a substitute source.

\(^2\) Renewable energy that cannot be delivered to the CAISO grid without a substitute electricity source.
Future Changes to the ERMP
The various limits set by the ERMP are based on best practices but may need to change as CPA develops further operational experience and/or expands its service territory. The ERMP takes into account setting different limits for 2019, in which CPA is still commencing service to members, and for 2020 and beyond, when CPA is in steady-state operations. Transaction volumes will rapidly increase as CPA becomes fully-implemented and there may be a need for additional formal delegation to staff to ensure operational flexibility. The ERMP may also need to be amended based on new market or regulatory conditions. The Executive Director is responsible for keeping the Board abreast of changes impacting CPA’s risk profile or the applicability of the ERMP.

FY18-19 PROCUREMENT SCHEDULE – KEY ELEMENTS
The FY18-19 Procurement Schedule reflects procurement activities consistent with the limits established in the ERMP. The Procurement Schedule also discusses a long-term procurement solicitation, which staff intends to bring back to the Board for a more detailed discussion about goals and targets at the August 2018 meeting. A high-level summary of FY 18-19 procurement activities is as follows:

• July 2018
  o 2018 balance of year PCC2 solicitation (already in progress)
  o 2018-2021 RA solicitation

• August 2018
  o Short-term solicitation for PCC1, PCC2 and carbon free energy

• September 2018
  o Long-term solicitation for PCC1, PCC2 and carbon free energy (subject to further input from the Board at its August meeting)

• May 2019
  o Long-term solicitation for PCC1, PCC2 and carbon free energy (subject to further input from the Board prior to launch)

• June 2019
  o 2019-2022 RA solicitation

• Ongoing
Procurement to meet near-term open positions either bilaterally or through short-term solicitations

The FY18-19 Procurement Schedule is subject to change as market conditions dictate. Material changes to the approved schedule will be presented to the Board.

Attachments: CPA Energy Risk Management Policy
CPA FY18-19 Procurement Schedule
Resolution 18-009 Delegating Procurement Authority to the Executive Director pursuant to the ERMP
Energy Risk Management Policy

July 12, 2018
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Section 1: ENERGY RISK MANAGEMENT POLICY OVERVIEW

1.1 Background and Purpose

The Clean Power Alliance of Southern California (CPA) is a Joint Powers Authority (JPA) administering a Community Choice Aggregation (CCA) program in Southern California. CPA service territory currently includes 31 jurisdictions – 29 cities and the unincorporated parts of Los Angeles and Ventura Counties. CPA members presently include the following:

**Counties:**
- Los Angeles
- Ventura

**Cities:**
- Agoura Hills
- Alhambra
- Arcadia
- Beverly Hills
- Calabasas
- Camarillo
- Carson
- Claremont
- Culver City
- Downey
- Hawaiian Gardens
- Hawthorne
- Manhattan Beach
- Malibu
- Moorpark
- Ojai
- Oxnard
- Paramount
- Redondo Beach
- Rolling Hills Estates
- Santa Monica
- Sierra Madre
- Simi Valley
- South Pasadena
- Temple City
- Thousand Oaks
- Ventura
- West Hollywood
- Whittier

CCA, authorized in California under AB 117 and SB 790, allows local governments, including counties and cities, to purchase wholesale power supplies for resale to their residents and businesses as an alternative to electricity provided by an Investor Owned Utility (IOU). For CPA members, that IOU is Southern California Edison (SCE). Electricity procured by CPA to serve customers is delivered over SCE’s transmission and distribution system.

CPA exists to serve its local government members, and the residences and businesses located within their respective communities. CPA’s specific objectives are to provide its customers with a reliable supply of electricity, at competitive electric rates, sourced from a generation portfolio with lower greenhouse gas (GHG) emissions and higher renewable content than the incumbent utility, SCE. CPA also has goals to be a catalyst for local economic development and give its member agencies greater choice in the energy procured for their residents.

To meet these commitments, CPA must procure electric power supplies and operate in the wholesale energy market which exposes CPA, and ultimately the customers that it serves, to various risks. The intent of the Energy Risk Management Policy (ERMP) is to provide CPA, and by extension its customers, with a
framework, to identify, monitor and manage risks associated with procuring power supplies and operating in wholesale energy markets.

The Energy Risk Management Policy (ERMP), including its appendices, establishes CPA’s Energy Risk Program.

1.2 Scope

Unless otherwise explicitly stated in the ERMP or other policies approved by the CPA Board of Directors (Board), the ERMP applies to all power procurement and related business activities that may impact the risk profile of CPA. The ERMP documents the framework by which CPA staff and consultants will:

- Identify and quantify risk
- Develop and execute procurement strategies
- Develop controls and oversight
- Monitor, measure and report on the effectiveness of the ERMP

To ensure its successful operation, CPA has partnered with experienced consultants to provide power supply services. Specific to power procurement, CPA has partnered with an outside Portfolio Manager. The Portfolio Manager augments CPA’s internal Front (transacting), Middle (monitoring) and Back (settlement) Office related activities as discussed at Section 4.4. The Portfolio Manager will adhere to and be governed by the ERMP in providing these services to CPA. In addition, the Portfolio Manager’s activities executed on CPA’s behalf will be governed by its own risk management policies and procedures, and prudent industry practices.

1.3 Energy Risk Management Objective

The objective of the ERMP is to provide a framework for conducting procurement activities that maximize the probability of CPA meeting the goals listed in Section 2.1.

Pursuant to the ERMP, CPA will identify and measure the magnitude of the risks to which it is exposed and that contribute to the potential for not meeting identified goals.

1.4 ERMP Administration

The ERMP has been reviewed and approved by the Board. The Executive Director in consultation with the Risk Management Team (collectively, the “RMT”), as defined in Section 4.3, and the Board must approve amendments to the ERMP, except for appendices D, E, and F, which may be amended with approval of the Executive Director, in consultation with the RMT. The Executive Director must give notice to the Board of any amendment it makes to an appendix or a reference policy or procedure document.
Section 2: GOALS AND RISK EXPOSURES

2.1 ERMP Goals
To help ensure its long-term success, CPA has outlined the following goals:

- Build a portfolio of resources with lower GHG emissions and higher renewable content than SCE;
- Meet reliability requirements established by the State of California, and operate in a manner consistent with Prudent Utility Practice (defined as the practices generally accepted in the utility industry to ensure safe, reliable, compliant and expeditious operations);
- Maintain competitive retail rates with SCE after adjusting for exit fees (currently the Power Charge Indifference Adjustment or PCIA) and Franchise Fees paid by CPA customers;
- Emphasize during the initial years of operation the funding of financial reserves to meet the following long-term business objectives:
  - Stabilize rates by dampening year-to-year variability in power supply costs;
  - Establish an investment-grade credit rating to maximize the ability of CPA to engage in long-term acquisition or development of generation supplies consistent with ERMP goals; and
  - Provide a source of equity capital for investment in generation.

The goals outlined above are incorporated into the financial models and metrics that are used to monitor and measure risk and ERMP success. It is important to note that the goals listed above are not intended to be a comprehensive list of goals for CPA. Rather, the above reflect the overarching goals critical to CPA’s long-term financial success and that will guide the ERMP.

2.2 Risk Exposures
For the purpose of the ERMP, risk exposure is assessed on all transactions (energy, environmental attributes, and capacity) executed by the Portfolio Manager on behalf of CPA, or by CPA unilaterally, as well as the risk exposure of open positions and the impacts of these uncertainties on CPA’s load obligations.

CPA faces a range of risks during launch and ongoing operation including:

- Customer opt-out risk
- Market risk
- Regulatory risk
- Volumetric risk
- Model risk
- Operational risk
- Counterparty credit risk
- Reputation risk
2.2.1 Customer Opt-Out Risk

Customer opt-out risk may be realized by any condition or event that creates uncertainty within, or a diminution of, CPA’s customer base. Customer opt-out risk is manifested in two separate ways.

First, the ability of customers to return to bundled service from SCE creates uncertainty in CPA’s revenue stream, which is critical for funding ERMP goals and achieving the investment grade credit rating needed to successfully operate over the long-term.

Second, customer opt-out risk can potentially challenge the ability of CPA to prudently plan for, and cost-effectively implement, long-term resource commitments made on behalf of its member communities and the customers it serves.

CPA will manage customer opt-out risk through the following means:

- Implement a key accounts program and maintain strong relationships with the local community including elected leaders, stakeholders and all of the customers CPA serves;
- Actively monitor and advocate for the interests of CPA and its customers in SCE ratemaking proceedings, California Public Utilities Commission (CPUC) proceedings that potentially affect exit fees paid by CPA customers, as well as all regulatory and legislative proceedings where an adverse outcome may challenge the ability of CPA to deliver on customer commitments;
- Regularly monitor and report actual and projected financial results including probability-based and stress-tested financial results assuming a range of possible future outcomes with respect to:
  - Future SCE generation and PCIA rates;
  - Future market costs for energy, environmental attributes and capacity; and
  - Anticipated or threatened regulatory actions, when appropriate.
- Adopt, implement and update, as needed, a formal Energy Risk Hedging Strategy (Appendix B) describing the strategy that CPA will follow for engaging in procurement activities; and
- Evaluate expansion of CPA’s customers base through incorporation of other eligible communities into the CCA.

2.2.2 Market Risk

Market risk is the uncertainty of CPA’s financial performance due to variable commodity market prices (market price risk) and uncertain price relationships (basis risk). Variability in market prices creates uncertainty in CPA’s procurement costs, which has a direct impact on customer rates. CPA will manage market risk through:

- Regular measurement;
- Execution of approved procurement;
- Hedging and Congestion Revenue Right strategies; and
- Use of the Limit Structure set forth in the ERMP (see limits in Section 5.1.2 and Appendix B).
2.2.3 Regulatory and Legislative Risk

CPA and other CCAs are subject to an evolving legal and regulatory landscape. Additionally, CCAs are in direct competition with California’s IOUs in supplying retail electricity and the IOUs face the risk of stranded investments in generating assets and power purchase agreements procured in the past to serve now departing CCA loads. The manner in which such stranded costs of these legacy power supplies are allocated to departing CCA loads is subject to change based on various proceedings at the CPUC. The outcome of such proceedings will directly affect the cost of power for CPA’s customers, as well as impact the rate competitiveness of CPA.

In addition to exit fees, potential regulatory and/or legislative changes could affect the ability of CPA to exercise local control over the manner and means of procuring power supplies to serve its customers.

CPA will manage regulatory and legislative risks by:

- Regularly monitor and analyze legislative and regulatory proceedings impacting CCAs; and
- Actively participate in, and advocate for, the interests of CPA and its customers during regulatory and legislative proceedings.

2.2.4 Volumetric Risk

Volumetric risk reflects the potential uncertainty in the quantity of different power supply products (e.g., renewable energy, Carbon Free Energy and capacity) required to meet the needs of CPA customers. This uncertainty can lead to adverse financial outcomes, as well as create potential for CPA to fail to meet reliability or renewable energy compliance requirements established by the State of California and/or the CPA Board. Customer load is subject to fluctuation due to customer opt-outs or departures, temperature deviation from normal, unforeseen changes in the growth of behind the meter generation by CPA customers, unanticipated energy efficiency gains, new or improved technologies, as well as local, state and national economic conditions. CPA will manage volumetric risk by taking steps to:

- Implement robust short- and long-term load and generation supply forecast methodologies, including regular monitoring of forecast accuracy through time and refining such forecasts as additional information becomes available;
- Account for volumetric uncertainty in load and/or generation supply in in the Energy Risk Hedging Strategy;
- Monitor trends in customer onsite generation, economic shifts, and other factors that affect electricity customer consumption and composition; and
- Proactively engage with customers in developing distributed energy resources and behind-the-meter generation and energy efficiency programs so as to better forecast changes in load.

2.2.5 Model Risk

Model risk has potential for an inaccurate or incomplete representation of CPA’s actual or forecast financial performance due to deficiencies in models and/or information systems used to capture all transactions. CPA will manage model risk by:
• RMT ratification of models used to forecast financial performance, net positions and/or measure risk;
• Ongoing review of model outputs;
• A requirement to record all procurement transactions in a single trade capture system; and
• Ongoing update and improvement of models as additional information and expertise is acquired.

2.2.6 Operational Risk

Operational risk is the uncertainty of CPA’s financial performance due to weaknesses in the quality, scope, content, or execution of human resources, technical resources, and/or operating procedures within CPA. Operational risk can also be exacerbated by fraudulent actions by employees or third parties or inadequate or ineffective controls. CPA will manage operational risk through:

• The controls set forth in the ERMP;
• RMT oversight of procurement activity;
• Timely and effective reporting to the Executive Director in consultation with the RMT, and the Board;
• Implementation of a compliance training program for CPA staff;
• Ongoing CPA and Portfolio Manager staff education/training and participation in industry forums; and
• Annual audits to test compliance with the ERMP.

2.2.7 Counterparty Credit Risk

Counterparty credit risk is the potential that a counterparty will fail to perform or meet its obligations in accordance with terms agreed to under contract. CPA’s exposure to counterparty credit risk is controlled by the limit controls set forth in the Credit Policy described in Section 6.

2.2.8 Reputation Risk

Reputation risk is the potential that CPA’s reputation is harmed, causing customers to opt-out of CPA service and migrate back to SCE. Reputational risk is also the potential that energy market participants view CPA as an untrustworthy business partner, thus reducing the pool of potential counterparties and/or having counterparties apply a CPA-specific risk premium to pricing. Reputational risk is managed through:

• Implementation of and adherence to the ERMP;
• Engaging in ethical, transparent and honest business practices during trading activities; and
• Establishment and adherence to industry best practices including both those adopted by other CCAs, as well as those adopted by traditional municipal electric utilities.
Section 3: BUSINESS PRACTICES

3.1 General Conduct

It is the policy of CPA that all Board members, staff, and consultants (collectively referred to “CPA Representatives”), adhere to standards of integrity, ethics, conflicts of interest, compliance with statutory law and regulations and other applicable CPA standards of personal conduct while employed by or affiliated with CPA. Towards this end, all persons performing marketing and trading functions on behalf of CPA shall be subject to, read, understand, and abide by the provisions contained in the CPA Code of Marketing and Trading Practices (see Appendix F).

3.2 Trading for Personal Accounts

All CPA Representatives participating in any transaction or activity within the coverage of the ERMP are required to comply with the CPA Conflict of Interest Code adopted by the Fair Political Practices Commission and are obligated to give notice in writing to CPA of any legal, financial or personal interest such person has in any counterparty that seeks to do business with CPA, and to identify any real or potential conflict of interest such person has or may have with regard to any existing or potential contract or transaction with CPA, within 48-hours of becoming aware of the conflict of interest. Written notice should be submitted to the Executive Director substantially in the form of the letter notification shown in Appendix E.

Further, all persons are prohibited from personally participating in any transaction or similar activity that is within the coverage of the ERMP, or prohibited by California Government Code Section 1090, and that is directly or indirectly related to the trading of electricity and/or environmental attributes as a commodity.

If there is any doubt as to whether a prohibited condition exists, then it is the CPA Representative’s responsibility to discuss the possible prohibited condition with CPA legal counsel.

3.3 Adherence to Statutory Requirements

All CPA Representatives are required to comply with rules promulgated by the State of California, CPUC, California Energy Commission, Federal Energy Regulatory Commission (FERC), Commodity Futures Trading Commission (CFTC), and other regulatory agencies.

Congress, FERC and CFTC have enacted laws and regulations that prohibit, among other things, any action or course of conduct that actually or potentially operates as a fraud or deceit upon any person in connection with the purchase or sale of electric energy or transmission services. These laws also prohibit any person or entity from making any untrue statement of fact or omitting a material fact where the omission would make a statement misleading. Violation of these laws can lead to both civil and criminal actions against the individual involved, as well as CPA. The ERMP is intended to comply with these laws, regulations and rules and to avoid improper conduct on the part of anyone employed by CPA. These procedures may be modified from time to time based on legal requirements, auditor recommendations, and other considerations.
In the event of an investigation or inquiry by a regulatory agency, CPA will provide legal counsel to employees provided the subject of the investigation is within the employee’s course and scope of employment. However, CPA reserves the right to refrain from providing legal counsel if it reasonably appears to the CPA General Counsel and Executive Director that the employee was either not acting in good faith or was acting outside the course and scope of his or her employment.

CPA employees are prohibited from working for another power supplier, CCA or utility while they are simultaneously employed by CPA unless an exception is authorized by the Board.

3.4 Transaction Type

Authorized transaction types are listed in Appendix C. Each approved transaction type that is listed is included to either meet a mandatory procurement obligation required of all Load Serving Entities (LSE) serving retail loads in California; and/or alternatively, the approved product is needed for CPA to meet an identified ERMP goal. Specifically:

- Resource Adequacy Capacity is a mandatory procurement obligation that ensures adequate generation supplies are available on a planning basis to reliably meet the requirements of electric consumers in the California Independent System Operator (CAISO) balance authority;
- Portfolio Content Category 1 (PCC1) and Portfolio Content Category 2 (PCC2) renewable energy must be procured by CPA to comply with the state of California’s Renewable Portfolio Standard, as required by SB 350. CPA has made a voluntary decision to purchase incremental quantities of PCC1 and/or PCC2 renewable energy to exceed the renewable portfolio content of the incumbent utility;
- Carbon Free Energy is a voluntary purchase of specified source energy from large hydroelectric generation than enables CPA to provide its customers with electricity sourced from generators producing low GHG emissions so that member agencies can meet their climate action plans and CPA can contribute to combatting climate change;
- Physical Energy products are a voluntary purchase made by CPA to provide cost certainty and rate stability for customers; and
- The CAISO is the largest grid operator in the state of California and CPA members lie within its balancing area. CAISO operates Day-Ahead, Fifteen Minute and Real-Time Markets and other ancillary markets necessary for reliable operation of the grid. CPA is required to participate in CAISO markets. Acquisition of the CAISO products listed in Appendix C either result from mandatory participation in CAISO’s markets, or are useful for managing short-term market risks associated with CAISO’s markets.

The strategy for using and procuring the approved products is described in further detail in the Energy Risk Hedging Strategy.

3.4.1 Exceptions

New transaction types may provide CPA with additional flexibility and opportunity but may also introduce new risks. Therefore, transaction types not included in Appendix C must be approved by the RMT and the Board prior to execution using the process defined below.
When seeking approval for a new transaction type, a New Transaction Type Approval Form, as shown in Appendix D, is to be drafted describing all significant elements of the proposed transaction. The proposal write-up will, at a minimum, include:

- A description of the benefit to CPA, including the purpose, function and expected impact on costs (i.e.; decrease costs, manage volatility, control variances, etc.);
- Identification of the in-house and/or external expertise that will manage and support the new or non-standard transaction type;
- Assessment of the transaction’s risks, including any material legal, tax or regulatory issues;
- How the exposures to the risks above will be managed by the Limit Structure;
- Proposed valuation methodology (including pricing model, where appropriate);
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new transaction type;
- Proposed accounting methodology; and
- Proposed work flows/methodology (including systems).

It is the responsibility of the Middle Office to ensure that relevant departments have reviewed the proposed transaction type and that material issues are resolved prior to submittal to the Board for approval. If the transaction type is approved, Appendix C to the ERMP will be updated to reflect its addition.

3.5 Counterparty Suitability

All counterparties with whom CPA transacts must be reviewed for creditworthiness and assigned a Credit Limit as described in Section 6.

3.6 System of Record

Since information systems play a vital role in CPA’s trading abilities, CPA shall ensure that the information systems and technology used to store all transaction information are maintained and secure. At the outset of CCA operations, CPA’s transactions will be stored in the Portfolio Manager’s enterprise trading and risk management system.

The Portfolio Manager has assigned a Database Administrator (DBA) that is charged with database security and maintenance for the transaction database. For data security, transaction data stored in the system of record will be replicated daily to ensure data redundancy and backed-up to an offsite location.

All transaction records will be maintained in US dollars and will be separately recorded and categorized by type of transaction. This system of record shall be auditable.

3.7 Transaction Valuation

Transaction valuation and mark-to-market (valuing of an asset based on its current market price) reporting of positions shall be based on independent, publicly available, market-observed prices (replacement costs) whenever possible. In the event there are not market-observed prices, the value of CPA’s
transactions shall follow a notional value calculation (the total nominal dollar value of a transaction over its full duration) or other methodology approved as part of the new product approval process.

All transactions and open positions will be valued daily.

3.8 Stress Testing

In addition to limiting and measuring risk using the methods described herein, stress testing shall also be used to examine performance of the CPA portfolio under potential adverse conditions. Stress testing is used to understand the potential variability in CPA’s projected procurement costs and resulting impacts on customer rates and CPA’s competitive positioning associated with low probability events. The Middle Office will perform stress-testing of the portfolio on a monthly basis and distribute results to the RMT.

3.9 Trading Practices

As previously noted, CPA exists to serve its customers. The scope of its wholesale market operations is limited to that which is required to meet the power supply obligations of its customers consistent with ERMP goals. It is the expressed intent of the ERMP to prohibit wholesale market activities that result in procurement of any power supply product beyond that which is required to meet an identifiable need of CPA customers. The purchase or sale of any power supply product beyond what is reasonably anticipated to be needed to meet the requirements of CPA customers is a speculative transaction and is prohibited.

In the course of developing operating plans and conducting procurement activities, CPA recognizes that staff must employ reasonable expertise and judgment, and it is not the intent of the ERMP to restrain the legitimate application of analysis and market expertise in executing procurement strategies intended to minimize costs or maximize the value of generation within the constraints of the ERMP. If any questions arise as to whether a proposed transaction(s) constitutes speculation, the RMT shall review the transaction(s) to determine whether the transaction(s) would constitute speculation and shall document its findings. As used here, “speculation” means the act of trading an asset with the expectation of realizing financial gain resulting from a change in price in the asset being transacted.

Staff and consultants engaged in procurement activities will also observe the following practices:

- Persons shall conduct business in good faith and in accordance with all applicable laws, regulations, tariffs and rules;
- Persons shall not arrange or execute wash trades (i.e. offsetting transactions where no financial risk is taken);
- Persons shall not disseminate known false or misleading information or engage in transactions to exploit such information;
- Persons shall not game or otherwise interfere with the operation of a well-functioning competitive market;
- Persons shall not collude with other market participants; and
- Persons shall immediately report any known or suspected violation of the ERMP.
3.10 Training

CPA recognizes the importance of ongoing education to manage risk and to contribute to ERMP success. Towards this end, CPA will observe the following practices:

- All employees executing procurement transactions on behalf of CPA must receive appropriate training in the attributes of each product type that they transact, how the product furthers the portfolio objectives of CPA, and how the risk profile of CPA is impacted by procurement of each product;
- All employees executing procurement activities shall complete energy market compliance training once per calendar year and acknowledge receipt of said training in writing;
- New employees must complete energy market compliance training within 30 days of hire date.

The Chief Operating Officer shall maintain records of each employee’s training status.
Section 4: ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

4.1 Board of Directors Responsibilities

The Board has the responsibility to review and approve the ERMP. With this approval, the Board acknowledges responsibility for understanding the risks CPA is exposed to through its CCA activity and how the policies outlined in the ERMP help CPA manage the associated risks. The Board is also responsible to:

- Provide strategic direction to CPA;
- Consider transactions beyond authorities delegated to the Executive Director in consultation with the RMT;
- Consider changes to the Energy Risk Hedging Strategy (see Appendix B); and
- Consider new transaction types not currently listed in the ERMP (see Appendix C).

4.2 Risk Management Team

The RMT is responsible for implementing, maintaining and overseeing compliance with the ERMP and for maintaining the Energy Risk Hedging Strategy. At a minimum, the members of the RMT shall include the Executive Director and at least two additional CPA staff members with experience in energy markets selected at the sole discretion of the Executive Director.

The primary goal of the RMT is to ensure that the procurement activities of CPA are executed within the guidelines of the ERMP and are consistent with Board directives. The RMT shall consider and propose changes to the ERMP when conditions dictate.

Pursuant to direction and delegation from the Board of Directors and the limitations specified by this ERMP, the Executive Director, in consultation with the RMT, maintains authority over procurement activities for CPA. This authority includes, but is not limited to, taking any or all actions necessary to ensure compliance with the ERMP.

The RMT authorities and responsibilities may include, but are not limited to:

- Maintain the Energy Risk Hedging Strategy and ensure that all procurement strategies and related protocols are consistent with the ERMP;
- Review initial financial and risk models and subsequent changes;
- Establish counterparty Credit Limits;
- Review initial counterparty credit review models and methods for setting and monitoring Credit Limits and subsequent changes;
- Review reports as described in the ERMP;
- Meet to review actual and projected financial results and potential risks;
- Keep apprised of any change in the environment in which CPA operates that has a material effect upon the risk profile of CPA;
- Review summaries of limit violations and recommend corrective actions, if necessary; and
• Review the effectiveness of CPA’s energy risk measurement methods.

4.3 Segregation of Duties

CPA shall work to maintain a segregation of duties, also referred to as "separation of function," to help manage and control the risks outlined in the ERMP. Individuals responsible for legally binding CPA to a transaction will not also perform confirmation or settlement functions without supplemental, transparent, and auditable controls. CPA also will leverage the organizational structure of the Portfolio Manager’s Front, Middle and Back offices to help maintain a segregation of duties. The Front, Middle and Back Office responsibilities for CPA are described below.

4.4.1 Front Office

The Front Office is headed by the Director of Power Planning & Procurement. The Front Office has overall responsibility for (1) managing all activities related to procuring and delivering resources needed to serve CPA load, (2) analyzing fundamentals affecting load and supply factors that determine CPA’s net position, and (3) transacting within the limits of the ERMP and associated policies to balance loads and resources and maximize the value of CPA assets through the exercise of approved optimization strategies. Other duties associated with these responsibilities include:

• Assist in the development and analysis of risk management hedging products and strategies, and bring recommendations to the RMT;
• Prepare a monthly operating plan for the prompt month (the month following the current month) that gives direction to the Day-Ahead and Real-Time Market trading and scheduling staff regarding the bidding and scheduling of CPA’s resource portfolio in the CAISO market;
• Develop, price and negotiate hedging products;
• Forecast Day-Ahead load and monitor/forecast same-day loads;
• Keep accurate records of all executed transactions;
• Manage and facilitate the transaction execution process for long-term power purchase agreements through coordination of the following activities:
  o Notify Front Office personnel of any anticipated unique physical delivery or scheduling issues;
  o Work with Middle Office personnel and legal counsel to establish a contract, evaluate counterparty creditworthiness and secure additional credit from the counterparty, if necessary;
  o Work with Middle Office, as needed, to perform an analysis of the potential transaction to evaluate the effect on CPA’s portfolio risks;
  o Notify Back Office of terms and conditions affecting settlement to ensure that the necessary settlement procedures are in place.

4.4.2 Middle Office

The Middle Office functions will be the responsibility of the Chief Operating Officer. The Middle Office provides market and credit risk oversight, has responsibility for development of risk management policies and procedures, monitors compliance with the same, and keeps management and the Board informed on
risk management issues. Through its partnership with the Portfolio Manager, CPA will maintain its Middle Office functions independent from the front and back office functions.

Middle Office responsibilities include the following:

- Create and ensure compliance with policies outlining standard procedures for conducting business;
- Estimate and publish daily forward monthly power and natural gas price curves for a minimum of the balance of the current year through the next calendar year;
- Calculate and maintain the net forward positions (a forecast of the anticipated electric demands compared to existing resource commitments) of CPA for all power products (energy, renewable energy, Carbon Free Energy and Resource Adequacy Capacity);
- Ensure that CPA adheres to all risk policies and procedures;
- Implement and enforce credit policies and limits;
- Handle confirmation of all transactions and reconcile differences with the trading counterparties;
- Ensure all trades have been entered into the appropriate system of record;
- Ensure that all CAISO Day-Ahead, Fifteen Minute and Real-Time Market delivery volumes and prices are entered into a transaction database;
- Review models and methodologies and recommend RMT approval, as needed;
- Maintain a record of all transactions in a single trade capture system; and
- Mark unrealized and realized gain and losses associated with CPA hedge activity.

4.4.3 Back Office

The Back Office functions will be the responsibility of the Director of Power Planning & Procurement or other senior financial staff as CPA grows. It provides support with a wide range of administrative activities necessary to execute and settle transactions and to support the risk control efforts (e.g. transaction entry and/or checking, data collection, billing, etc.) consistent with the ERMP. Through its partnership with the Portfolio Manager, CPA will maintain its Back Office functions independent from the Front and Middle Office functions.

Back Office responsibilities include the following:

- Ensure reliability of financial statements;
- Establish tax policies that comply with tax rules and make appropriate tax elections, in collaboration with accounting professionals and/or outside auditing firms;
- Maintaining the overall financial security of transactions undertaken on behalf of CPA;
- Carrying out month-end checkout of all transactions each month; and
- Invoicing and resolving disputes with counterparties.
Section 5: DELEGATION OF AUTHORITY

5.1 Risk Limits

The following limits apply to all CPA procurement activities. These limits are Board-approved and define the limits that CPA must operate within. The metrics and management of risk within these limits is further described in the Energy Risk Hedging Strategy.

5.1.2 Delegation Authority

Through its approval of the ERMP, the Board has delegated operations and oversight to the Executive Director, in consultation with the RMT, as outlined through the ERMP. Specifically, to facilitate daily operations of the CCA, the Board has delegated transaction execution authorities shown in the table below.

<table>
<thead>
<tr>
<th>Position</th>
<th>Term Limit*</th>
<th>Counterparty Limit</th>
<th>Notional Value Limit (per transaction)</th>
<th>Notional Value Limit (annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director in consultation with the RMT</td>
<td>5 years</td>
<td>Pursuant to Credit Policy</td>
<td>Board-approved limits set in the Energy Risk Hedging Strategy</td>
<td></td>
</tr>
<tr>
<td>Executive Director¹</td>
<td>1 year</td>
<td>Pursuant to Credit Policy</td>
<td>$5m in 2019; $10m in 2020 and beyond</td>
<td>$25m in 2019; $80m in 2020 and beyond²</td>
</tr>
</tbody>
</table>

*Term is the total duration of the contract, defined as the number of days between the beginning flow date and the ending flow date, inclusive.

For a transaction to be valid, it must conform to each of the four limits specified in the above table.

These limits will be applied to wholesale power procurement outside of transactions directly executed with the CAISO. These limits provide CPA the needed authority to manage risks as they arise. Transactions falling outside the delegations above require Board approval prior to execution.

Transactions with CAISO and CAISO administrative fees are excluded from this table. CAISO transactions are limited to those required for scheduling contracts in the CAISO market and for balancing CPA’s load and resources.

¹ For operational flexibility, the Executive Director will have the authority to delegate 30% of procurement authority to either the Chief Operating Officer or Director of Power Planning & Procurement, as needed.

² Annual limits intended to reflect approximately 10% of annual power supply costs.
Long-term procurement, defined as contract terms greater than 5 years, will be conducted in accordance with Board-approved procurement plans. Long-term bilateral or solicitation awards will be subject to Board approval.  

All procurement executed under the delegation above, must align with CPA’s underlying risk exposure (i.e., load requirements, locational and temporal) that is being hedged consistent with the Energy Risk Hedging Strategy.

5.1.3 Volume Limits

Transactions should not be executed that exceed CPA’s load (energy and capacity), renewable or Carbon Free Energy requirements. If there is an adjustment to CPA requirements resulting in the volume of existing transactions exceeding 100% of CPA’s requirements, the RMT will determine the offsetting strategy deployed in sufficient proportion to mitigate the encroachment.

An exception to the above limits may be made by the RMT if executing a transaction exceeding load will minimize costs or is necessary to ensure compliance. For example, procuring RA for the entire year could cause CPA to hold excess RA in certain months. Such a transaction would be acceptable if a lower cost alternative transaction or set of transactions that more closely matches monthly needs is unavailable.

5.1.4 Locational Limits

The delivery location for all transactions must support the requirements of CPA’s source or sink locations.

5.1.5 CAISO Submission Limits

CPA shall bid at least 80% of its forecast load requirements in the Day-Ahead Market and bids shall not exceed 100% of forecast load requirements.

CPA shall offer no more than 100% of the forecasted generation capability in the Day-Ahead Market.

CPA shall follow CAISO protocols for all activity within CAISO.

5.2 Monitoring, Reporting and Instances of Exceeding Risk Limits

The Middle Office is responsible for monitoring and reporting compliance with all limits within the ERMP. If a limit or control is violated, the Middle Office will send notification to the trader responsible for the violation and the RMT. The RMT will discuss the cause and potential remediation of the exceedance to determine next steps for curing the exceedance.

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3 The RMT will oversee the solicitation process for long-term procurement. Awards will be presented without market sensitive information (i.e. pricing or other sensitive commercial terms) for Board consideration in accordance with applicable law.
Section 6: CREDIT POLICY AND COUNTERPARTY SUITABILITY

Prior to execution of any transaction, the Front Office will verify that CPA has executed a master agreement with the counterparty, that the counterparty has been evaluated for creditworthiness, and that an approved Credit Limit has been established. No transactions may be executed without first ensuring the transaction falls within the unutilized Credit Limit for the counterparty.

6.1 Master Enabling Agreements and Confirmations

Transactions are governed by master agreements, the forms of which must be prepared by CPA General Counsel and approved by the Board. No transactions may be executed without a fully executed master agreement being on file. Written confirmations of each transaction will contain standard commercial terms and provisions. Material modifications or additions to standard commercial terms in confirmations require approval by legal counsel.

It is CPA’s policy to confirm all transactions in writing. All confirmations received from counterparties will be matched against trades in the system of record. Any discrepancies between a confirmation and the system of record may be handled by the Front Office representative that executed the transaction, or if necessary, a Middle Office representative will seek resolution with the counterparty. All confirmations will be kept on file.

6.1.1 Exceptions

It is standard industry practice to not provide written confirmation of certain short-term transactions with a term of one day or less. Additionally, CPA may agree with certain counterparties to alternative methods for confirming certain transactions. Transactions executed in a recorded telephone conversation or recorded instant message in which the offer and acceptance shall constitute the agreement of the parties must be confirmed in writing after-the-fact, with notice being provided to the counterparty within 72 hours.

6.2 Counterparty Suitability

All counterparties shall be evaluated for creditworthiness by the Middle Office prior to execution of any transaction and no less than annually thereafter. Additionally, counterparties shall be reviewed if a change has occurred, or is perceived to have occurred, in market conditions or in a company’s management or financial condition. This evaluation, including any recommended increase or decrease to a Credit Limit, shall be documented in writing and include all information supporting such evaluation in a credit file for the counterparty.

A Credit Limit for a counterparty will not be recommended or approved without first confirming the counterparty’s senior unsecured or corporate credit rating from one of the nationally recognized rating agencies (S&P, Moody’s, and/or Fitch) and/or performing a credit review or analysis of the counterparty’s or guarantor’s financial statements. The credit analysis shall include, at a minimum, current audited financial statements or other supplementary data that indicates financial strength commensurate with an investment grade rating and consider factors such as:
Liquidity
Leverage (debt)
Profitability
Net worth

Trade and banking references, and any other pertinent information, may also be used in the review process.

Once a counterparty has been determined to be creditworthy, the Middle Office will propose a Credit Limit for approval by the Executive Director, in consultation with the RMT. Although a counterparty may qualify for a certain maximum Credit Limit, the types of products to be transacted, as well anticipated transaction volumes, terms and other business factors may prompt CPA to select a lower limit that is considered more appropriate.

Counterparties that do not qualify for an unsecured Credit Limit must post an acceptable form of credit support or prepayment prior to the execution of any transaction. A counterparty may choose to provide a guarantee from a third party, provided the third party satisfies the criteria for a Credit Limit as outlined herein.

6.3 Maximum Credit Limit

Each new counterparty Credit Limit or increase to an existing limit will be reviewed by the RMT. The maximum amount of any Credit Limit extended to a counterparty shall not exceed $40,000,000 \(^4\) unless approved in writing by the Board.

6.4 Credit Review Exceptions

Counterparties not subject to the above credit review criteria include those associated with Day-Ahead and current day purchases where risks associated with market movements is minimal.

6.5 Credit Limit and Monitoring

The Middle Office will monitor the current credit exposure for each counterparty with whom CPA transacts and include such information in the Current Counterparty Credit Risk Report. This report will be submitted to the RMT for review pursuant to the reporting requirements outlined in Section 7.

Current credit exposure is a measure of the known exposures and composed of two primary exposures – (1) realized exposure, and (2) forward exposure. Realized exposure, a payable or receivable amount owed between counterparties, is a measurement of cash flow for billed and unbilled transactions. Forward exposure is a measure of current unrealized exposure and includes the measure of a counterparty’s incentive to fulfill contractual obligations. Forward exposure measures the risk associated with having a payment default or the need to replace a transaction in the event of delivery default.

\(^4\) Approximately 5% of annual power supply costs in 2020.
Section 7: POSITION TRACKING AND MANAGEMENT REPORTING

A vital element in the ERMP is the regular identification, measurement and communication of risk. To effectively communicate risk, all risk management activities must be monitored on a frequent basis using risk measurement methodologies that quantify the risks associated with CPA’s procurement-related business activities and performance relative to identified goals.

Minimum reporting requirements are shown below. The reports outlined below will be presented to the RMT. Reports will be generated weekly unless otherwise noted.

- **Financial Model Forecast**
  Latest projected financial performance, marked to current market prices, and shown relative to CPA’s financial goals.

- **Net Position Report**
  Latest forward net position report, by product type (energy, PCC1, PCC2, Carbon Free Energy and RA capacity) for the current and prompt year.

- **Counterparty Credit Exposure**
  Current counterparty credit exposure compared against limits approved by CPA, as well as the limit assigned to CPA by the counterparty.

- **Monthly Risk Analysis**
  Cash Flow at Risk and stress testing of financial forecasts relative to financial goals. Additional discussion of the specific Cash Flow at Risk metric that CPA will use, and its application, is provided in the Energy Risk Hedging Strategy.

- **Quarterly Board Report**
  Update on activities, projected financial performance, and general market outlook to be presented quarterly at Board meetings, communicated in a way to ensure CPA confidentiality and market sensitive data is not released.
Section 8: ERMP REVISION PROCESS

The ERMP will evolve over time as market and business factors change. At least on an annual basis, the Executive Director, in consultation with the RMT, will review the ERMP and associated procedures to determine if they should be amended, supplemented, or updated to account for changing business conditions and/or regulatory requirements. If an amendment is warranted, the ERMP amendment will be submitted to the Board for approval. Changes to ERMP appendices may be approved and implemented by the Executive Director, in consultation with the RMT, with the exception of new transaction types and changes to the Energy Risk Hedging Strategy, which also require Board approval.

8.1 Acknowledgement of ERMP

All CPA Representatives participating in any activity or transaction within the scope of the ERMP shall sign, on an annual basis or upon any revision, a statement approved by the Executive Director, in consultation RMT, that such CPA Representative has:

- Read the ERMP;
- Understands the terms and agreements of said ERMP;
- Will comply with said ERMP;
- If an employee, understands that any violation of said ERMP shall subject the employee to discipline up to and including termination of employment;
- If a consultant, understands that any violation of said ERMP may be grounds for consultant contract termination; and
- If a Board member, understands that any violation of said ERMP shall subject the Board member to action by the Board.

8.2 ERMP Interpretations

Questions about the interpretation of any matters of the ERMP should be referred to the Executive Director.

All legal matters stemming from the ERMP will be referred to CPA counsel.
Appendix A: DEFINITIONS

**Back Office**: That part of a trading organization which handles transaction accounting, confirmations, management reporting, and working capital management.

**CAISO**: California Independent System Operator. CAISO operates a California bulk power transmission grid, administers the State’s wholesale electricity markets, and provides reliability planning and generation dispatch.

**Carbon Free Energy**: Energy that is generated from a specific zero carbon emitting generating asset. It is commonly used to note energy from large hydroelectric generation that while non-carbon emitting, is not an RPS-eligible generation source. Sometimes referred to as specified source energy.

**CCA**: Community Choice Aggregator. CCAs allow local government agencies such as cities and/or counties to purchase and/or develop generation supplies on behalf of their residents, businesses and municipal accounts.

**CFTC**: Commodity Futures Trading Commission. The CFTC is a U.S. federal agency that is responsible for regulating commodity futures and swap markets. Its goals include the promotion of competitive and efficient futures markets and the protection of investors and market participants against manipulation, abusive trade practices and fraud.

**Congestion Revenue Right**: A point-to-point financial instrument in the Day-Ahead Energy Market that entitles the holder to receive compensation for or requires the holder to pay certain congestion related transmission charges that arise when the transmission system is congested.

**Credit Limit**: The maximum amount of financial exposure one party is willing to extend to another.

**Day-Ahead Market**: The short-term forward market conducted by an Organized Market prior to the operating day. It is intended to efficiently allocate transmission capacity and facilitate purchases and sales of energy and scheduling of bilateral transactions.

**FERC**: Federal Energy Regulatory Commission. FERC is a federal agency that regulates the interstate transmission of electricity, natural gas and oil. FERC also reviews proposals to build liquefied natural gas terminals, interstate natural gas pipelines, as well as licenses hydroelectric generation projects.

**Front Office**: That part of a trading organization which solicits customer business, services existing customers, executes trades and ensures the physical delivery of commodities.

**Franchise Fee**: A franchise fee is a percentage of gross receipts that an IOU pays cities and counties for the right to use public streets to provide gas and electric service. The franchise fee surcharge is a percentage of the transmission (transportation) and generation costs to customers choosing to buy their energy from third parties. IOUs collect the surcharges and pass them through to cities and counties.

**IOU**: An Investor Owned Utility (IOU) is a business organization providing electrical and/or natural gas services to both retail and wholesale consumers and is managed as a private enterprise.

**Limit Structure**: A set of constraints that are intended to limit procurement activities.

**Middle Office**: That part of a trading organization that measures and reports on market risks, develops risk management policies and monitors compliance with those policies, manages contract administration and credit, and keeps management and the Board informed on risk management issues.
PCIA: Power Cost Indifference Adjustment or successor. The PCIA is intended to compensate IOUs for their stranded costs when a bundled customer departs and begins taking generation services from a CCA.

Portfolio Content Category 1 (PCC1) Renewable Energy: Energy and bundled Renewable Energy Credits that is simultaneously procured from an RPS-eligible facility that is directly interconnected to the distribution or transmission grid within a California balancing authority area (CBA); or that is not directly interconnected to a CBA but is delivered to a CBA without substituting electricity from another source.

Portfolio Content Category 2 (PCC2) Renewable Energy: Energy and bundled Renewable Energy Credits that is simultaneously purchased from an RPS-eligible facility, but the energy is firmed and shaped with substitute electricity scheduled into a CBA within the same calendar year as the renewable energy is generated.

Real-Time Market: The real-time market is a spot market in which LSEs can buy power to meet the last few increments of demand not covered in their day ahead schedules, up to 75 minutes before the start of the trading hour.

Resource Adequacy Capacity: A capacity product whereby a Seller commits to a must offer obligation of its generator in the CAISO market and on behalf of a specified Load Serving Entity.

Settlement: Settlement is the process by which counterparties agree on the dollar value and quantity of a commodity exchanged between them during a particular time interval.

Stress testing: Stress testing is the process of simulating different financial outcomes to assess potential impacts on projected financial results. Stress testing typically evaluates the effect of negative events to help inform what actions may be taken to lessen the negative consequences should such an event occur.
Appendix B: ENERGY RISK HEDGING STRATEGY

1.1 Introduction

CPA is routinely exposed to commodity price risk and volume variability risk in the normal conduct of serving the power supply requirements of its customers.

This Energy Risk Hedging Strategy (ERHS) describes the strategy and framework that CPA will use to hedge the power supply requirements of its customers during the prompt calendar year (the calendar year after the current calendar year) plus the following four calendar years. Specific focus is on procurement of the following market-based products:

- Fixed Priced Energy
- Portfolio Content Category 1 Renewable Energy
- Portfolio Content Category 2 Renewable Energy
- Carbon Free Energy
- Resource Adequacy Capacity

In addition to market-based transactions entered into pursuant to this ERHS, CPA will also enter into longer-term power purchase agreements (PPAs) pursuant to statutory requirements (e.g., SB 350 mandate to, by 2021, procure a minimum of 65 percent of RPS requirements under a 10-year or longer power purchase agreement), as well as voluntary long-term resource acquisition decisions made independently by CPA pursuant to its Integrated Resource Plan or other approved Board-approved strategies. Long-term Power Purchase Agreements (PPAs) will count as hedges as described later in this ERHS.

2.1 Governance

This ERHS shall be updated, as necessary, from time to time and governed by the Energy Risk Management Policy (EMRP) approved by the CPA Board of Directors.

3.1 Hedging Program Goals

The overall goal of the ERHS is to identify exposure to commodity prices, quantify the financial impact variability in commodity prices, load requirements and generation output may have on the ability of CPA to meet its financial program goals, and manage the associated risk.

The primary goals that guide this ERHS are:

- Acquire a portfolio of resources with lower greenhouse gas emissions and higher renewable content than SCE;

- Meet reliability requirements established by the state of California, and operate in a manner consistent with prudent utility practice;
- Maintain competitive retail rates with SCE after adjusting for exit fees (currently the Power Charge Indifference Adjustment or PCIA) and Franchise Fees paid by CPA customers;
- Build financial reserves to ensure the CPA’s long-term financial objectives are achieved.

All hedging activities will be conducted to achieve results consistent with the above goals and to meet the power supply requirements of CPA’s customers. Any transaction that cannot be directly linked to a requirement of serving CPA’s customers, or that serves to reduce risk as measured by the Power Supply Cost at Risk (PSCaR) described below is prohibited.

4.1 Hedging Targets and Strategies

4.1.1 Fixed Price Energy

Fixed Price Energy purchases provide for suppliers to deliver energy – for which CPA will receive energy market revenues – to CPA at a fixed price. They are used to manage the electricity commodity price risk that the CPA faces as a Load Serving Entity. Specific to CPA’s customers, Fixed Price Energy hedges are used to provide cost certainty and rate stability.

In the near-term, CPA will predominantly employ Fixed Price Block Energy contracts, which provide for suppliers to deliver a predetermined volume of energy at a constant delivery rate. As CPA enters into long-term, fixed price contracts for renewable and/or carbon-free energy, these will likewise hedge CPA’s market risk and, subsequently, reduce the required volume of Fixed Price Block Energy purchases.

When assessing its requirements for Fixed Price Energy, the CPA will forecast the monthly energy requirements of its customers during heavy and light load hours⁵ each month. Forecast load will be determined through use of an econometric model that forecasts both total energy usage and peak demand by customer load class. The model will use historical data to estimate relationships between energy consumption and economic, demographic and/or weather variables. The econometric model will be refined through time as additional load data is acquired through CPA operations.

The CPA will observe the following schedule when hedging its Fixed Priced Energy Requirements:

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %&lt;sup&gt;6&lt;/sup&gt;</th>
<th>Maximum Hedge %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt Month</td>
<td>90</td>
<td>100</td>
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<td>Prompt Calendar Year</td>
<td>70</td>
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<td>0</td>
<td>40</td>
</tr>
<tr>
<td>CY + 4</td>
<td>0</td>
<td>40</td>
</tr>
</tbody>
</table>

⁵ Heavy Load (On-peak) Hours in wholesale energy markets are 6am to 10pm, Monday through Saturday, excluding New Years Day, Memorial Day, 4th of July, Labor Day, Thanksgiving and Christmas. All other hours during the year are considered Light Load (Off-peak) Hours.

⁶ CPA will exclude the estimated amount of hedge provided to CPA’s customers by SCE’s portfolio under the current PCIA construct when calculating compliance with the hedge schedule.
CLEAN POWER ALLIANCE BOARD OF DIRECTORS
AGENDA ITEM 7 – ATTACHMENT 1

The hedge schedule for the Prompt Month will be measured as of 5 days prior to the first day of the month (e.g., on August 27, 2018, CPA will have hedged 90 to 100 percent of its projected energy requirements during September 2018).

The hedge schedule for the Prompt Calendar Year (CY), as well as subsequent 2 calendar years, will be measured as of the first day of each new calendar year (e.g., on January 1, 2019, CPA will have hedged 70 to 90 percent of its forecast energy requirements for CY 2019; 50 to 70 percent of its forecast energy requirements for CY 2020 and 30-50 percent of its forecast energy requirements for CY 2021).

The minimum hedge level will be achieved by implementing a time-driven programmatic strategy. Time-driven programmatic hedges are executed at a predetermined rate pursuant to a time schedule and without regard for market conditions. The purpose of these hedging transactions is to achieve a reduction in variability in power supply costs by gradually increasing the amount of energy hedged as the actual date of consumption approaches. Time-driven strategies avoid the inherent impossibility of trying to consistently and accurately “time the market” to purchase energy at least cost when making hedging decisions. Additionally, a load serving entity the size of CPA needs to spread its procurement efforts over time to effectively manage the potential negative price impacts of procuring a large volume of energy, over a short period of time, in an illiquid market.

Hedging decisions to reach targets between the minimum and maximum hedge levels will be based on price-driven or opportunistic strategies. The purpose of price-driven or opportunistic strategies is to capitalize on market opportunities when conditions are favorable. The CPA will base its decision to execute opportunistic hedges on the anticipated impact to projected power supply costs and the resulting reduction in PSCaR.

Opportunistic hedges may be executed when energy price levels are favorable to lowering the cost of power relative to established program goals and financial projections; alternatively, opportunistic hedges can be executed in adverse market conditions relative to financial goals in order to reduce the potential negative impact of continued upward trending commodity prices relative to established goals.

In executing this ERHS, Fixed-Price Energy hedges may be modified, repositioned or unwound for the purpose of maintaining hedge coverage that matches changes in forecast electric load. This includes the ability of the CPA to use liquid market products to hedge average loads over a defined time period and then later modify its hedges to more precisely match load.

4.1.2 Portfolio Content Category 1 Renewable Energy

In order to cost-effectively meet its GHG-reduction and renewable energy goals, CPA intends to meet a growing share of its energy supply requirements with renewable energy, a large portion of which will be Product Content Category 1 (PCC1) renewable energy. PCC1 renewable energy is sourced from a renewable generator that is either directly interconnected to the California Independent System Operator (CAISO) or another California Balancing Authority or directly scheduled into CAISO without use of substitute energy.

In order to manage price risk of long-term renewable energy, and to allow CPA to prudently and methodically build a portfolio of long-term assets, CPA intends to meet its PCC1 energy targets with a
blend of short and long-term contracts. In the 2018-2020 period, this balance will include a relatively higher share of short-term contracts as the CPA focuses on launching its CCA and establishing a strong financial foundation. While hedging its PCC1 requirements during the next one to two years with contracts that are primarily shorter in term, CPA will observe the following schedule. The hedge schedule percentages shall be measured such that a 100% hedge position equals 75%\(^7\) of the RPS energy CPA will need to serve all customers at their chosen rate option (e.g. 50% RPS). The hedge schedule shall be measured on December 1 of each year for the Prompt Calendar year and the four subsequent calendar years.

### PCC1 Hedge Targets Applicable During Calendar Years 2018-2020

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %</th>
<th>Maximum Hedge %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt Calendar Year</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>CY + 1</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>CY + 2</td>
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<td>70</td>
</tr>
<tr>
<td>CY + 3</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>CY + 4</td>
<td>0</td>
<td>70</td>
</tr>
</tbody>
</table>

Between 2018 and 2021, CPA will increase its focus to longer-term PCC1 contracts, particularly for Calendar Year 2021 and beyond. This shift is necessary to comply with the renewable procurement requirements of SB 350, as well as the fact that new renewable generating facilities typically require long-term PPAs with terms that can range from ten to twenty-five years. CPA’s strong interest in delivery of renewable generation to its customers will eventually require voluntary execution of long-term PPAs beyond what is mandated by SB 350.

CPA’s eventual goal is to reach a steady state of procurement in which it contracts for four to eight percent of its projected annual PCC1 requirements each year via long-term contract. Doing so will i) allow CPA to steadily reduce its exposure to renewable energy and energy market price risks in a fashion similar to the programmatic hedging approach for Fixed-Price Block Energy and ii) ensure that CPA is in a position to make strategic procurement decisions and, if appropriate, commitments every year.

As CPA’s PCC1 portfolio is increasingly comprised of long-term contracts in line with long-term contracting requirements mandated under SB 350, in 2021 and thereafter, CPA shall observe the following schedule while hedging its PCC1 requirements. This hedge schedule shall first be measured on December 1, 2020 and then on December 1 of each subsequent year for the Prompt Calendar year and the two following calendar years.

### PCC1 Hedge Targets Applicable Beginning in Calendar Year 2021

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %</th>
<th>Maximum Hedge %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt Calendar Year</td>
<td>65</td>
<td>100</td>
</tr>
</tbody>
</table>

\(^7\) SB350 requires a minimum of 75% of RPS product used for compliance to come from PCC1 resources.
4.1.3 Portfolio Content Category 2 Renewable Energy

CPA shall diversify its renewable energy portfolio further by incorporating Portfolio Content Category 2 (PCC2) renewable energy purchases. PCC2 renewable energy is sourced from renewable generators located outside the state of California where that generation is “firmed and shaped” for delivery into California. PCC2 purchases are typically less expensive and shorter in term than PCC1, so they provide a cost-effective and flexible method of augmenting CPA’s renewable energy purchases to meet renewable portfolio content commitments to customers.

CPA will observe the following schedule when hedging its PCC2 renewable energy requirements. The hedge schedule percentages shall be measured such that a 100% hedge position equals 25% of the RPS energy CPA will need to serve all customers at their chosen rate option (e.g. 50% RPS). In other words, if CPA’s PCC2 position is 100% hedged, then 75% of the RPS energy will come from PCC1 resources. The hedge schedule shall be measured on December 1 of each year for the Prompt Calendar year and the two subsequent calendar years.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %</th>
<th>Maximum Hedge %</th>
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<tbody>
<tr>
<td>Prompt Calendar Year</td>
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<td>25</td>
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<tr>
<td>CY + 4</td>
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<td>10</td>
</tr>
</tbody>
</table>

It should be noted that there is currently a proceeding underway at the California Public Utility Commission to implement California legislature’s AB 1110, which may impact the reporting and accounting methodologies that apply to PCC2 renewable energy, so the hedging schedule above is subject to change as CPA gains clarity regarding any potential revised methodology.

4.1.4 Carbon Free Energy

In pursuit of its GHG-reduction objections, CPA shall augment its renewable energy purchases outlined above with energy purchases from carbon-free energy generating facilities, which are typically hydro-

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8 SB 350 allows a maximum of 25% of RPS product used for compliance to come from PCC2 resources.

9 RPS compliance rules set minimum requirements for PCC1 procurement and maximum limits for PCC2 procurement as a percentage of the total RPS compliance portfolio. If insufficient PCC2 product is available in the market, the Risk Management Team may approve shifting volumes from the PCC2 hedge schedule into the PCC1 hedge schedule.
electric resources located in California that are too large to qualify as Eligible Renewable Resources (30 MW or greater) or located outside of California. Similar to PCC2 renewable energy contracts, carbon-free energy purchases are typically short-term, most frequently one to three years in length.

CPA will observe the following schedule when hedging its Carbon-Free renewable energy requirements. The hedge schedule shall be measured on December 1 of each year for the Prompt Calendar year and the two subsequent calendar years.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %</th>
<th>Maximum Hedge %</th>
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<tbody>
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<tr>
<td>CY + 3</td>
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<td>25</td>
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<tr>
<td>CY + 4</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

In setting the above targets, it is important to note that the purchase of Carbon Free Energy is a voluntary requirement set by the CPA Board to exceed SCE’s GHG emissions goals. In determining the total volume of Carbon Free Energy to be hedged, the CPA Board may elect to increase or reduce the total quantity of Carbon Free Energy included in CPA’s portfolio as it seeks to balance multiple program objectives, including financial goals such as targets for financial reserves and retail rates. The Board will determine CPA’s target quantity of Carbon Free Energy annually during the rate-setting process.

**4.1.5 Resource Adequacy Capacity**

As a Load-Serving Entity (LSE) in California, CPA is required to demonstrate both annually and monthly that it has secured sufficient energy capacity to provide for its share of California’s energy load; this capacity is referred to as Resource Adequacy (RA). Because CPA serves customers in SCE’s service territory, CPA has local RA requirements specific to the Los Angeles Basin and Big Creek/Ventura local areas, as well as general RA requirements for Southern California (“South of Path 26 System”), a portion of which must be Flexible RA. Flexible RA requirements ensure resources are available on the grid to provide ancillary services such as ramping and regulation.

RA is typically transacted via contracts that vary in length from one month to three years, and it is currently bought and sold via a bilateral market, which not only provides cost-effective contracting opportunities but also proves at times to be fragmented and volatile. While a waiver process exists to excuse LSEs from their RA requirements, it is the goal of CPA to meet its requirements and not use the RA waiver process.

CPA will observe the following schedule when hedging its RA requirements. The hedge schedule shall be measured for each RA product that CPA is required to procure on December 1 of each year for the Prompt Calendar year and the two subsequent calendar years.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Minimum Hedge %</th>
<th>Maximum Hedge %</th>
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<tbody>
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<td>Prompt Calendar Year</td>
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<tr>
<td>CY + 1</td>
<td>50</td>
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</tr>
<tr>
<td>CY + 4</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>
5.1 Hedge Program Metrics

The success of the Energy Risk Hedging Strategy will be measured by realizing power supply costs in line with the budgeted power supply costs used to set customer rates, as well as by reducing CPA’s exposure to commodity price risk. The following two metrics will be utilized to manage the Energy Risk Hedging Strategy:

- Current projected power supply costs will be compared to budgeted power supply costs where budgeted costs will be based on the assumptions used at the time customer generation rates are set. Current power supply costs shall use all fixed priced contracts executed as of the date of the report. All open positions will be marked to market and compared to the budgeted power supply costs.

- Power Supply Cost at Risk (PSCaR). PSCaR represents a statistical view of what could happen to CPA’s power supply costs assuming that no action is taken to manage its portfolio from the date of the analysis through the end of the period of time being analyzed. The potential cost will be calculated using a historical sampling methodology that considers on- and off-peak periods separately over the remaining life of the transactions. The PSCaR calculation will consider potential variability in load and generation supply. The PSCaR will be calculated by rank ordering the portfolio cost and measuring the difference between the 95th percentile and the expected power cost outcome.

These metrics will be reviewed when making price-driven or opportunistic hedging decisions to ensure that the transactions are consistent with the goals of the Energy Risk Hedging Strategy. These metrics will be updated and reported by TEA to the CPA on a monthly basis.

6.1 Reporting Requirements

The following reports are required to manage the hedge program and to ensure its success:

- Net Position Report for each product
- Current Projected Power Supply Costs compared to budget
- Power Supply Cost at Risk
- GHG intensity
Appendix C: AUTHORIZED TRANSACTION TYPES

All transaction types listed below must be executed within the limits set forth in the ERMP. Definitions for each product are provided in Appendix A.

- **CAISO Market Products**
  - **Day-Ahead Market Energy** (Energy purchased from the CAISO Day-Ahead Market.)
  - **Real-Time Market Energy** (Energy purchased from the CAISO in the Real-Time Market)
  - **Congestion Revenue Rights** (A point-to-point financial instrument in the Day-Ahead Energy Market that entitles the holder to receive compensation for or requires the holder to pay certain congestion related transmission charges that arise when the transmission system is congested.)
  - **Convergence Bids** (Financial positions, either demand or supply, taken in the Day-ahead Market and liquidated in the Real-Time Market.)
  - **Inter-Scheduling Coordinator Trades** (A trade between two Scheduling Coordinators that is a settlement service that CAISO offers to parties of a bilateral contract as a means of offsetting CAISO settlement charges against bilateral contractual payment responsibilities.)

- **Physical Energy Products**
  - **Short-Term Energy** (Energy traded in the CAISO market or bilaterally for a duration less than one year.)
  - **Long-Term Energy** (Energy traded in the CAISO market or bilaterally for a duration greater than one year.)
  - **Physical Over-the-Counter (OTC) Options** (Call options that give the buyer the right, but not the obligation, to buy an underlying power product at agreed upon terms as detailed in a confirmation agreement; or put options that give the seller the right, but not the obligation, to sell an underlying power product at agreed upon terms as detailed in a confirmation letter.

- **Resource Adequacy Capacity** (A capacity product whereby a Seller commits to a must offer obligation of its generator in the CAISO market and on behalf of a specified Load Serving Entity.)

- **Import Capability Rights** (Entitles an LSE to count Resource Adequacy products at a specified import location toward its Resource Adequacy Requirements.)

- **Physical Environmental Products**
  - **PCC1 and PCC2 Renewable Energy** (see definition in Appendix A)
  - **Carbon Free Energy** (see definition in Appendix A)
  - **Air Resource Board Allowances** (An allowance is a tradeable permit issued by the California Air Resource Board to emit one metric ton of a carbon dioxide equivalent greenhouse gas emission.)

- **Financial Hedging Products**
  - **Futures Contracts** (A contract to buy or sell a commodity (electricity) at a predetermined price at a specified time in the future. Futures Contracts are standardized for quality and quantity to facilitate trading on a futures exchange (e.g., Intercontinental Exchange).)
  - **Swaps** (Financial contracts in which one party agrees to pay a cash flow calculated by multiplying a fixed volume by a fixed price (fixed price payer) and the other party agrees to...
pay a cash flow calculated by multiplying the same fixed volume times a market reference index price (floating price payer). At settlement, the party owing the higher amount pays the net difference. Swaps are transacted in over-the-counter markets.)

- **Options on Futures** (Call options give the buyer the right, but not the obligation, to purchase a Futures Contract. Put options give the buyer the right, but not the obligation, to sell a Futures Contract.)

- **Options on Swaps (Swaptions)** (call options give the buyer the right, but not the obligation, to enter into a swap transaction as the fixed price payer. A put option gives the buyer the right, but not the obligation, to enter into a swap transaction as the floating priced payer.)

- **Transmission** (The reservation and transmission of capacity and energy between two points on a transmission provider’s system.)

- **Tolling Agreements** (Agreement between a power buyer and a power generator, under which the buyer supplies the fuel, either physically or financially, and receives an amount of power generated based on an assumed conversion rate at an agreed cost.)
Appendix D: NEW TRANSACTION TYPE APPROVAL FORM

New Transaction Type Approval Form

Prepared By: 

Date: 

New Transaction Type Name: 

Business Rationale and Risk Assessment: 

- Product description – including the purpose, function, expected impact on net revenues (i.e., increase, manage volatility, control variances, etc.) and/or benefit to CPA 
- Identification of the in-house or external expertise that will be relied upon to manage and support the new or non-standard transaction 
- Assessment of the transaction’s risks, including any material legal, tax or regulatory issues 
- How the exposures to the risks above will be managed by the limit structure 
- Proposed valuation methodology (including pricing model, where appropriate) 
- Proposed reporting requirements, including any changes to existing procedures and system requirements necessary to support the new product 
- Proposed accounting methodology 
- Proposed Middle Office work flows/methodology, including systems 
- Brief description of the responsibilities of various departments within CPA who will have any manner of contact with the new or non-standard transaction

Reviewed by: 

_________________________ ___________________________
Director of Power Planning & Procurement Date

_________________________ ___________________________
Chief Operating Officer Date

_________________________ ___________________________
Executive Director Date
Appendix E: NOTICE OF CONFLICT OF INTEREST

To: [insert title]

Declaration of Conflict of Interest

I understand that I am obligated to give notice in writing to Clean Power Alliance of any interest or relationship that I may have in any counterparty that seeks to do business with Clean Power Alliance, and to identify any real or potential conflict of interest such counterparty has or may have with regard to any existing or potential contract or transaction with Clean Power Alliance, within 48-hours of becoming aware of the conflict of interest.

I would like to declare the following existing/potential conflict of interest situation arising from the discharge of my duties concerning Clean Power Alliance activities covered by the scope of the ERMP:

a) Persons/companies with whom/which I have official dealings and/or private interests:
________________________________________________________________________
________________________________________________________________________

b) Brief description of my duties which involved the persons/companies mentioned in item a) above.
________________________________________________________________________
________________________________________________________________________

Position and Name: ________________________________

Signature: ________________________________

Date: ________________________________
Appendix F: SAMPLE CODE OF MARKETING AND TRADING PRACTICES

See next page.
Clean Power Alliance of
Southern California
Code of Marketing and Trading Practices
July ____, 2018

Definitions

Marketing and Trading Employee – Any employee, contractor, consultant, or agent of CPA who engages in procurement activity.

Scope of Code
This Code of Marketing and Trading Practices (the “Code”) applies to all CPA marketing and trading employees. Each person subject to this Code is required to read, understand, and abide by the provisions contained in this Code.

Purpose
In addition to demonstrating CPA’s commitment to ethical business practices, this Code is designed to ensure that CPA complies with its obligations under state and federal laws, rules and regulations promulgated by various governmental agencies, and applicable policies adopted by its Clients. This Code defines and affirms the values and principles that CPA’s employees must follow in conducting their business activities. The Code is intended to complement the other policies, procedures and processes of CPA and to guide traders and marketers as they negotiate transactions, arrange for transmission, and manage risk.

Compliance with the Code allows CPA to assure its Clients, counterparties, potential customers, regulators, and the public that its business activities are, and will continue to be, conducted with integrity and unlawful/unethical trading practices will not be tolerated.

Questions about compliance with industry and company regulations as well as with this Code should be referred to CPA’s General Counsel.

Policy
CPA’s marketing and trading employees shall:

1. Conduct business in good faith and in accordance with all applicable laws, regulations, tariffs and rules.
2. Endeavor to always act in the best interests of CPA’s customers.
3. Not disseminate, cause to be disseminated or facilitate the dissemination of known false or misleading information, or engage in transactions in order to exploit known false or misleading information.
4. Engage only in transactions with legitimate business purposes.
5. Not knowingly arrange or execute wash trades.
6. Not engage in any activity with the intent to alter any market price or otherwise interfere with the normal operation of a well-functioning competitive market.
7. Not engage in price reporting or furnishing transaction prices to any entity that collects prices to be used in the calculation of a price index or for distribution to subscribers, without prior written approval of CPA’s General Counsel.
8. Not collude with other market participants to: (i) affect the price of any commodity; (ii) allocate territories, customers or products; or (iii) otherwise restrain competition.
9. Not engage in transactions for commodities or services without the intention of providing those specific commodities or services.
10. Not reserve service, attempt to reserve service, access information, or attempt to access information from any transmission service provider except through means available to all eligible customers.
11. Successfully complete yearly CPA compliance training.
12. Comply with requirements that trading and marketing activities are recorded and retained.
13. Cooperate with any audit or investigation into trading and marketing activities.

**Duty to Report Violations and Non-Retaliation Clause**
A CPA employee who believes that a violation of the Code has occurred is required to promptly notify the Chief Operating Officer. CPA shall make every effort to ensure the confidentiality of the employee. CPA shall not discharge, suspend, demote, harass, layoff, deny a promotion, or take any other retaliatory action against an employee solely as a result of the act of reporting a suspected violation of the code. This in no way affects CPA’s rights as an employer with respect to all other issues. CPA will monitor and follow up to ensure that employees who have reported alleged violations have not been subject to retaliation.

**Disciplinary Action**
Any failure to abide by this Code, including the Duty to Report Violations, will result in disciplinary action. All potential violations are handled on a case-by-case basis and will result in a full review by, at minimum, the following individuals: the employee’s immediate supervisor and CPA’s General Counsel. Factors that are considered in setting the disciplinary action plan include but are not limited to: source of violation discovery (self-reported, peer-reported, reported by a third party, via internal procedures, or the result of an audit), intent (accidental or intentional), type and magnitude of risk that the employee exposed CPA to (financial, reputation, etc.), and frequency of the violation (first offense or history of multiple offenses). The disciplinary actions taken may involve demotion, loss of compensation (suspension without pay), and termination of employment.

I agree to abide by the provisions of CPA’s Code of Marketing and Trading Practices.

_________________________  ___________________________  ________________
Signature                             Printed Name                           Date
Energy Procurement Schedule:
2018 and 2019

Procurement Schedule: July 2018 – June 2019
Over the next 12 months, CPA will procure the following wholesale energy and capacity products:

- PCC1 Renewable Energy
- PCC2 Renewable Energy
- Carbon-free Energy
- Resource Adequacy
- Fixed Price Energy

All procurement will adhere with CPA’s Energy Risk Management Policy (ERMP) and Energy Risk Hedging Strategy, including prescribed energy hedge schedules.
## Procurement Schedule: July 2018 – June 2019

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Ongoing</strong></td>
<td>Bilateral procurement as appropriate to fill near-term open positions and capitalize on time-sensitive opportunities.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>2018</strong></td>
<td></td>
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</tr>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td>2018 PCC2 Solicitation</td>
<td></td>
<td>2018-2021 RA Solicitation</td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>Short-Term and Long-Term Renewable and Carbon-free Energy Solicitation</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Oct</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>2019</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>May</td>
<td></td>
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</tr>
<tr>
<td>Jun</td>
<td>Long-Term Renewable Energy Solicitation</td>
<td></td>
<td></td>
<td></td>
<td>2019-2022 RA Solicitation</td>
</tr>
</tbody>
</table>

- Monthly portfolio assessment and purchases per ERMP and Hedging Schedule.
RESOLUTION NO. 18-009

RESOLUTION OF THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA DELEGATING AUTHORITY TO THE EXECUTIVE DIRECTOR PURSUANT TO THE ENERGY RISK MANAGEMENT POLICY

THE BOARD OF DIRECTORS OF CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, Clean Power Alliance of Southern California (formerly known as Los Angeles Community Choice Energy Authority) (“Clean Power Alliance” or “CPA”) was formed on June 27, 2017;

WHEREAS, the CPA Board of Directors ("Board"), on April 5, 2018, adopted Resolution 18-006 delegating authority to the Executive Director for certain activities related to power procurement;

WHEREAS, the Board approves the Energy Risk Management Policy ("ERMP") which establishes a framework by which the Board, staff, and consultants will conduct power procurement and related business activities that may impact the risk profile of CPA; and

WHEREAS, any power procurement activity that falls outside the parameters of the ERMP will be brought to the Board for consideration.

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD OF DIRECTORS OF THE CLEAN POWER ALLIANCE OF SOUTHERN CALIFORNIA:

1. The Executive Director is hereby authorized to conduct power procurement and related transactions pursuant to the adopted ERMP.

2. The Board has determined that the approval of the ERMP is not a project under CEQA because the ERMP does not have the potential for causing a significant impact on the environment under State CEQA Guidelines Section 15061(b)(3).

ADOPTED AND APPROVED this ___ day of __________ 2018.

____________________________
Chair

ATTEST:

____________________________
Secretary
Regulatory Issues

1. PCIA Rulemaking (R.17-06-026)
   The PCIA is used to calculate exit fees owed by Community Choice Aggregation (CCA) customers to their incumbent Investor-Owned Utility (IOU). These fees are intended to cover the above-market costs of power contracts that were stranded by CCA load departure from bundled IOU service.

   Some of the most promising proposals for a longer-term solution include CalCCA’s securitization proposal as well as proposals for a resource auction mechanism (both of which were described in last month’s Legislative and Regulatory update). However, the IOUs have argued that both proposals would require too much time to implement, citing the need for legislative action in the case of securitization.

   A proposed decision is expected in late July with a final decision expected in fall 2018. Regardless of the outcome, protests to the decision are expected. CPA will continue to engage on this issue, primarily through CalCCA.

2. CPUC “Green Book” and En Banc with CEC
On May 3, 2018, the CPUC issued a draft report titled: “California Customer Choice: An Evaluation of Regulatory Framework Options for an Evolving Electricity Market”, also known as the “Green Book.” The report is targeted at the California State Legislature and invites a re-examination of California’s existing electric sector framework, specifically focused on deregulation and the rise of community choice aggregation. The report claims to be “strategically agnostic,” but compares current trends in the California electricity market (i.e. customer choice) to the California energy crisis of 2000-01. CPA contributed to comments submitted by CalCCA on June 11, and CalCCA prepared a one-page factsheet on the Green Book (attached), in which it describes the Green Book as:

- Filled with dire claims about an impending energy crisis and vague recommendations that aren’t backed up by data or specifics;
- More about protecting and expanding the CPUC’s role than solving any issues with the market; and
- Fails to acknowledge the role CCA’s play in achieving record levels of renewable energy at competitive rates.

On June 22, the CPUC and CEC held a customer choice En Banc hearing. CPUC President Michael Picker announced the two agencies are co-developing a “Choice Action Plan,” to be released by October 2018, which will provide a type of roadmap for addressing key issues arising from increasing fragmentation in the state’s energy market, and potentially address perceived areas of risk. The primary concerns expressed by regulators is how to ensure resource adequacy in an increasingly decentralized system; prepare for impacts associated with the potential lifting of the state’s Direct Access cap (as proposed in SB 237); and who will serve as the provider of last resort should a CCA or other load-serving entity fail. After questioning operational CCA representatives during various panels on consumer choice, affordability, reliability, and decarbonization, Commissioners uniformly indicated an interest in considering the creation of some sort of centralized procurement system to ensure reliability, particularly in load-constrained areas.
3. Resource Adequacy (R.17-09-020)

On May 27, 2018, the Commission issued a proposed decision in its proceeding on Resource Adequacy, adopting local capacity requirements for 2019 and refining the Resource Adequacy program. Of particular note to CPA, the Commission has asked parties to submit proposals on the possibility of a multi-year RA compliance requirement (i.e. requiring multi-year RA contracts for a portion of the portfolio) and proposals for a central buyer to procure local RA resources. Staff continues to monitor this proceeding as it moves into Track 2 proceedings.

Legislative Issues

1. Grid Regionalization Efforts (AB 813)

AB 813, authored by Assemblymember Chris Holden, would provide a process by which the California Independent System Operator (CAISO) or other grid operators in California could “regionalize” control of the electric grid to include other areas in the western United States. Under regionalization, out-of-state resources in areas that are part of the regional grid operator’s territory would be treated the same as if those resources were located in California. This means such resources would be treated as PCC1 resources for purposes of the Renewable Portfolio Standard (RPS) and supply and demand would be balanced amongst all resources on the regional grid.

Clean Power Alliance has not taken a position on the bill and staff is not recommending that CPA take a position at this time. Although CalCCA has taken a position in support of the bill, CPA abstained in the vote at the CalCCA Board.

In addition to CalCCA, supporters of the bill include Governor Brown, NRDC, the Union of Concerned Scientists, Environmental Defense, the Chamber of Commerce, and industry groups representing renewable and conventional energy developers. Supporters of the bill argue that regionalization would reduce reliance on fossil generation and reduce costs by providing greater access to low-cost renewable and carbon free resources outside of California. Further, supporters argue that a larger regional grid will reduce the
curtailment of renewable energy by providing a broader market for the balancing of energy supply and demand. Finally, supporters note that the bill would not finalize a regionalization proposal. Rather, it would set up a process whereby the CPUC, CEC and CARB would review any proposal prior to implementation.

Opposition to the bill include organized labor, Sierra Club, Food and Water Watch, and The Utility Reform Network (TURN). They argue that regionalization would end California’s control of the electric grid, resulting in increased use of natural gas and coal-fired generation and higher costs for customers. Additionally, opponents argue that the bill would result in fewer construction jobs from new renewable generation being built in California. Lastly, opponents suggest that many of the benefits of regionalization could be achieved through alternative means such as expansion of the Energy Imbalance Market and greater coordination with utilities in the Pacific Northwest.

2. Direct Access Expansion Efforts (SB 237)

SB 237, a gut-and-amend by Senator Bob Hertzberg, seeks to, over a period of three years commencing on July 1, 2019, remove the existing cap on the amount of Direct Access (DA) customers currently allowed to purchase electricity directly from providers other than their Investor Owned Utility (IOU). By removing the cap on DA customers, for which demand currently exceeds availability, this bill is potentially dangerous to CCAs as many commercial customers could migrate to DA, rather than participate in the CCA, taking with them a substantial portion of the CCA load. There is additional concern that DA providers do not share the same environmental or social goals as CCAs, nor do they have the same obligation to serve all customers.

Neither CPA nor CalCCA have taken a position on this bill yet. While SB 237 faces significant hurdles in the legislature before passage, CPA staff is closely monitoring this bill in concert with CalCCA lobbyists, and is prepared to engaged in opposition if needed, mostly likely in coalition with environmental and ratepayer groups. In light of recent claims by the CPUC that the grid is becoming increasingly destabilized, a number of legislators have questioned whether this is the right time to remove the cap on DA.
3. Ongoing Communication with Legislators

CPA staff, in conjunction with the Legislative & Regulatory Committee Chair and Board members, have been meeting with State Senate and Assembly Members, as available, who represent the jurisdictions within CPA’s service territory. Recent productive meetings were held with Assemblymember Autumn Burke, District 62, and Assemblymember Mike Gipson, District 64.

To support these in person meetings, on June 25, 2018, CPA transmitted a letter to Los Angeles and Ventura County area Legislators introducing CPA and summarizing the legislative and regulatory issues that have been raised recently regarding community choice. A copy of this letter is attached for reference.

Attachments: CPA Letter to Legislators
CalCCA Factsheet on CPUC Green Book
June 25, 2018

Dear Honorable Senators & Assembly Members:

The Clean Power Alliance of Southern California is one of the state's newest Community Choice Aggregation (CCA) Joint Powers Authority, made up of 31 local agencies across Los Angeles and Ventura Counties. These agencies have banded together to provide cleaner electricity at competitive rates, offering a choice in electricity service providers for the first time to nearly 3 million residents in our region.

Over the past few months, the President of the California Public Utilities Commission (CPUC) has made several statements to the Legislature and at CPUC meetings claiming that the rise of CCAs is creating a risk of a new electricity reliability crisis. Earlier this month, his office also distributed a draft white paper (the “Green Book”) on the future of electricity regulation in an era of customer choice that portrayed CCAs as a problem to be dealt with rather than an opportunity to be grasped. Moreover, the Green Book makes dire claims about a looming energy crisis without any supporting data or specifics.

In actuality, CCAs contribute to grid reliability and were established by the legislature in the aftermath of the energy crisis to provide a higher level of accountability to California residents. While the regulatory landscape for electricity is changing and new frameworks for collaboration across multiple actors in California could be beneficial, we would caution against paying much heed to allegations about reliability that are not based on fact.

Here are some key facts to consider as you hear calls for action against CCAs:

**CCAs across California have and continue to meet their Resource Adequacy requirements.** As Clean Power Alliance ramps up service, we will to continue to meet the same reliability standards as the Investor Owned Utilities (IOUs).

**The Legislature promoted the creation of CCAs in the wake of the last energy crisis.** In doing so, it noted their similarity to municipal utilities, which remained financially stable as the IOUs experienced serious financial challenges. By introducing a level of public oversight at the local level, accountability increases and risky market manipulation is discouraged.
Clean Power Alliance already expects to meet the 2030 State mandate of 50% renewable energy content in 2019, eleven years earlier than required. This voluntary action is the kind of leadership our local communities can provide by engaging closely with our customers and leveraging our collective purchasing power.

In summary, we expect that as CCAs continue to enjoy success in collectively achieving greenhouse gas reductions in the electricity sector in a decentralized manner that is affordable, reliable and fair to all customers, their perceived threat to IOUs will prompt calls for new legislation and regulatory action.

We urge you to communicate with us to make sure you have all the facts and perspectives when considering any legislation concerning CCA operations, and pledge to work closely with you to meet our mutual environmental goals for the State and our local communities.

Sincerely,

Diana Mahmud
Chair, Clean Power Alliance
Councilmember, City of South Pasadena

Sheila Kuehl
Vice-Chair, Clean Power Alliance
Supervisor, County of Los Angeles

Linda Parks
Vice-Chair, Clean Power Alliance
Supervisor, County of Ventura

Lindsey Horvath
Chair, Legislative Committee, Clean Power Alliance
Councilmember, City of West Hollywood

Ted Bardacke
Executive Director, Clean Power Alliance

Enclosure: CalCCA Fact Sheet on CPUC Draft “Green Book”
CPUC Draft “Green Book”
A Report in Search of a Problem

Community Choice Aggregators (CCAs) were enabled by the California Legislature in the wake of the energy crisis, as part of the solution, allowing local communities to take control of the energy they buy and to address constraints on competition that contributed to the crisis.

Highly-regulated, locally-controlled CCAs were designed to make energy markets less risky and protect ratepayers. CCAs are performing as intended – providing reliable, affordable and clean energy to local customers and delivering innovative programs that address both local needs and state goals.

Full of dire claims about an impending energy crisis and vague recommendations that aren’t backed up by data or specifics

More about protecting and expanding the CPUC’s role than solving any issues with the market

Fails to acknowledge the role CCAs play in achieving record levels of renewable energy at competitive rates

Reliability
As entities created in response to the last energy crisis, CCAs take seriously their obligation to meet California’s Resource Adequacy (RA) requirements and have been meeting their responsibility to “keep the lights on.”

The draft paper overlooks the fact that the California Independent System Operator (CAISO), the Federal Energy Regulatory Commission (FERC) and the Western Electricity Coordinating Council (WECC) have the primary responsibility for reliability.

Affordability
CCAs and other forms of energy choice create opportunities for energy consumers to take action on climate change, affordability and local benefits. Previously, the IOU monopolies in communities meant consumers had no choice.

Now, customers have a choice in who provides their energy and where program revenues are invested. CCAs are governed by local elected officials, putting the needs of their communities, not shareholders, first.

Decarbonization
CCAs offer the ability to procure renewable energy that meets the needs and perspectives of their communities. Additionally, CCAs have helped drive decarbonization efforts to help meet the state’s emission reduction goals.

CCAs are required to meet the same reliability standards as IOUs

CCA customers have saved $89,678,000 on their energy bills

The Bottom Line
The CPUC paper fails to recognize the important role CCAs play within their communities. Where IOUs get a guaranteed rate of return that goes to corporate and institutional shareholders, CCAs invest their revenues right back into their communities through programs that serve their customers’ needs and further our state’s decarbonization goals – rather than pumping up stock prices. There is no risk of an energy crisis and no need for additional legislative engagement.
Phase I and II – Operations
On June 25, CPA began serving non-residential customers in unincorporated Los Angeles County, South Pasadena and Rolling Hills Estates. There are 32,284 potential CPA customers in this phase; each customer transitions on their monthly meter read date, so it will take a full month to make the complete transition. Combined with the 1,783 Los Angeles County municipal accounts that began service in February 2018, CPA now has 34,067 potential customers. SCE has delayed Phase II enrollment on 1,037 accounts for up to 45 days due to IT issues on their end. The first of two required post-enrollment notices will be mailed this month. A Joint Rate Comparison mailer (attached) that is co-branded with SCE was also sent out in late June.

As of July 2, the combined opt-out rate for these two phases was 0.55%, representing 2.7% of CPA’s total expected annual energy load for these two phases. Only 30 customers have chosen to change their rate option (five to 100% renewables and 25 to 36% renewables). The two most common reasons stated for opting out are a dislike of being automatically enrolled and rate/cost concerns. During the month of June, 96% of calls to the call center were answered within one minute and 97% were answered within three minutes.
Phase II – Power Procurement
CPA has acquired most of its power needs for 2018 and continues to negotiate bilaterally to close out its 2018 Resource Adequacy position. An RFO for additional 2018 PCC2 renewables was issued on June 29, with bids due July 10.

Board Retreat
For CPA staff the three main takeaways from the June 22 Board retreat were:

- Maintain renewables-based rate options for CPA’s launch years but explore customer rebates and GHG-based rate options in the future.
- Set a simple and clear financial reserve policy by the end of 2018 with the goal of earning a credit rating in the future years.
- Engage in a local programs strategic planning process so that CPA will be ready to deploy programs when funding is available while pursuing strategic opportunities for piloting cost-neutral projects and programs that could be scaled in the future.

A full summary of the Board retreat will be distributed later this month. Thank you to all who were able to participate.

Third-Party Review of CPA’s Financial Model and Proforma
Pacific Energy Advisors completed a third-party review of CPA’s financial model and pro forma. PEA concluded that CPA’s pro forma model is a sound planning tool, that its financial projections are reasonable, and that it generally aligns with industry norms. PEA made technical recommendations around load forecasting and rate setting that CPA plans to implement to more accurately reflect projected revenue and operating costs. The review contains confidential and market sensitive information; Board members who wish to read PEA’s review may do so at CPA offices.

Staffing/Hiring
Tyler Aguirre was hired as Account Services Manager. Tyler has worked for CPA, first as an intern, then as a part-time consultant, since the summer of 2017. Tyler will be responsible for working with individual customers who have complex rate structures and
will be a member of the 2019 rate setting team. Tyler recently completed her Masters in Public Policy at the UCLA Luskin School where she did her capstone project on electricity rate design for large commercial customers.

CPA is currently advertising for a Director of Marketing & Account Services. Consistent with the approved FY18-19 budget, CPA also expects to hire a Director of Legislative & Regulatory Affairs, a Finance Manager, and Power Procurement Analyst over the next several months.

**Contracts Executed in June Under Executive Director Delegated Authority**

Pacific Energy Advisors was contracted to conduct a third-party review of CPA’s financial model and pro forma for a not-to-exceed amount of $20,000.

E3 was contracted to assist CPA with the modeling necessary to complete the 2018 IRP for a not-to-exceed amount of $40,000. CPA will have on-going access to the E3’s modelling software for internal use.

**Community Advisory Committee**

The application period for Community Advisory Committee members is now open until July 25, and materials are available in English and Spanish on CPA’s website, here: [cleanpoweralliance.org/documents](http://cleanpoweralliance.org/documents). To date, CPA staff has received positive interest in the Community Advisory Committee and three individuals have already submitted applications. Staff will distribute another announcement to its member jurisdictions and stakeholders in mid-July, and all member agencies are encouraged to share the information with their communities and stakeholders (flyer attached). In August, CPA staff will screen the applications, followed by review by the Community Advisory Ad Hoc Committee. Recommendations for membership are anticipated to be presented to the Board for consideration at its September meeting.

Attachments: CPA / SCE Joint Rate Comparison

Community Advisory Committee Flyer
Your power choices.

Choose the energy source and rate plan that’s right for your business.

Clean Power Alliance is California’s new locally operated electricity provider offering clean, renewable energy choices for businesses in your area!

For the first time, you now have a choice when it comes to your energy. Clean Power Alliance and Southern California Edison (SCE) encourage you to compare your choices and select the option that suits your business best.
Understanding your energy choices.

<table>
<thead>
<tr>
<th>2018 Schedule TOU-GS-1-A Commercial Rate Comparison</th>
<th>SCE</th>
<th>SCE Green Rate 50% renewable</th>
<th>SCE Green Rate 100% renewable</th>
<th>36% renewable</th>
<th>50% renewable</th>
<th>100% renewable</th>
</tr>
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<tbody>
<tr>
<td>Generation Rate ($/kWh)</td>
<td>$0.0750</td>
<td>$0.09728</td>
<td>$0.10705</td>
<td>$0.06894</td>
<td>$0.06977</td>
<td>$0.08394</td>
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<tr>
<td>SCE Delivery Rate ($/kWh)</td>
<td>$0.09695</td>
<td>$0.09695</td>
<td>$0.09695</td>
<td>$0.09695</td>
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<tr>
<td>Surcharges ($/kWh)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>$0.01332</td>
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<tr>
<td>Total Costs ($/kWh)</td>
<td>$184.45</td>
<td>$194.62</td>
<td>$204.00</td>
<td>$179.21</td>
<td>$180.04</td>
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<td>Average Monthly Bill ($)</td>
<td>$184.82</td>
<td>$194.62</td>
<td>$204.41</td>
<td>$179.56</td>
<td>$180.40</td>
<td>$194.59</td>
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</table>

Monthly Usage: 1,002 kWh

* This comparison illustrates the estimated electricity costs for a typical small commercial customer within SCE and Clean Power Alliance’s service territory with an average monthly consumption of 1,002 kilowatt hours (kWh). This comparison is based on Clean Power Alliance rates approved by the Board of Directors on April 5, 2018 and effective as of June 25, 2018. SCE rate options are based on rates published January 1, 2018. Both Clean Power Alliance and SCE’s rates are subject to change.

** Generation Rate reflects the cost of producing or purchasing electricity to power your business. This rate will vary depending on your service provider and rate plan.

** SCE Delivery Rate is a charge assessed by SCE to deliver electricity to your business. This rate depends on usage.

** Surcharges represent the Cost Responsibility Surcharges (CRS) and Franchise Fee (FF) that are applicable to Community Choice Aggregation (CCA) customers. The CRS recovers costs of power purchase commitments that become stranded as a result of a CCA initiating service. The FF recovers taxes owed to a city in exchange for allowing SCE to utilize electrical distribution lines throughout the property of the city. SCE acts as the collection agency for the FF surcharge which is levied by cities and counties for all customers.

<table>
<thead>
<tr>
<th>Electric Power Generation Mix*</th>
<th>SCE Green Rate 50% renewable</th>
<th>SCE Green Rate 100% renewable</th>
<th>36% renewable</th>
<th>50% renewable</th>
<th>100% renewable</th>
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<tr>
<td>Renewables</td>
<td>28% 64% 100%</td>
<td>36% 50% 100%</td>
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<td></td>
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<tr>
<td>Biomass &amp; Biowaste</td>
<td>1% 0% 0%</td>
<td>0% 0% 0%</td>
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<td>Geothermal</td>
<td>7% 4% 0%</td>
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<td>Small Hydroelectric</td>
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<tr>
<td>Solar Electric</td>
<td>10% 55% 100%</td>
<td>100%</td>
<td></td>
<td></td>
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<tr>
<td>Wind</td>
<td>10% 5% 0%</td>
<td>0% 0% 0%</td>
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<tr>
<td>Non-Renewable</td>
<td>72% 36% 0%</td>
<td>64% 50% 0%</td>
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<tr>
<td>Coal</td>
<td>0% 0% 0%</td>
<td>0% 0% 0%</td>
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<tr>
<td>Large Hydroelectric</td>
<td>6% 3% 0%</td>
<td>51% 37% 0%</td>
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<td>Natural Gas</td>
<td>19% 10% 0%</td>
<td>0% 0% 0%</td>
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<tr>
<td>Nuclear</td>
<td>6% 3% 0%</td>
<td>0% 0% 0%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td>0% 0% 0%</td>
<td>0% 0% 0%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Unspecified Sources**</td>
<td>41% 20% 0%</td>
<td>33% 15% 0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100% 100% 100%</td>
<td>100% 100% 100%</td>
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</tbody>
</table>

A breakdown of specific Clean Power Alliance renewable sources is not yet available and will be provided at a future date.

* SCE’s generation data represents the most recent data provided through the California Energy Commission’s Power Source Disclosure program. Clean Power Alliance’s generation data represents 2018 estimates based on executed and anticipated contracts.

** Unspecified sources of power mean electricity from transactions that are not traceable to specific generation sources.

If this comparison does not address your current rate plan or if you have further questions, we would love to hear from you! Please visit us at cleanpoweralliance.org or call us at (888) 585-3788. You can also reach SCE at (800) 974-2356 or sce.com.
Help guide Southern California’s energy future!

Clean Power Alliance is seeking interested community members from Los Angeles and Ventura Counties to serve on its inaugural volunteer Community Advisory Committee that will help inform the growth of Southern California's newest, locally-operated clean energy provider.

About the opportunity

- 15-member advisory committee representing 7 sub-regions of Clean Power Alliance territory
- Advise the Clean Power Alliance Board of Directors on valuable policy and planning matters
- Not just for energy experts—seeking diverse cross-section of community representatives

About Clean Power Alliance

Clean Power Alliance believes in a clean energy future that is local, where communities are empowered and customers are given a choice about the source of their energy. We are California's new locally-operated electricity provider across Los Angeles and Ventura counties, offering clean renewable energy at competitive rates. To view our service territory, visit cleanpoweralliance.org.

Clean Power Alliance purchases clean power and Southern California Edison (SCE) delivers it. Nothing else changes—SCE will continue to deliver power, send bills, and be responsible for resolving any issues with electricity service. Through this partnership, over three million SoCal residents and over one million customer accounts will enjoy the shared benefits of Clean Power Alliance: local management and control over rate setting and development of local programs, stable and competitive electric rates, a higher content of renewable energy resources in our electricity supply, and community engagement!

Interested? Apply online at cleanpoweralliance.org/documents

Deadline: July 25th, 2018

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