Clean Energy Alliance
JOINT POWERS AUTHORITY

AGENDA

Board of Directors Meeting Agenda
August 20, 2020, 2 p.m.
City of Solana Beach | Virtual Meeting

Per State of California Executive Order N-29-20, and in interest of public health and safety, we are temporarily taking actions to prevent and mitigate the effects of the COVID-19 pandemic by holding Clean Energy Alliance Joint Powers Authority meetings electronically or by teleconferencing. All public meetings will comply with public noticing requirements in the Brown Act and will be made accessible electronically to all members of the public seeking to observe and address the Clean Energy Alliance Joint Powers Authority Board of Directors. The meetings can be watched via livestream at https://solanabeach.12milesout.com/Video/Live. You can participate in the meeting by e-mailing your comments to the Secretary at secretary@thecleanenergyalliance.org prior to commencement of the meeting. If you desire to have your comment read into the record at the meeting, please indicate so in the first line of your e-mail and limit your e-mail to 500 words or less. These procedures shall remain in place during the period in which state or local health officials have imposed or recommended social distancing measures.

CALL TO ORDER

ROLL CALL

FLAG SALUTE

BOARD COMMENTS & ANNOUNCEMENTS

PRESENTATIONS

APPROVAL OF MINUTES:

Consent Calendar

Item 1: **Clean Energy Alliance Treasurer's Report**

RECOMMENDATION
Receive and File Clean Energy Alliance Treasurer's Report.

New Business

Item 2: **Clean Energy Alliance Interim Chief Executive Officer Report & Regulatory Affairs Update**

RECOMMENDATION
1) Receive and file Clean Energy Alliance Interim Chief Executive Officer Report.
2) Receive and file Clean Energy Alliance Regulatory Affairs Update Report.

Item 3: **Clean Energy Alliance Integrated Resource Plan**

RECOMMENDATION
Approve Clean Energy Alliance Integrated Resource Plan.

Item 4: **Clean Energy Alliance Credit Solution Update**

RECOMMENDATION
1) Authorize Interim Chief Executive Officer to execute a Promissory Note with Calpine Energy Solutions for $400,000, to provide funding for the CEA FY 20/21 budget through February 2021; and
2) Direct the Interim Chief Executive Officer to continue to work towards a credit solution for the remaining CEA start-up fudning needs and to return with options at the November 19, 2020 CEA Regular Board Meeting.

Item 5: **Clean Energy Alliance Inclusive & Sustainable Workforce Policy**

RECOMMENDATION
Review, Provide Input and Approve Clean Energy Alliance Inclusive & Sustainable Workforce Policy.

Item 6: **Clean Energy Alliance Community Advisory Committee Workplan**

RECOMMENDATION
Review, provide input and approve Clean Energy Alliance Community Advisory Committee (CAC) initial scope of work and desired outcomes for the Workplan.

Item 7: **Clean Energy Alliance Award Portfolio Manager Services**

RECOMMENDATION
Authorize Interim Chief Executive Officer to execute an agreement with Pacific Energy Advisors to provide Portolio Management Services through June 30, 2023, for an amount not to exceed $120,000 annually, subject to General Counsel approval.

Item 8: **Clean Energy Alliance Interim Treasurer**

RECOMMENDATION

Authorize Clean Energy Alliance Interim Chief Executive Officer to execute an agreement with Marie Berkuti for Interim Treasurer Services through June 30, 2021, for an amount not to exceed $10,000, subject to General Counsel approval.

BOARD MEMBER REQUESTS FOR FUTURE AGENDA ITEMS

ADJOURN:

NEXT MEETING: September 17, 2020, 2 p.m., hosted by City of Carlsbad (Virtual Meeting)

Reasonable Accommodations
Persons with a disability may request an agenda packet in appropriate alternative formats as require by the Americans with Disabilities Act of 1990. Reasonable accommodations and auxiliary aids will be provided to effectively allow participation in the meeting. Please contact the Carlsbad City Clerk's Office at 760-434-2808 (voice), 711 (free relay service for TTY users), 760-720-9461 (fax) or clerk@carlsbadca.gov by noon on the Monday before the Board meeting to make arrangements.

Written Comments
To submit written comments to the Board, please contact the Carlsbad City Clerk's office at secretary@thecleanenergyalliance.org*. Written materials related to the agenda that are received by 5:00 p.m. on the day before the meeting will be distributed to the Board in advance of the meeting and posted on the Authority webpage. To review these materials during the meeting, please contact the Board Secretary.*

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Marie Marron Berkuti, Interim Treasurer

ITEM 1: Clean Energy Alliance Treasurer's Report

RECOMMENDATION:

Receive and File Clean Energy Alliance Interim Treasurer's Report.

BACKGROUND AND DISCUSSION:

This report provides the Board with the following financial information through June 30, 2020 (draft):

- Budget to Actuals – Reports actual revenues and expenditures compared to adopted budget as of June 30, 2020 (draft)
- Statement of Financial Position – Reports assets and liabilities of CEA as of June 30, 2020 (draft)

The Treasurer's Report as of June 30, 2020 is a draft document because the CEA is awaiting an invoice from the City of Solana Beach for services provided to the CEA for November 2019 through June 2020.

At its June 18, 2020 board meeting, the CEA Board adopted the Fiscal Year 2020/21 budget. This report also provides the Board with the following financial information through July 31, 2020:

- Budget to Actuals – Reports actual revenues and expenditures compared to adopted budget as of July 31, 2020.
- Statement of Financial Position – Reports assets and liabilities of CEA as of July 31, 2020
- List of Payments Issued – Reports payments issued for July 2020

JUNE 30, 2020 (DRAFT) REPORTS (FY 2019/20)

BUDGET TO ACTUALS

Through June 30, CEA has earned 100% of its revenue as a result of invoicing the advances to the Member Agencies.

Of its approved $450,000 budgeted expenditures, $363,131.68 has been expended, leaving $86,868.32.

Clean Energy Alliance
Budget to Actuals
for period ended June 30, 2020 (Draft)

	BUDGET	ACTUALS	VARIANCE
Revenue			
Advances from Member Agencies	$ 450,000.00	$ 450,000.00	-
Total Revenue	450,000.00	450,000.00	-
Expenses			
Staffing/Consultants	$ 50,000.00	$ 41,856.74	$ 8,143.26
Legal Services	130,000.00	77,795.79	52,204.21
Professional Services	115,000.00	141,979.15	(26,979.15)
Memberships & Due	1,500.00	1,500.00	-
Graphic Design Services	6,500.00	-	6,500.00
CCA Bond	147,000.00	100,000.00	47,000.00
Total Expenses	$ 450,000.00	$ 363,131.68	$ 86,868.32
Net Results (Revenue - Expenses)	$ -	$ 86,868.32	$ 86,868.32

STATEMENT OF FINANCIAL POSITION

CEA's Statement of Financial Position reports the assets and liabilities as of June 30, 2020 (Draft).

Clean Energy Alliance
Statement of Financial Position
As of June 30, 2020 (Draft)

Assets		
River City Bank - Operating Account	$ 199,483.98	
Total Assets		$ 199,483.98
Liabilities		
Accounts Payable		
Current	$ 74,150.90	
Noncurrent	38,464.76	
Total Liabilities		$ 112,615.66
Reserve for Future Expenses		$ 86,868.32

As of June 30, liabilities represent invoices received for services, but not yet paid. The noncurrent accounts payable are amounts due to the cities of Carlsbad and Del Mar for services provided to the CEA for the period November 2019 to June 2020. These invoices are scheduled to be paid once the CEA is operational.

JULY 31, 2020 REPORTS (FY 2020/21)

BUDGET TO ACTUALS

Through July 31, CEA is still working towards obtaining the expected $4,006,500 in available funding from the proposed credit solution.

Of its approved $4,006,500.00 budgeted expenditures, $26,465.50 has been expended, leaving $3,980,034.50

Clean Energy Alliance
Budget to Actuals
for the one month period ended July 31, 2020

	BUDGET	ACTUALS	VARIANCE
Revenue			
Credit Solution	$ 4,006,500.00	$ -	(4,006,500.00)
Total Revenue	4,006,500.00	-	(4,006,500.00)
Expenditures			
Staffing/Consultants	$ 120,000.00	$ 11,437.50	$ 108,562.50
Legal Services	320,000.00	1,428.00	318,572.00
Professional Services	310,000.00	13,600.00	296,400.00
Memberships & Due	15,000.00	-	15,000.00
Print/Mail Services	132,000.00		132,000.00
Advertising	10,000.00		10,000.00
Graphic Design Services	10,000.00		10,000.00
Website Maintenance	2,500.00		2,500.00
Audit Services	40,000.00		40,000.00
CCA Bond	47,000.00		47,000.00
OPERATING EXPENSES	$ 1,006,500.00	$ 26,465.50	$ 980,034.50
CAISO Deposit	$ 500,000.00	$ -	$ 500,000.00
Cash-Flow & Lockbox Reserves	2,500,000.00		2,500,000.00
NON-OPERATING EXPENSES	$ 3,000,000.00	$ -	$ 3,000,000.00
TOTAL	$ 4,006,500.00	$ 26,465.50	$ 3,980,034.50
Net Results (Revenue - Expenditures)	$ -	$ (26,465.50)	$ (7,986,534.50)

STATEMENT OF FINANCIAL POSITION

CEA's Statement of Financial Position reports the assets and liabilities as of July 31, 2020.

Clean Energy Alliance
Statement of Financial Position
As of July 31, 2020

Assets		
River City Bank - Operating Account	$ 137,564.28	
Total Assets		$ 137,564.28
Liabilities		
Accounts Payable		
Current	$ 38,696.70	
Noncurrent	38,464.76	
Total Liabilities		$ 77,161.46
Reserve for Future Expenditures		$ 60,402.82

LISTING OF PAYMENTS

The report below provides the detail of payments issued by CEA for July 2020. All payments were within approved budget.

Clean Energy Alliance
List of Payments Issued July 2020

Date		Vendor	Description	Amount
07/07/17	ACH	WSPP	Membership - FY2020	25,000.00
07/09/20	ACH	RWG Law	May 2020 General Counsel Svcs	5,944.20
07/22/20	ACH	Bayshore Consulting	June 2020 CEO Services	9,937.50
07/22/20	ACH	Hall Energy	June 2020 Energy Procurement Counsel Svcs	2,439.50
07/22/20	ACH	Pacific Energy Advisors	June 2020 Technical Consulting Svcs	18,598.50
			Total July Payments	$ 61,919.70

FISCAL IMPACT

There is no fiscal impact associated with this item.

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 2: Clean Energy Alliance Operational, Administrative and Regulatory Affairs Update

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RECOMMENDATION:

1) Receive and File Community Choice Aggregation Update Report from Interim CEO.
2) Receive Community Choice Aggregation Regulatory Affairs Report from Special Counsel.

BACKGROUND AND DISCUSSION:

This report provides an update to the Clean Energy Alliance (CEA) Board regarding the status of the operational, administrative and regulatory affairs activities.

OPERATIONAL UPDATE

CEA is meeting its milestones for the implementation of its community choice aggregation (CCA) program and is on track to begin serving customers in May 2021. (Attachment A - Clean Energy Alliance Timeline of Implementation Action Items).

CEA Launch Schedule

As you are aware, San Diego Gas & Electric (SDG&E) has been working over the past several years on their Customer Information System replacement program, known as Envision. They had committed to, and were on track, for a January 4, 2021 go live, despite the challenges of working remote in the COVID-19 environment. With a January 2021 go live, SDG&E committed to supporting the CEA launch of May 2021. On Friday July 10, CEA staff, its regulatory attorney Ty Tosdal and data manager Calpine Energy Solutions participated in a call with San Diego Community Power and SDG&E regarding the recently approved California Public Utilities Commission (CPUC) Decision D. 20-06-003, which requires the Investor Owned Utilities (IOU) to adopt rules and policy changes designed to reduce the number of residential disconnections, provide assistance with debt forgiveness and offer extended payment plans. The decision is required to be implemented by the IOUs April 2021. This timing has presented a challenge to SDG&E to keep its go live date of January 4, 2021 while also meeting the requirements of the decision. SDG&E submitted a letter to the CPUC requesting an extension to September 30, 2021 for implementing the new procedures and policies required by the decision. This request was denied by the CPUC, resulting in SDG&E postponing implementation of its Envision project to April 2021.

CEA and its consultants have been working diligently with SDG&E to develop a launch schedule that minimized impact to CEA while also minimizing the risk of incorrect bills being sent to customers. SDG&E has proposed a two-phased schedule with accounts transitioning to CEA in May and June 2021. May 2021 Phase 1 would include the transition of Solana Energy Alliance customers to CEA as well as customers who do not have complex billing plans in Carlsbad and Del Mar. Those customers who have been identified with complex billing plans would transition in June 2021. CEA is working with its consultants, Pacific Energy Advisors and Calpine Energy Solutions to evaluate the impact of this two-

phased approach from an operational and financial perspective. Staff anticipates providing the Board with an updated pro forma reflecting this new phased approach.

Should the proposed change work from an operational and financial perspective, and the Board supports the change, several regulatory actions would need to be taken, including providing proper notification to the CPUC Energy Division and working with SDG&E regarding the impact to resource adequacy requirements.

Expansion of Clean Energy Alliance
Staff has no update regarding CEA expansion.

Regulatory Compliance Filings
The Integrated Resource Plan (IRP) provides the CPUC with CEA's 10-year projected electricity load as part of the integrated resource planning process to ensure that California's electric sector meets its GHG reduction goals while maintaining reliability at the lowest possible costs. Although the IRP was originally due in April 2020, its due date has been extended to September 2020. The IRP will be presented to the Board at this meeting and submitted by the September 1 deadline.

Long-Term Renewable Procurement
As a load serving entity, CEA will be required to procure 65% of its minimum required renewable portfolio standards in contracts of 10-years or longer. To ensure compliance with this requirement, work has begun in developing specification for a long-term renewable solicitation. The solicitation process, from beginning through final execution can be lengthy, particularly in light of the impacts of COVID-19 on the renewable development industry. The solicitation opened on July 1, 2020 with proposals due July 27, 2020. CEA's consultant, Pacific Energy Advisors, have been evaluating the responses to develop a short list of projects to move forward with negotiations.

Request for Proposals
Request for Qualifications 2020-004 for Portfolio Manager and Scheduling Coordinator
At its May 21, 2020 meeting the Board authorized issuance of RFQ 2020-004, Portfolio Manager and Scheduling Coordinator Services with responses due June 17, 2020. CEA received four responses for portfolio management services and four responses to the Scheduling Coordinator Services. Staff is continuing to evaluate the responses related to the Scheduling Coordinator tasks. The Portfolio Manager tasks portion is recommended for award at this meeting.

Request for Proposals 2020-005 for Communications and Marketing Services
At its May 21, 2020 meeting the Board authorized issuance of RFP 2020-005, Communications and Marketing Services with responses due June 19, 2020.

The scope of work requested in the RFP included:

- Community outreach and stakeholder engagement
- CEA branding, design, messaging and identity
- Website update, content development related to CEA implementation and maintenance
- Regulatory required noticing, marketing and advertising campaign
- Media relations and public affairs
- Project management/performance metrics

CEA received eleven responses to the RFP:

- Aqua Community Relations
- Brown Marketing Strategies
- Circlepoint
- Cook & Schmid
- Loma Media
- Tripepi Smith
- Southwest Strategies
- JPW Communications
- Lane Sharman – Community Engagement and Stakeholder Outreach only
- Jacqueline Rossow Consulting
- Selene Lawrence

The proposals were reviewed and rated by City of Carlsbad Communications staff Kristina Ray and Nikki Matosian and Barbara Boswell, Interim Chief Executive Officer.

The responses were evaluated based on three categories:

- Experience and qualifications: demonstrated experience performing the scope of work;
- Approach to performing scope of work: Approach demonstrated ability to perform tasks and meet CEA goals;
- Project costs: Fees were realistic for services being performed.

A short list of firms to be interviewed was developed based on the results of the RFP evaluations. The interview panel included Jason Haber, City of Carlsbad, Clem Brown, City of Del Mar, Dan King, City of Solana Beach, Nikki Matosian, City of Carlsbad Communications and Barbara Boswell, Interim Chief Executive Officer.

The four firms invited to interview and fee proposed is summarized below:

FIRM	NOT TO EXCEED AMOUNT
Circlepoint	$232,310
Cook & Schmid	$148,634
Loma Media	$75,000
Tripepi Smith	$71,441

Based on the interviews and subsequent reference checks, the committee recommends Tripepi Smith as the firm that will best fits the needs of CEA and its Member Agencies. Tripepi Smith brings their wealth of experience providing communications and marketing services to local governments throughout California, including CCA programs. The Tripepi Smith fee is within the Interim CEO authority to execute.

Administrative and Operational Policies
During the coming months as CEA prepares for its implementation and operation, policies will be brought to the Board for consideration in future Board meetings. The policies as proposed will be based on Government Code or regulatory requirements and best practices of successfully operational CCAs.

The policies and timeline as currently anticipated are:

September 17 Board Meeting

- Energy Risk Management Policy
- Records Retention Policy
- Investment Policy

REGULATORY UPDATE

Attached is a regulatory report from Ty Tosdal, Special Counsel, providing a summary of key regulatory proceedings (Attachment B - Tosdal APC Energy Regulatory Update).

Due to a conflict of interest, Special Counsel Tosdal has informed CEA that his firm is unable to represent CEA for the SDG&E ERRA proceeding which is the rate proceeding that the annual generation and Power Charge Indifference Adjustment rates are set. Due to the critical nature of this proceeding, it is in CEA's best interest to engage the services of another legal firm to represent CEA in this proceeding. It is anticipated that the fee for these services will be approximately $25,000, which is within the Interim CEO signature authority. CEA is in the process of seeking proposals from firms for the representation. This proceeding was anticipated as part of the CEA legal services budget, and sufficient funds are available to cover the engagement.

FISCAL IMPACT

There is no fiscal impact by this action.

ATTACHMENTS:

Attachment A - Clean Energy Alliance Timeline of Implementation Action Items

Attachment A

Clean Energy Alliance
Timeline of Implementation Related Action Items

Timing	Date Completed	Description	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20
12/19/19	12/19/19	Appoint Interim Executive Director									
12/19/19	12/19/19 & 12/23/19	Approve & File Implementation Plan & Statement of Intent									
1/16/20	1/16/20	Direction on Banking and Credit Solutions									
1/16/20	1/16/20	Authorize RFP for Technical Consultant to Assist with Regulatory Filings									
1/16/20	1/16/20	Authorize RFP for Data Manager/Call Center									
1/16/20	1/16/20	CEA Public Outreach and Marketing Kickoff									
1/20/20	1/20/20	Issue RFP for Technical Consultant & Data Manager									
2/20/20	2/20/20	Select Financial Institution & Approve Financing Plan									
2/20/20	2/20/20	Select Technical Consultant to Assist with Regulatory Filings									
2/20/20	2/20/20	Select Data Manager									
2/20/20	2/20/20	Staff Develop & Submit Draft Customer Notice to CPUC									
2/20/20	2/20/20	Develop Renewable Portfolio Standards Procurement Plan									
2/20/20	2/20/20	Authorize Execution of Service Agreement with SDG&E									
4/20/20	4/23/20	Post CCA Bond with CPUC									
4/20/20	4/23/20	Execute Service Agreement with SDG&E & Submit to CPUC									
4/20/20	4/20/20	Year-Ahead Resource Adequacy Forecast Filing									
6/30/20		Initial Resource Adequacy Solicitation									
6/29/20		File 2020 Renewable Portfolio Standards Procurement Plan									
8/20/20		Approve Integrated Resource Plan									
8/31/20		File Integrated Resource Plan									

Key:

Administrative
Implementation Plan Related
Regulatory Compliance

Clean Energy Alliance
Timeline of Action Items
CCA Program Related

Timing	Description	3rd Qtr '20	4th Qtr '20	1st Qtr '21	Apr-21	May-21	Jun-21	Jul-21
9/1/20	Marketing/Customer Outreach Plan Development & Kickoff							
9/17/20	Approve Policies:							
	Records Retention Policy							
	Investment Policy							
9/17/20	Bid Evaluation and Criteria Scoring System							
9/17/20	Award Scheduling Coordinator Services							
9/17/20	Introduce Energy Risk Management Policy							
11/1/20	System Testing with SDG&E							
11/1/20	Set up Call Center/Scripting/IVR Recordings							
1/1/21	Create Customer Pre- and Post-Enrollment Notices							
2/1/21	Rate Setting							
3/1/21	Customer Noticing							
5/1/21	Launch							

Key:

Board Actions/Activity
Staff/Consultant Activity
Marketing/Customer Outreach
CCA Launch

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 3: Clean Energy Alliance 2020 Integrated Resource Plan

RECOMMENDATION:

Adopt Resolution approving 2020 Clean Energy Alliance Integrated Resource Plan.

BACKGROUND AND DISCUSSION:

At its Special Meeting July 23, 2020, the Clean Energy Alliance (CEA), the Board received a presentation regarding the Integrated Resource Plan (IRP).

The CEA Joint Power Authority Agreement Section 6.3 directs that the Authority "shall cause to be prepared an Integrated Resource Plan in accordance with California Public Utilities Commission regulations, and consistent with California Public Utilities Commission regulations…" Public Utilities Code Section 454.52 requires all California Public Utilities Commission (CPUC) load serving entities, including community choice aggregation (CCA) programs file an Integrated Resource Plan (IRP) with the CPUC every two years. The IRP looks out at a 10-year horizon and looks at the procurement plan to meet the state's goals of reducing greenhouse gas (GHG) emissions by 40% from 1990 levels by 2030 and 60% renewable energy resources by December 31, 2030.

Section 454.52(b)(3) further requires that the IRP of a CCA be submitted to its governing board for approval and shall achieve the following:

(A) Economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals of achieving 40% reduction in GHG emissions from 1990 levels by 2030 and procure 60% renewable energy resources by December 31, 2030.

(B) A diversified procurement portfolio consisting of both short-term and long-term electricity and electricity-related and demand reduction products.

(C) Resource Adequacy requirements.

The 2020 IRP filing is prepared using the California Public Utilities Commission (CPUC) provided Narrative Template, Resource Data Template, and the Clean Power Supply System Calculator. Two plans are required to be filed in 2020, consistent with a statewide GHG emission limit for the electric sector for 2030 of 46 MMT and a lower limit of 38 MMT.

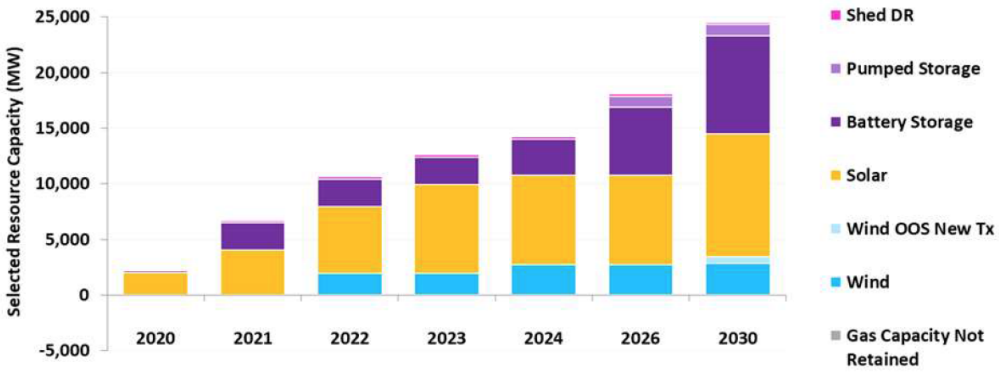
The 2030 GHG benchmarks based on the GHG emissions limit are as follows:

LSE	Proportion of 2030 emissions inclusive of industrial load*	2030 Load (GWh)	Proportion of 2030 Load within IOU Territory	2030 GHG emissions benchmark (MMT) -- 46 MMT scenario	2030 GHG emissions benchmark (MMT) -- 38 MMT scenario
SDG&E Area					
Bundled	8.84%	5,366	29.46%	1.198	0.990
Direct Access		3,940	21.63%	0.880	0.727
Clean Energy Alliance		992	5.45%	0.222	0.183
Solana Energy Alliance		0	0.00%	0.000	0.000
San Diego Community Power		7,914	43.45%	1.768	1.460

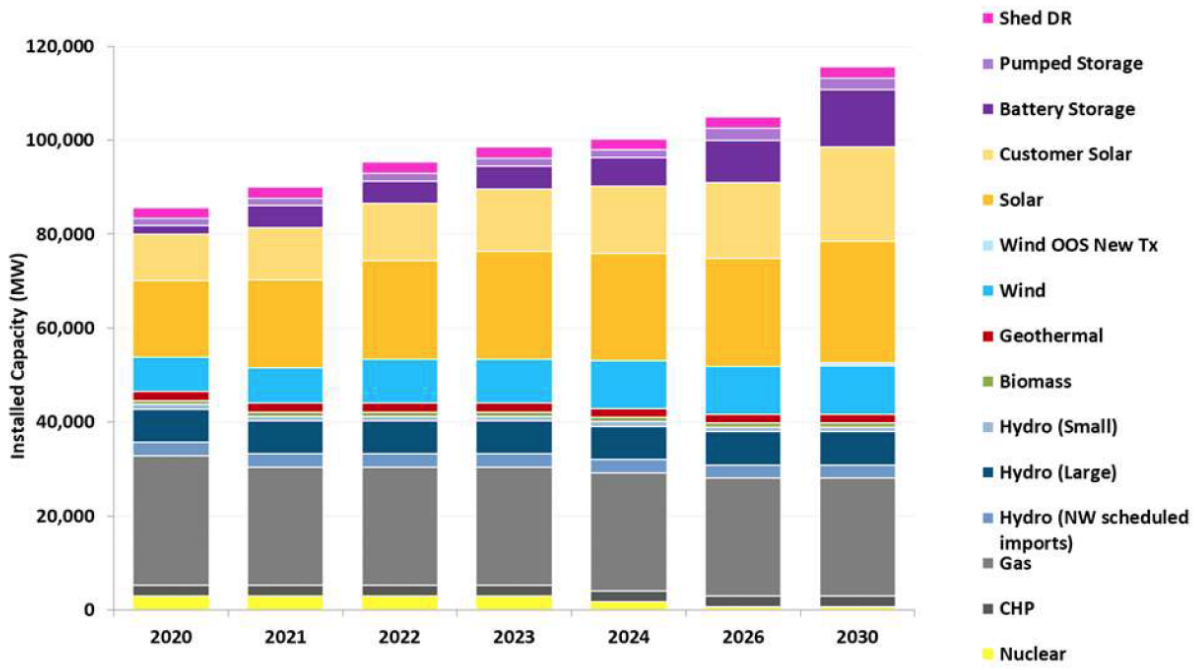
Assumptions for CEA's IRP include a renewable energy portfolio target of 50% at launch increasing to 100% by 2035, diversity in planned generation mix (solar, wind, natural gas, battery storage, etc) for energy and resource adequacy, assumptions regarding new buildout vs. use of existing resources and geographic regions for planned resources.

The state provides its assumptions related to the types of new resources that will be needed to meet the state's goals as shown below:

Cumulative buildout of new resources



Cumulative Resources



The IRP will be submitted to the CPUC by the due date of September 1, 2020.

FISCAL IMPACT

There is no fiscal impact associated with this item.

ATTACHMENT

Attachment A - Resolution Approving Clean Energy Alliance Integrated Resource Plan
Attachment B – Clean Energy Alliance Integrated Resource Plan

RESOLUTION NO. ____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CLEAN ENERGY ALLIANCE APPROVING AN INTEGRATED RESOURCE PLAN

WHEREAS, Community Choice Aggregation (CCA), authorized by Assembly Bill 117, is a state law that allows cities, counties and other authorized entities to aggregate electricity demand within their jurisdictions in order to purchase and/or generate alternative energy supplies for residents and businesses within their jurisdiction while maintaining the existing electricity provider for transmission and distribution services; and

WHEREAS, Senate Bill 350, approved October 7, 2015, establishes a requirement for Community Choice Aggregation Programs to develop an Integrated Resource Plan and submit it to the California Public Utilities Commission for certification; and

WHEREAS, Clean Energy Alliance's Integrated Resource Plan was developed consistent with the requirements as established by the California Public Utilities Commission.

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD OF DIRECTORS OF THE CLEAN ENERGY ALLIANCE, AS FOLLOWS:

SECTION 1. That based upon and in consideration of staff reports, presentations, public testimony and comment, and such other matters presented to the Board of Directors during the public meeting on this matter, the Board of Directors finds and declares the foregoing recitals to be true and correct and incorporates the same as substantive findings herein.

SECTION 2. That the Integrated Resource Plan for LCE has been developed in compliance with SB 350 and California Public Utilities Commission direction and is hereby approved.

SECTION 3. That the Board Secretary shall certify to the adoption of this Resolution, and it shall become effective immediately upon adoption.

PASSED, APPROVED and ADOPTED this 20th day of August 2020 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST: APPROVED:

Sheila Cobian, Board Secretary

Eleanor Haviland, Chair

Standard LSE Plan

CLEAN ENERGY ALLIANCE

2020 INTEGRATED RESOURCE PLAN

SEPTEMBER 1, 2020

Table of Contents

I. Introduction and Executive Summary

a. Introduction

Description of CEA

Clean Energy Alliance is a Joint Powers Authority ("JPA") formed by the communities of Carlsbad, Del Mar and Solana Beach in November 2019.

As a JPA CEA is a *local government agency*. CEA is governed by a three-member board composed of representatives of its member local governments. Through these representatives CEA is controlled by and accountable to the communities CEA serves.

CEA plans to provide retail electric generation services and complementary energy programs to customers within the municipal boundaries of the following communities:

- City Carlsbad
- City of Del Mar
- City of Solana Beach

CEA plans to begin serving load in May 2021, with and anticipated customer base of approximately 51,000 residential accounts and 8,000 commercial and industrial accounts. The Solana Energy Alliance is an existing CCA program serving the City of Solana Beach, and the customers currently served by the Solana Energy Alliance are planned to be transferred to service by CEA in May 2021. As directed by the Commission, CEA's integrated resource plan includes the loads and resources associated with the existing Solana Energy Alliance CCA program.

CEA's Mission

CEA was formed for the express purpose of empowering its member communities to choose the generation resources that reflect their specific values and needs. CEA's purpose is to be an energy services provider, which benefits the community through the delivery of cleaner and more locally produced electricity, demand reduction, economic investment and competitive rates for residents, businesses, and municipal facilities in the service territory.

Consistent with Public Utilities Code Sections 366.2(a)(5) and 454.52 (b)(3),[1] all procurement by CEA, including the portfolios set forth in this IRP, *must* comply with policy direction provided by CEA's governing board.

[1] All further citations to statute are to the California Public Utilities Code unless otherwise noted.

Introduction to CEA's IRP

In accordance with the requirements of California Public Utilities Code Sections 454.51 and 454.52 and Commission Decisions ("D.") 20-03-028, D.19-11-016, D.18-02-018, D.19-04-040, and formal guidance provided by the Commission's Energy Division , CEA is providing its load serving entity ("LSE") -specific Integrated Resource Plan ("IRP") to the Commission for certification review and use in the Commission's statewide planning process. In addition to this narrative, CEA's IRP includes the following documents:

- CEA's 38 MMT Resource Data Template
- CEA's 46 MMT Resource Data Template
- CEA's 38 MMT Clean System Power Calculator
- CEA's 46 MMT Clean System Power Calculator

As directed in D.20-03-028, CEA is submitting two conforming portfolios in this IRP, one based on the Commission's 46 MMT greenhouse gas (GHG) reduction benchmark and associated 38 MMT reference system portfolio ("RSP"), and a second based on the Commission's 46 MMT benchmark and RSP.

As demonstrated by the significant differences between the Commission's 2017-2018 RSP and its 2019-2020 RSP, projecting resource need over the time horizon covered by the IRP is an inexact matter. Further, CEA is a new entity currently focused primarily on activities leading to the successful launch of the program in 2021. The future resources identified in CEA's IRP represent CEA's best good-faith projection of the resource mix that it will procure over the IRP planning horizon, based on the best information currently available. The resources identified in future iterations of CEA's IRP may change due to new information and changed circumstances, and the ultimate resource mix that CEA actually procures may differ from what is reflected in the plan due to a number of variables including availability of supply, price of supply and/or other market or regulatory considerations.

Board Approval of IRP

In compliance with Public Utilities Code Section 454.52(b)(3), this IRP was formally submitted to CEA's governing board for approval based on the IRPs compliance with Sections 454.51 and 454.52 (the "IRP Statute") and all relevant board-adopted procurement requirements CEA's governing board. On August 20, 2020 CEA's board issued Resolution [Resolution name/number] which formally approves this IRP, and adopts CEA's 46 MMT Preferred Conforming Portfolio ("46 MMT PCP") and its 38 MMT Preferred Conforming Portfolio ("38

MMT PCP"). In [Resolution name/ number] CEA's board also makes the following determinations regarding CEA's Preferred Conforming Portfolios ("PCPs"):

- CEA's PCPs achieves economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in Section 454.52(a)(1)(A-I).
- CEA's PCPs includes a diversified procurement portfolio consisting of both short-term and long-term electricity and electricity-related and demand reduction products.
- CEA's PCPs achieves the resource adequacy requirements established pursuant to Public Utilities Code Section 380.
- CEA's PCPs are consistent with the procurement timing, resource mix, and operational attributes of both the Commission's 38 MMT RSP and the Commission's 46 MMT RSP.
- CEA's PCPs are fully compliant with all CEA board-adopted procurement directives.

A copy of [Resolution name/number] is attached to this IRP Narrative and is identified as Attachment [#].

Request for Certification

CEA respectfully requests that the Commission certify this IRP.

As both the Legislature and the Commission have recognized, The Legislature has granted CCAs broad authority to procure resources on their customers' behalf, an authority limited only where "other generation procurement arrangements have been expressly authorized by statute."[2] Likewise, the Legislature has granted CCAs autonomy in setting their own rates and managing interactions with their customers.[3] The Commission has three primary interests the CCA IRP process:

- Ensuring that CCA IRPs provide the CCA procurement information that the Commission needs in order to develop its statewide plan.[4]

2 Public Utilities Code Section 366.2(a)(5).
3 [add].
4 [add].

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- Ensuring that CCAs' current and planned procurement is consistent with the resource adequacy ("RA") requirements established pursuant to Public Utilities Code Section 380.[5]
- Ensuring that CCAs' current and planned procurement satisfies the CCA's share of renewables integration resource identified in the Commission's Reference System Portfolio ("RSP"), and that the CCA either self-provides or pays for IOU procurement for its share of any renewable integration shortfall.[6]

CEA has prepared its IRP with these interests in mind, and thanks the Commission in advance for its recognition of CCA procurement autonomy and the benefits of a collaborative approach with CCAs in its certification review of CEA's IRP.

b. Executive Summary

This narrative provides a detailed description of the development and content of CEA's PCPs, each portfolio's compliance with applicable requirements, and an action plan detailing CEA's planned next steps.

CEA developed its IRP through the following steps:

- CEA compiled data for its existing energy contracts, Resource Adequacy ("RA") capacity contracts, and its share of capacity for allocated Cost Allocation Mechanism ("CAM") resources.
- For each IRP planning year, CEA identified its short positions relative to CEA planning targets in consideration of its assigned load forecast.
- CEA populated the Resource Data Template with all current contracts.
- CEA compiled detailed information on projects for which it is currently negotiating power purchase agreements, including information regarding project status and timing.
- CEA identified future contracts it expects for new solar, storage, and wind generation. CEA prioritized the selection of future resources that ensure CEA's overall portfolio of new resources is consistent with the relevant Reference System Portfolio's resource attribute/category mix,[7] procurement timing, and CEA's proportional share of planned new procurement.
- CEA added generic future contracts with existing resources to help fill its remaining open positions.

[5] Section 454.52(b)(3)(C).
[6] Section 454.51.
[7]

- CEA used the Commission's Clean System Power Calculator Tool to check the GHG emissions associated with the resulting portfolio to ensure that these emissions are equivalent to CEA's assigned share of the 38 MMT benchmark; CEA added planned purchases of large hydro-electric energy in sufficient volume to ensure that portfolio emissions were equal to or below CEA's assigned share of the 38 MMT GHG benchmark
- CEA identified the resulting portfolio as its 38 MMT PCP
- Using the 38 MMT PCP as a starting point, CEA replaced planned large hydro-electric and renewable energy procurement with system power until the portfolio had emissions equal to the CEA assigned share of the 46 MMT GHG benchmark.
- CEA identified the resulting portfolio as its 46 MMT PCP.
- CEA checked both its 38 MMT PCP and its 46 MMT PCP for reliability by comparing the total portfolio net qualifying capacity against CEA's RA requirements for the month of September in each year of the planning period. CEA further established that its planned incremental capacity exceeds its pro rata share of capacity that may be needed for replacement of Diablo Canyon.

CEA reached the following findings regarding its 38 MMT PCP:

- CEA's 38 MMT portfolio includes the procurement of the following new resources:
    - New hybrid resources totaling 150 MW solar/ 75 MW battery storage
    - New wind resources totaling 75 MW
    - New long duration storage of 7 MW
- CEA's 38 MMT portfolio provides for the following overall resource mix in 2030:
    - 13 MW of large hydro
    - 107 MW of Wind
    - 200 MW of Solar
    - 75 MW of Short Duration Battery Storage
    - 7 MW of Long Duration Storage
    - 117 MW of Natural Gas/Other (capacity-only)
- CEA's 38 MMT portfolio is consistent with procurement timing, resource quantities, and general resource attributes identified in the 38 MMT RSP.
- CEA's 38 MMT portfolio would have 2030 emissions of 0.151 MMT. This is slightly below CEA's assigned share of 2030 emissions, 0.152 MMT.
- CEA's 38 MMT portfolio meets all relevant reliability metrics.
- CEA's 38 MMT portfolio provides more than CEA's load-proportional share of renewable integration resources.

CEA reached the following findings regarding its 46 MMT portfolio:

- CEA's 46 MMT portfolio includes the procurement of the following new resources:
    - New hybrid resources totaling 150 MW solar/ 75 MW battery storage
    - New wind resources totaling 75 MW
    - New long duration storage of 7 MW
- CEA's 46 MMT portfolio provides for the following overall resource mix in 2030:
    - 94 MW of Wind
    - 180 MW of Solar
    - 75 MW of Short Duration Battery Storage
    - 7 MW of Long Duration Storage
    - 117 MW of Natural Gas/Other (capacity-only)
- CEA's 46 MMT portfolio conforms to the procurement timing, resource quantities, and general resource attributes identified in the 46 MMT RSP.
- CEA's 46 MMT portfolio would have 2030 emissions of 0.189 MMT. This is equivalent to CEA's assigned share of 2030 emissions, 0.189 MMT .

To implement its PCPs, CEA is adopting the action plan described in section IV, below. This action plan consists of the following steps:

- CEA will periodically solicit offers for new renewable generation and storage projects. These resources are typically secured through long term power purchase agreements. CEA expects to secure power purchase agreements for new projects in multiple solicitations conducted over the next several years.
- Periodically throughout the year, CEA will solicit offers for short term renewable energy, resource adequacy, system energy, and other products needed to balance the portfolio and adhere to position limits established through CEA's risk management policy and practices. These solicitations can take the form of formal request for offers processes, bilateral discussions, and transactions arranged through broker markets.

II. Study Design

a. Objectives

CEA had the following objectives in performing the analytical work to develop its IRP:

1. Identify a 38 MMT portfolio with emissions equal to CEA's proportional share of the 38 MMT GHG reduction benchmark, as determined using the Commission's emissions calculator.

2. Identify a 46 MMT portfolio with emissions equal to CEA's proportional share of the 46 MMT GHG reduction benchmark, as determined using the Commission's emissions calculator.

3. Identify 38 and 46 MMT portfolios that achieve economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in Section 454.52(a)(1)(A-I).

4. Identify diverse and balanced 38 and 46 MMT portfolios that include both short-term and long-term electricity and electricity-related and demand reduction products.

5. Identify portfolios that achieve the resource adequacy requirements established pursuant to Public Utilities Code Section 380 and fully provide CEA's share of system reliability and renewable integration resources.

6. Identify portfolios that fully comply with all CEA board-adopted procurement directives.

7. Identify portfolios that are fully compliant with CEA's obligations under the Renewable Portfolio Standard program.

8. Identify portfolios that are cost-effective and minimize rate impacts on CEA's customers.

b. Methodology

i. Modeling Tool(s)

In developing its planned portfolios CEA uses modeling tools that quantify portfolio targets for renewable energy content, capacity, and portfolio GHG emissions, as well as physical and financial positions to ensure adherence to sound risk management business practices. CEA uses proprietary models to assess annual, monthly, and hourly open positions taking account of forecast hourly electric loads and expected deliveries from CEA's resource portfolio. CEA uses a proprietary financial model to project power supply costs and incorporate existing and planned procurement into an overall financial assessment of revenues, costs, and cash flows. CEA also utilities a commercially available energy trading and risk management system to monitor positions, market exposure, credit exposure, value-at-risk, and other risk management metrics.[8]

[8] CEA Solutions TRMTracker SaaS

For new resource selection, CEA relied upon the modeling and assumptions in the Reference System Portfolio as well as CEA's recent procurement experience which provides insight into resource availability and cost. The mix of new resources selected in the RSP is similar to the mix CEA would select based on its procurement experience.

GHG emissions were assessed using the Commission's Clean System Power tool for the 38 MMT and 46 MMT variations.

ii. Modeling Approach

Load Forecast

CEA developed its IRP using its assigned load forecast from Attachment A to the May 20, 2020 *Administrative Law Judge's Ruling Correcting April 15, 2020 Ruling Finalizing Load Forecasts and Greenhouse Gas Benchmarks for Individual 2020 Integrated Resource Plan Filings* ("Load Forecast Ruling"). As instructed by the Commission, CEA's integrated resource plan includes the existing contracts and the 2020 loads of the Solana Energy Alliance. CEA's assigned load forecast, including Solana Energy Alliances 2020 assigned load forecast, is as follows:

Table 1: CEA's 2020-2030 Load Forecast

Year	Load Forecast (GWh)
2020	58
2021	144
2022	929
2023	927
2024	929
2025	933
2026	938
2027	946
2028	953
2029	960
2030	968

Load Shape

In developing its portfolio CEA used the default load shape from the Clean System Power Calculator, which reflects the CAISO hourly system average load shape forecast for the 2019 IEPR Mid Baseline Mid AAEE case.

The use of this load shape does not change CEA's total annual energy volumes for both load and load modifiers, and these energy volumes remain consistent with CEA's assigned load forecast.

Load-Proportional GHG Emissions Benchmark

CEA assessed its modeling against its 2030 load-proportional share of the respective 38 MMT and 46 MMT benchmarks, as specified in the 38 MMT and 46 MMT Clean System Power tools. CEA understands these values to be consistent with the benchmarks assigned in Table 1 of the Load Forecast Ruling, with adjustment for certain allocated emissions as reflected in the Clean System Power tools:[9]

Table 2: CEA's Assigned Shares of GHG Reduction Benchmarks

2030 Load (GWH)	Proportion of 2030 Load Within IOU Territory	2030 GHG Benchmark (MMT) – 46 MMT Scenario	2030 GHG Benchmark (MMT) – 38 MMT Scenario
1,141	5.3%	0.189	0.152

Compiling Existing Resources

To populate its baseline resource templates, CEA added existing resources from the following sources:

- Energy Contracts.
- Capacity (Resource Adequacy) Contracts.
- CEA's assigned share of capacity for CAM resources, taken from the most recent year-ahead CAM resource list available on the Commission's Resource Adequacy Compliance Materials webpage.

Selecting New Resources

To identify its new resource procurement, CEA first determined the new resource capacity it intends to add each year, in consideration of resource need (open positions), long-term renewable contracting requirements, renewable portfolio standards, resource adequacy requirements, the need for incremental resource adequacy capacity to contribute to system reliability and renewable integration needs, the potential for technological improvements, and financial considerations. CEA selected resource types based on its experience with competitive

[9] Load Forecast Ruling at 5-7 (Table 1).

solicitations for new renewable and storage resources as well as by making reference to the studies and modeling underlying the adopted Reference System Portfolios.

Confirming Reliability

CEA's portfolios were evaluated to ensure that sufficient dependable capacity (net qualifying capacity) is available to meet peak load requirements plus a 15% reserve margin. CEA used technology specific Effective Load Carrying Capacity ("ELCC") factors provided by the Commission to assess the contribution of each resource to system reliability. CEA's portfolios were designed to ensure that current incremental resource adequacy capacity obligations are met and that CEA contributes to new resource development to address fossil fuel retirements and decommissioning of the Diablo Canyon nuclear power plant.

Calculating GHG Emissions

CEA calculated the emissions associated with its 38 MMT PCP and its 46 MMT PCP using the Commission's Clean System Power calculator tool. The assigned load forecast and default load shapes and behind the meter adjustments were used for this assessment, along with the planned supply portfolios. The results were checked against the assigned GHG benchmarks included in the Clean System Power tools.

III. Study Results

a. Conforming and Alternative Portfolios

As required by the Commission, CEA is submitting two conforming portfolios – a 38 MMT PCP that conforms to the Commission's 38 MMT RSP and a 46 MMT PCP that conforms to the Commission's 46 MMT RSP. CEA is not submitting alternative portfolios.

CEA's 38 MMT PCP

The table included as Attachment B to this Narrative provides a summary of CEA's 2030 38 MMT Portfolio, identifying resources by type and distinguishing between the following procurement categories:

- Existing resources (energy and capacity) that CEA owns or contracts with, consistent with definitions provided in the Resource Data Template.
- Existing resources (energy and capacity) that CEA plans to contract with in the future.

- Existing resources (capacity) that CEA partially pays for through CAM.
- New Resources (energy and capacity) that are under development that CEA is planning to procure.
- Future new resources (energy and capacity) that CEA is planning to procure.

In summary, to meet CEA's projected 2030 energy demand of 968 GWh, CEA has selected a 2030 38 MMT PCP composed primarily of the following resources:

- Existing solar (planned procurement) – 50 MW.
- Existing wind (planned procurement) – 32 MW
- Existing hydro (planned procurement) – 13 MW
- New solar (future resources) – 150 MW
- New wind (future resources) - 75 MW
- New short duration storage (future resources) – 75 MW
- New long duration storage (future resources) – 7 MW

Additionally, CEA's 2030 38 MMT PCP includes capacity-only resources composed primarily of the following resources:

- CAM, Demand Response and Energy Efficiency Allocations – 45 MW
- Existing natural gas and other (planned procurement) - 72 MW

CEA's portfolio includes a mix of existing and new resources. Approximately 225 MW of CEA's 2030 portfolio is composed of new resources, reflecting CEA's role as an active player in the State's development of new renewable and storage resources.

CEA's 38 MMT PCP Is Consistent With The 38 MMT RSP

The new resources included in CEA's 38 MMT PCP are consistent with the 38 MMT RSP's 2030 new resource mix. Under D.20-03-028, "LSEs are not required to adhere directly to the exact proportion of resources selected by RESOLVE in the 46 MMT or 38 MMT portfolios, in developing their own portfolios" and "specific resources may be used as proxies for similar resources."[10] The Decision requires that LSEs procure resources in four broad categories defined by their attributes: long-duration storage (8-12 hours); short-duration storage (4 hours or less); hybrid resources; and other resources.[11]

As demonstrated in the following table, CEA's 38 MMT portfolio is generally consistent with CEA's proportional share of *new procurement* for each of the four "resource types" identified in D.20-03-028:

[10] D.20-03-028 at 63

[11] Id.

Table 3: 38 MMT PCP New Resource Procurement by Resource Type Compared to 38 MMT RSP

Resource Type	38 MMT RSP New Resources[12]	CEA Load-Proportional Share of 38 MMT RSP New Resources	CEA's 38 MMT Portfolio
Long-Duration Storage	1,605 MW	7	7
Short Duration Storage (4 hours or less)	9,714 MW	41	75
Renewable Resources	20,274	85	225
Hybrid Resources[13]	0 MW		0
Other Resources	222	1	0

The differences between CEA's raw proportional share of the 38 MMT RSP New Resources and the resources amounts in CEA's 38 MMT Portfolio reflect CEA's planned contributions to new resource development during this planning period. In particular, CEA plans to add significant new renewable generation and storage capacity to help reduce reliance on fossil fueled generation, while minimizing GHG emissions and maintaining reliability. As compared to the RSP, CEA's 38 MMT PCP includes more renewable energy and more short and long duration storage which helps contribute to system reliability and renewable resource integration.

CEA's 46 MMT PCP

The table included as Attachment B to this Narrative provides a summary of CEA's 2030 46 MMT PCP, identifying resources by type and distinguishing between the following procurement categories:

- Existing resources (energy and capacity) that CEA owns or contracts with, consistent with definitions provided in the Resource Data Template.
- Existing resources (energy and capacity) that CEA plans to contract with in the future.
- Existing resources (capacity) that CEA partially pays for through CAM.
- New Resources (energy and capacity) that are under development that CEA is planning to procure.
- Future new resources (energy and capacity) that CEA is planning to procure.

[12] D.20-03-028 at 46 (Table 8).

[13] CEA interprets the category "hybrid resources" as including generation resources that are capable of reliably dispatching to meet late-afternoon peak load. This would include biogas generation, combined solar and storage, and geothermal.

In summary, to meet CEA's projected 2030 load of 968 GWh, CEA has selected a 2030 46 MMT PCP composed primarily of the following resources:

- Existing solar (planned procurement) – 30 MW.
- Existing wind (planned procurement) – 19 MW
- New solar (future resources) – 150 MW
- New wind (future resources) - 75 MW
- New short duration storage (future resources) – 75 MW
- New long duration storage (future resources) – 7 MW

Additionally, CEA's 2030 38 MMT PCP includes capacity-only resources composed primarily of the following resources:

- CAM, Demand Response and Energy Efficiency Allocations – 45 MW
- Existing natural gas and other (planned procurement) - 72 MW

CEA's portfolio includes a mix of existing and new resources. Approximately 225 MW of CEA's 2030 portfolio is composed of new resources, reflecting CEA's role as an active player in the State's development of new renewable and storage resources.

As demonstrated in the following table, CEA's 46 MMT PCP is generally consistent with CEA's proportional share of new procurement for each of the four "resource types" identified in D.20-03-028:

Table 4: 46 MMT PCP New Resource Procurement by Resource Type Compared to 46 MMT RSP

Resource Type	46 MMT RSP New Resources[14]	CEA Proportional Share of 46 MMT RSP New Resources	CEA's 46 MMT PCP
Long-Duration Storage	973 MW	4	7
Short Duration Storage (4 hours or less)	8,873 MW	37	75
Renewable Resources	14,460	61	225
Hybrid Resources[15]	0 MW	0	0
Other Resources	222 MW	1	0

[14] D.20-03-028 at 41 (Table 5).

[15] CEA interprets the category "hybrid resources" as including generation resources that are capable of reliably dispatching to meet late-afternoon peak load. This would include biogas generation, combined solar and storage, and geothermal.

The differences between CEA's raw proportional share of the 46 MMT RSP New Resources and the resources amounts in CEA's 46 MMT PCP reflect CEA's planned contributions to new resource development during this planning period. In particular, CEA plans to add significant new renewable generation and storage capacity to help reduce reliance on fossil fueled generation, while minimizing GHG emissions and maintaining reliability. As compared to the RSP, CEA's 46 MMT PCP includes more renewable energy and more short and long duration storage which helps contribute to system reliability and renewable resource integration.

b. Preferred Conforming Portfolios

38 MMT PCP

As demonstrated in Appendix A, CEA's 38 MMT PCP consists of a combination of:

- Utility-Scale Solar
- In-State Wind
- Large Hydro
- Short-Duration Storage
- Long-Duration Storage
- Natural Gas/Other (capacity only)

As stated above, in accordance with Section 454.51(b)(3), CEA's governing board has determined that the resource mix in its PCP achieves "economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in [Section] 454.51(a)(1)]." These benefits and characteristics are discussed as follows.

GHG Reduction Goals

CEA's 38 MMT PCP achieves results and performance characteristics consistent with the Section 454.52(a)(1)(A) goal of meeting the Commission's 38 MMT GHG reduction benchmark. The 2030 emissions from CEA's 38 MMT PCP are slightly lower than CEA's load-proportional share of the 38 MMT emissions benchmark. CEA's proportional share of the 38 MMT benchmark is 0.159 MMT.[16] According to the Commission's emissions calculator, CEA's 38 MMT PCP would account for 0.158 MMT in 2030 emissions, which is slightly below the assigned benchmark.

Renewable Energy

CEA's 38 MMT PCP achieves results and performance characteristics consistent with the Section 454.52(a)(1)(B) goal of ensuring that portfolios are composed of at least 50% eligible renewable

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resources. In 2030 CEA's 38 MMT overall PCP portfolio would consist of 82 percent eligible renewable generation, well in excess of the 50% target.

Minimizing Bill Impact

CEA's 38 MMT PCP achieves results and performance characteristics consistent with the Section 454.52(a)(1)(D) goal of minimizing the impact of planned procurement on ratepayers' bills. CEA's portfolio consists primarily of renewable resources that benefitted from increasing economies of scale over the past several years and have price projections that continue to drop in the foreseeable future.

CEA's recent procurement experience indicates that solar costs continue to decline, and lithium ion battery storage is increasingly cost effective relative to other capacity products available in the market, particularly when offered in a tax-advantaged hybrid configuration with solar generation.

CEA prioritizes cost competitiveness, reliability, use of renewable energy and local resource development. CEA anticipates that bill impacts will be minimized as new solar generation projects generally have lower net costs than the prices paid in the short-term renewable energy markets. Coupling new solar with battery storage increases the capacity value of the projects, displacing the need to buy expensive resource adequacy products, and provides limited dispatchability for the solar generation, minimizing the risk of degradation in energy value. Further, CEA's 38 MMT PCP minimizes exposure to volatile natural gas prices and the bill impacts that can result from periodic spikes in fossil fuel prices.

Ensuring System and Local Reliability

CEA's 38 MMT PCP achieves results and performance characteristics consistent with the Section 454.52(a)(1)(E) goal of ensuring system and local reliability. The 38 MMT PCP meets system resource adequacy requirements as detailed in Section III.f. CEA will meet its local resource adequacy requirements until such time as the central procurement entity takes on this responsibility pursuant to D.20-06-002. Some of the planned capacity-only contracts in CEA's 38 MMT PCP will be displaced by local resource adequacy procured by the central procurement entity. However, adoption of the central procurement entity construct is a recent development, and the details of its planned procurement are not yet known. To ensure there are no reliability gaps in CEA's 38 MMT PCP, and pursuant to Energy Division Guidance, CEA's portfolio assumes no CAM allocations or CAM resources beyond what is described in the most recently issued year-ahead CAM resource list and allocations. This approach, while consistent with Energy Division direction, will likely ultimately indicate more RA than CEA will be responsible for procuring. Thus, CEA provides this information with the understanding that its RA positions will be reduced by any future CAM allocations.

Demand-Side Energy Management

CEA's 38 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(G) goal of enhancing demand-side energy management. CEA's portfolio includes the effects of allocated demand response programs administered by SDG&E on behalf of all delivery service customers within its service area. CEA does not have current plans to administer demand response programs, but CEA may contract with demand response resources for resource adequacy capacity to the extent such opportunities are cost competitive and contribute to system reliability.

Minimizing Localized Air Pollutants With Emphasis on DACs

CEA's 38 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(H) goal of minimizing localized air pollutants and other GHG emissions with early priority on disadvantaged communities. CEA's 38 MMT portfolio relies primarily on renewable generation and hydro-electric generation and would have relatively low GHG and localized air pollution emissions. CEA's 38 MMT portfolio minimizes CEA's reliance on unspecified system power, instead opting for renewable generation procurement and development and hydro generation whenever feasible.

Results from the CSP tool indicate the following localized air pollutants associated with CEA's 38 MMT portfolio in 2030:

- NOx: 13
- PM 2.5: 7
- SO2: 1

These emissions derive from planned use of system energy in the 38 MMT PCP, as well as emissions from CHP resources and system energy assigned to the CEA portfolio by the CSP tool.

46 MMT PCP

As demonstrated in Appendix A, CEA's 46 MMT PCP consists of a combination of:

- Utility-Scale Solar
- In-State Wind
- Short-Duration Storage
- Long-Duration Storage
- Natural Gas/Other (capacity only)

As stated above, in accordance with Section 454.51(b)(3), CEA's governing board has determined that the resource mix in its PCP achieves "economic, reliability, environmental, security, and other benefits and performance characteristics that are consistent with the goals set forth in [Section] 454.51(a)(1)]." These benefits and characteristics are discussed as follows.

GHG Reduction Goals

CEA's 46 MMT PCP achieves emissions *equal to* CEA's proportional share of the 46 MMT benchmark. CCA Program's Proportional Share of the 46 MMT benchmark is 0.189 MMT. According to the Commission's emissions calculator, CEA's 46 MMT portfolio would account for 0.189 MMT in 2030 emissions

Renewable Energy

CEA's 46 MMT portfolio achieves results and performance characteristics that are consistent with the Section 454.52(a)(1)(B) goal of ensuring that portfolios are composed of at least 50% eligible renewable resources. In 2030 CEA's 46 MMT portfolio would consist of 74 percent eligible renewable generation, well in excess of the 50% target.

Minimizing Bill Impact

CEA's 46 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(D) goal of minimizing the impact of planned procurement on ratepayers' bills. CCA's portfolio consists primarily of renewable resources that benefitted from increasing economies of scale over the past several years and have price projections that continue to drop in the foreseeable future. CEA's portfolio consists primarily of renewable resources that benefitted from increasing economies of scale over the past several years and have price projections that continue to drop in the foreseeable future.

CEA's recent procurement experience indicates that solar costs continue to decline, and lithium ion battery storage is increasingly cost effective relative to other capacity products available in the market, particularly when offered in a tax-advantaged hybrid configuration with solar generation.

CEA prioritizes cost competitiveness, reliability, use of renewable energy and local resource development. CEA anticipates that bill impacts will be minimized as new solar generation projects generally have lower net costs than the prices paid in the short-term renewable energy markets. Coupling new solar with battery storage increases the capacity value of the projects, displacing the need to buy expensive resource adequacy products, and provides limited dispatchability for the solar generation, minimizing the risk of degradation in energy value. Further, CEA's 46 MMT PCP minimizes exposure to volatile natural gas prices and the bill impacts that can result from periodic spikes in fossil fuel prices.

Ensuring System and Local Reliability

CEA's 46 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(E) goal of ensuring system and local reliability.

The 46 MMT PCP meets system resource adequacy requirements as detailed in Section III.f. CEA will meet its local resource adequacy requirements until such time as the central

procurement entity takes on this responsibility pursuant to D.20-06-002. Some of the planned capacity-only contracts in CEA's 46 MMT PCP will be displaced by local resource adequacy procured by the central procurement entity. However, adoption of the central procurement entity construct is a recent development, and the details of its planned procurement are not yet known. To ensure there are no reliability gaps in CEA's 46 MMT PCP, and pursuant to Energy Division Guidance, CEA's portfolio assumes no CAM allocations or CAM resources beyond what is described in the most recently issued year-ahead CAM resource list and allocations. This approach, while consistent with Energy Division direction, will likely ultimately indicate more RA than CEA will be responsible for procuring. Thus, CEA provides this information with the understanding that its RA positions will be reduced by any future CAM allocations.

Demand-Side Energy Management

CEA's 46 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(G) goal of enhancing demand-side energy management. CEA's portfolio includes the effects of allocated demand response programs administered by SDG&E on behalf of all delivery service customers within its service area. CEA does not have current plans to administer demand response programs, but CEA may contract with demand response resources for resource adequacy capacity to the extent such opportunities are cost competitive and contribute to system reliability.

Minimizing Localized Air Pollutants With Emphasis on DACs

CEA's 46 MMT portfolio achieves results and performance characteristics consistent with the Section 454.52(a)(1)(H) goal of minimizing localized air pollutants and other GHG emissions with early priority on disadvantaged communities. CEA's 46 MMT portfolio relies primarily on renewable generation in combination with system energy and would have relatively low GHG and localized air pollution emissions.

Results from the CSP tool indicate the following localized air pollutants associated with CEA's 46 MMT portfolio in 2030:

- NOx: 16
- PM 2.5: 9
- SO2: 1

These emissions derive from planned use of system energy in the 46 MMT PCP, as well as emissions from CHP resources and system energy assigned to the CEA portfolio by the CSP tool.

c. GHG Emissions Results

CEA used its load-based proportional share of the 38 and 46 MMT benchmark to determine the emissions compliance for its 38 PCP and its 46 MMT PCP. CEA's assigned load-proportional share of the 38 MMT benchmark is 0.159 MMT. Based on the 38 MMT version of the CSP calculator, CEA's 38 MMT portfolio would result in total 2030 GHG emissions of 0.158 MMT, outperforming CEA's assigned share of the 38 MMT GHG reduction benchmark by 0.001 MMT.

CEA's assigned load-proportional share of the 46 MMT benchmark is 0.202 MMT. Based on the 46 MMT version of the CSP calculator, CEA's 46 MMT portfolio would result in total 2030 GHG emissions of 0.189 MMT, which is equal to its assigned load-proportional share of the 46 MMT benchmark.

d. Local Air Pollutant Minimization and Disadvantaged Communities

i. Local Air Pollutants

The 38 MMT version of the CSP calculator estimates the following emissions associated with CEA's 38 MMT portfolio:

- NOx: 13
- PM 2.5: 7
- SO2: 1

The 46 MMT version of the CSP calculator estimates the following emissions associated with CEA's 46 MMT portfolio:

- NOx: 16
- PM 2.5: 9
- SO2: 1

ii. Focus on Disadvantaged Communities

CEA's IRP is fully consistent with the goal of minimizing local air pollutants, with early priority on DACs. As identified in CalEnviroScreen 3.0, CEA serves no census tracks categorized as Disadvantaged Communities.

In total, CEA serves 0 customer accounts located within DACs. This is approximately 0 percent of CEA's total customer base (59,000 customers).

In developing its IRP, CEA carefully considered the impact of its resource procurement on DACs. All of the new resources CEA plans to develop are renewable or storage with no local emissions.

e. Cost and Rate Analysis

CEA's 38 MMT and 46 MMT portfolios are both reasonable from a cost perspective. In selecting resources for its portfolios, CEA carefully considered the cost implications of specific resource selections and procurement timing. This analysis was informed by CEA's procurement experience and the standard assumptions and results of the Commission's RESOLVE/SERVM modeling.

In general, CEA sought to balance the need to procure resources with enough lead time to meet CEA's LSE-specific procurement shortfalls and the Commission-identified overall system new resource need with the cost-saving benefits of waiting to procure renewable and storage resources with downward sloping cost projections. CEA also recognizes that future resource costs are highly uncertain, and technological advancement can happen unexpectedly; CEA's procurement cycle is designed to take advantage of technological and cost improvements by adding new resource commitments incrementally over time.

CEA's PCPs take advantage of the rapidly falling cost of solar, wind, and battery storage resources. CEA's PCPs also take advantage of the fact that, compared to Investor Owned Utilities, CCAs have significantly shorter generation project development timelines, in part due to the fact that CCAs do not require Commission approval of such projects. These shorter timelines result in significant direct savings and give CEA more flexibility to time its procurement to take maximum advantage of falling renewable generation prices.

f. System Reliability Analysis

Both CEA's 38 MMT PCP and its 46 MMT PCP are reliable and contribute CEA's fair share to system reliability.

The effective capacity of CEA's 38 MMT PCP is provided in the following "System Reliability Progress Tracking Table" from the its 38 MMT Resource Data Template dashboard (note that the row containing peak demand is confidential and has been excluded from this table). The net qualifying capacity for the month of September is shown for each year in the following table:

System Reliability Progress Tracking Table (NQC MW) for month of September by contract status, 38 MMT portfolio	ELCC type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
online	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
online	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
online	biomass	-	-	-	-	-	-	-	-	-	-	-
online	cogen	-	-	-	-	-	-	-	-	-	-	-
online	geothermal	-	-	-	-	-	-	-	-	-	-	-
online	hydro	-	-	-	-	-	-	-	-	-	-	-
online	thermal	10	10	10	-	-	-	-	-	-	-	-
online	battery	-	-	-	-	-	-	-	-	-	-	-
online	nuclear	-	-	-	-	-	-	-	-	-	-	-
online	solar	1	-	-	-	-	-	-	-	-	-	-
online	psh	-	-	-	-	-	-	-	-	-	-	-
online	unknown	-	192	192	156	140	141	110	112	113	115	117
development	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
development	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
development	biomass	-	-	-	-	-	-	-	-	-	-	-
development	cogen	-	-	-	-	-	-	-	-	-	-	-
development	geothermal	-	-	-	-	-	-	-	-	-	-	-
development	hydro	-	-	-	-	-	-	-	-	-	-	-
development	thermal	-	-	-	-	-	-	-	-	-	-	-
development	battery	-	-	-	-	-	-	-	-	-	-	-
development	nuclear	-	-	-	-	-	-	-	-	-	-	-
development	solar	-	-	-	-	-	-	-	-	-	-	-
development	psh	-	-	-	-	-	-	-	-	-	-	-
development	unknown	-	-	-	-	-	-	-	-	-	-	-
review	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
review	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
review	biomass	-	-	-	-	-	-	-	-	-	-	-
review	cogen	-	-	-	-	-	-	-	-	-	-	-
review	geothermal	-	-	-	-	-	-	-	-	-	-	-
review	hydro	-	-	-	-	-	-	-	-	-	-	-
review	thermal	-	-	-	-	-	-	-	-	-	-	-
review	battery	-	-	-	-	-	-	-	-	-	-	-
review	nuclear	-	-	-	-	-	-	-	-	-	-	-
review	solar	-	-	-	-	-	-	-	-	-	-	-
review	psh	-	-	-	-	-	-	-	-	-	-	-
review	unknown	-	-	-	-	-	-	-	-	-	-	-
planned_existing	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
planned_existing	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
planned_existing	biomass	-	-	-	-	-	-	-	-	-	-	-
planned_existing	cogen	-	-	-	-	-	-	-	-	-	-	-
planned_existing	geothermal	-	-	-	-	-	-	-	-	-	-	-
planned_existing	hydro	-	-	-	-	-	-	-	-	-	-	-
planned_existing	thermal	-	-	-	-	-	-	-	-	-	-	-
planned_existing	battery	-	-	-	-	-	-	-	-	-	-	-
planned_existing	nuclear	-	-	-	-	-	-	-	-	-	-	-
planned_existing	solar	-	-	-	-	-	-	-	-	-	-	-
planned_existing	psh	-	-	-	-	-	-	-	-	-	-	-
planned_existing	unknown	-	-	-	-	-	-	-	-	-	-	-
planned_new	wind_low_cf	-	-	-	-	17	17	17	17	17	17	17
planned_new	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
planned_new	biomass	-	-	-	-	-	-	-	-	-	-	-
planned_new	cogen	-	-	-	-	-	-	-	-	-	-	-
planned_new	geothermal	-	-	-	-	-	-	-	-	-	-	-
planned_new	hydro	-	-	-	-	-	-	-	-	-	-	-
planned_new	thermal	-	-	-	-	-	-	-	-	-	-	-
planned_new	battery	-	-	-	-	-	-	7	7	7	7	7
planned_new	nuclear	-	-	-	-	-	-	-	-	-	-	-
planned_new	solar	-	-	-	-	-	-	-	-	-	-	-
planned_new	psh	-	-	-	-	-	-	-	-	-	-	-
planned_new	unknown	-	-	-	50	50	50	75	75	75	75	75
TOTAL supply, NQC MW		11	202	202	206	206	207	208	210	211	213	215

As demonstrated in this Table, CEA's 38 MMT PCP contributes 215 MW of peak monthly net qualifying capacity ("NQC") in 2030. While not shown in the table above, this NQC exceeds CEA's peak load plus 15% planning reserve margin. Of this total, 92 MW are from new renewable and hybrid resources, and 7 MW are from new long duration storage. CEA's 38 MMT PCP includes planned contracts with existing resources, likely to be predominantly resource in the existing natural gas generator fleet, for 117 MW of NQC.[17] This balanced portfolio of flexible capacity works to effectively and reliability integrate a renewables-heavy portfolio, thus meeting and exceeding CEA's share of any systemwide renewable integration resource requirement.

The effective capacity of CEA's 46 MMT PCP is provided in the following "System Reliability Progress Tracking Table" from the its 46 MMT Resource Data Template dashboard (note that the row containing peak demand is confidential and has been excluded from this table)). The net qualifying capacity for the month of September is shown for each year in the following table:

[17] An undetermined portion of this capacity is expected to be procured by the central procurement entity.

System Reliability Progress Tracking Table (NQC MW) for month of September by contract status, 46 MMT portfolio	ELCC type	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
online	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
online	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
online	biomass	-	-	-	-	-	-	-	-	-	-	-
online	cogen	-	-	-	-	-	-	-	-	-	-	-
online	geothermal	-	-	-	-	-	-	-	-	-	-	-
online	hydro	-	-	-	-	-	-	-	-	-	-	-
online	thermal	10	10	10	-	-	-	-	-	-	-	-
online	battery	-	-	-	-	-	-	-	-	-	-	-
online	nuclear	-	-	-	-	-	-	-	-	-	-	-
online	solar	1	-	-	-	-	-	-	-	-	-	-
online	psh	-	-	-	-	-	-	-	-	-	-	-
online	unknown	-	192	192	156	140	141	110	112	113	115	117
development	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
development	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
development	biomass	-	-	-	-	-	-	-	-	-	-	-
development	cogen	-	-	-	-	-	-	-	-	-	-	-
development	geothermal	-	-	-	-	-	-	-	-	-	-	-
development	hydro	-	-	-	-	-	-	-	-	-	-	-
development	thermal	-	-	-	-	-	-	-	-	-	-	-
development	battery	-	-	-	-	-	-	-	-	-	-	-
development	nuclear	-	-	-	-	-	-	-	-	-	-	-
development	solar	-	-	-	-	-	-	-	-	-	-	-
development	psh	-	-	-	-	-	-	-	-	-	-	-
development	unknown	-	-	-	-	-	-	-	-	-	-	-
review	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
review	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
review	biomass	-	-	-	-	-	-	-	-	-	-	-
review	cogen	-	-	-	-	-	-	-	-	-	-	-
review	geothermal	-	-	-	-	-	-	-	-	-	-	-
review	hydro	-	-	-	-	-	-	-	-	-	-	-
review	thermal	-	-	-	-	-	-	-	-	-	-	-
review	battery	-	-	-	-	-	-	-	-	-	-	-
review	nuclear	-	-	-	-	-	-	-	-	-	-	-
review	solar	-	-	-	-	-	-	-	-	-	-	-
review	psh	-	-	-	-	-	-	-	-	-	-	-
review	unknown	-	-	-	-	-	-	-	-	-	-	-
planned_existing	wind_low_cf	-	-	-	-	-	-	-	-	-	-	-
planned_existing	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
planned_existing	biomass	-	-	-	-	-	-	-	-	-	-	-
planned_existing	cogen	-	-	-	-	-	-	-	-	-	-	-
planned_existing	geothermal	-	-	-	-	-	-	-	-	-	-	-
planned_existing	hydro	-	-	-	-	-	-	-	-	-	-	-
planned_existing	thermal	-	-	-	-	-	-	-	-	-	-	-
planned_existing	battery	-	-	-	-	-	-	-	-	-	-	-
planned_existing	nuclear	-	-	-	-	-	-	-	-	-	-	-
planned_existing	solar	-	-	-	-	-	-	-	-	-	-	-
planned_existing	psh	-	-	-	-	-	-	-	-	-	-	-
planned_existing	unknown	-	-	-	-	-	-	-	-	-	-	-
planned_new	wind_low_cf	-	-	-	-	17	17	17	17	17	17	17
planned_new	wind_high_cf	-	-	-	-	-	-	-	-	-	-	-
planned_new	biomass	-	-	-	-	-	-	-	-	-	-	-
planned_new	cogen	-	-	-	-	-	-	-	-	-	-	-
planned_new	geothermal	-	-	-	-	-	-	-	-	-	-	-
planned_new	hydro	-	-	-	-	-	-	-	-	-	-	-
planned_new	thermal	-	-	-	-	-	-	-	-	-	-	-
planned_new	battery	-	-	-	-	-	-	7	7	7	7	7
planned_new	nuclear	-	-	-	-	-	-	-	-	-	-	-
planned_new	solar	-	-	-	-	-	-	-	-	-	-	-
planned_new	psh	-	-	-	-	-	-	-	-	-	-	-
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g. Hydro Generation Risk Management

CEA's portfolios have little dependence on hydroelectricity and relatively little exposure to the risk of reduced hydro availability due to in-state drought. CEA's 46 MMT PCP has no planned use of hydro, and its 38 MMT PCP includes hydro in smaller amounts than the proportions included in the RSP (see table below). However, if draught conditions or other factors restrict available hydro energy, CEA would plan to substitute renewable energy resources to ensure it meets its assigned GHG benchmark.

Table 5: CEA Preferred Conforming Portfolio's Planned Use of Hydro Compared to RSP

Hydro Resource	38 and 46 MMT RSP MW	CEA Proportionate Share	CEA 46 MMT PCP	CEA 38 MMT PCP
CAISO Hydro	7,070	30	0	13
Hydro Imports	2,852	12	0	6

[18] An undetermined portion of this capacity is expected to be procured by the central procurement entity.

h. Long-Duration Storage Development

The Commission's 38 MMT RSP calls for 1,605 MW of new long-duration storage to be developed and operational by 2026, while the 46 MMT RSP calls for 973 MW of new long-duration storage to be operational by 2026.

In response to the Commission's analysis, thirteen CCAs (the Joint CCAs) issued a request for information ("RFI") on long-duration storage in June 2020. This RFI defined long-duration storage resources as those with the capability to discharge at full capacity for at least 8 hours. The RFI requested the following types of information: (1) storage technology and commercial history; (2) project specifics, including location, permitting, financing and development risks; (3) contracting terms and preferences, including indicative pricing.

The Joint CCAs received responses from 31 entities representing numerous types of chemical, mechanical and thermal long-duration storage technologies, such as: lithium-ion batteries; vanadium redox and other flow batteries; used electric vehicle batteries; waste to fuels via ultrasound; hydrogen storage; pumped storage hydro; geomechanical pumped storage; crane and stacked blocks; compressed air; flywheels; and molten salt and other thermal storage technologies. Moreover, the respondents identified 25 specific projects that represent more than 9,000 MW of capacity, two thirds of which is advertised as able to achieve commercial operation by 2026.

CEA will be considering the information made available through the RFI and will be assessing the economics of such projects. This assessment is expected to lead to Requests for Offers (RFOs) and transactional discussions aimed at bringing actual projects online by 2026. For its part, CEA anticipates it will procure its share of the CPUC's 1,605 MW target, which for CEA translates to 7 MW of long-duration storage online by 2026. Due to the scale and complexity of these projects, however, successful development will depend on efficient collaboration among numerous entities including load-serving entities, developers, manufacturers, market operators, regulators and environmental stakeholders.

i. Out-of-State Wind Development

The Commission's 38 MMT RSP calls for 3,000 MW of new out-of-state wind generation ("OOS Wind") to be developed and operational by 2030, while the 46 MMT RSP calls for 606 MW of new OOS Wind to be operational by 2030. CEA understands that the transmission projects needed to connect OOS wind to the CAISO grid require significant lead-times. However, given the fact that OOS Wind is not needed until 2030, CEA believes that a careful and considered approach to potential OOS Wind projects is best. CEA does not have specific plans for use of

OOS wind at this time, but is open to purchases of such resources and will evaluate offers it receives during its regular procurement process.

j. Transmission Development

In identifying resource locations for all portfolios, CEA was guided by the following considerations:

- CEA has a general preference for resources located within its service area and the communities it serves.
- CEA preferred projects in locations that can utilize existing transmission infrastructure with minimal upgrade/modification costs.
- CEA preferred low-impact renewable energy projects that provide economic benefit to DACs, subject to community interest in locally siting such projects.

Unlike the IOUs, CEA is not a transmission and distribution ("T&D") system operator. CEA does not enjoy the benefits of a granular knowledge of PG&E's T&D system, and CEA is not in the best position to identify optimal resource locations. In practice, CEA relies on project developers to conduct the research and technical studies necessary for siting potential generation projects. CEA evaluates projects offered by developers based on a variety of criteria, including transmission availability, nodal prices and potential for congestion, project viability, environmental, workforce, and other factors. As such, CEA generally utilized the RSP selected candidate resources as a guide for likely resource locations in its 38 MMT PCP and its 46 MMT PCP. These should be treated as general expectations based on the above-listed considerations, not set-in-stone selections, and actual project locations will be selected during CEA's solicitation processes.

CEA's 38 MMT PCP and 46 MMT PCP include a total of 232 MW of new resources to be built at the locations identified in CEA's 38 MMT resource data template. The following table provides a list of these resources, their identified locations, and CEA's preferred alternate locations if the Commission's modeling finds that the selected locations are not feasible.

New Resource Type	Size (MW)	Selected Resource	Preferred Alternative Resource/Location
Wind	75	Tehachapi_Wind	Southern_California_Desert_Ex_Wind
Hybrid	150	New_Hybrid	N/A
Storage, Long Duration*	7	New_Li_Battery	New_Flow_Battery

*CEA is exploring numerous long-duration storage technology types, as highlighted above in section H. However, the new resolve categories limits LSEs to “new lithium-ion” and “new flow” technology types for purposes of the Resource Data Template.

IV. Action Plan

a. Proposed Activities

CEA’s procurement process includes the following key activities:

a) Identification of planned resources by type, desired online date, and capacity.
b) Planning for procurement activities in consideration of CEA’s risk management policy; resource acquisition lead times including, where applicable, development timelines; staff capacity; and financial considerations
c) Design and administration of resource solicitations. For new resources, these typically take the form of periodic request for offers processes, while for existing resources, procurement activity is more frequent and routinized
d) Careful negotiation of contract terms to ensure positive outcomes for CEA customers with appropriate risk mitigation
e) Ongoing contract management, including where applicable, careful monitoring of development milestones.

b. Procurement Activities

CEA intends to take the following near-term (in the next 1-3 years) to implement its IRP and associated portfolio:

- Conduct one or more competitive solicitations for new renewable resources with planned online dates before 2026.
- Complete ongoing negotiations for short duration storage
- Manage existing development contract for new solar project to ensure expected commercial operation date is met
- Refine plans for procurement of long duration storage and begin solicitation process in 2023 or 2024 for a planned online date in 2026
- Carefully manage CEA’s supply portfolio to achieve CEA’s policy objectives and ensure compliance with all regulatory requirements

c. Potential Barriers

CEA has identified the following market, regulatory, financial, or other barriers or risks that may impede CEA's ability to acquire the resources identified in its Portfolio:

- Impacts of the Covid-19 pandemic on supply chains, the labor force, financial markets, and the overall ability of firms to timely develop generation and storage resources
- The potential for regulatory changes, including centralized procurement and rule changes that create uncertainty and undermine CEA's willingness or ability to enter into long term resource commitments
- Uncertainty around possible resource allocations from SDG&E resulting from the PCIA working group process and the lack of an allocation method to efficiently transfer excess resources from SDG&E to new CCAs.
- The inflexibility in long term contracting requirements under the renewable portfolio standards program, which does not accommodate a gradual ramping of resource commitments that would be appropriate for newly forming CCAs.
- Factors that may restrict availability of resource adequacy capacity such as retirement of conventional resources, the potential re-rating of renewable resource or battery storage Effective Load Carrying Capacity
- Factors that may increase CEA customer costs such as potential regulatory changes relating to the treatment of SDG&E generation costs and the share of costs allocated to CEA customers through the PCIA

d. Commission Direction or Actions

CEA encourages the Commission to adopt durable rules and processes to bring greater stability to the regulatory framework within which CEA and suppliers must plan and operate. Frequent rule changes disrupt CEA's ability to plan for the long term and to execute on the plan while minimizing costs to its customers.

e. Diablo Canyon Power Plant Replacement

CEA has included plans for new capacity development in its PCPs that are sufficient to meet its share of replacement capacity from the Diablo Canyon Power Plant. CEA's load ratio share of Diablo Canyon is estimated to be 10 MW, and CEA has plans to add 232 MW of new capacity, including 99 MW of (September) net qualifying capacity by 2030. 67 MW of the planned incremental net qualifying capacity would be available by 2024 when decommissioning of Diablo Canyon commences.

V. Lessons Learned

CEA's experience completing the resource data template and the clean system power tools leads to the following observations and suggestions:

- The Resource Data Template "dashboard" sheet could be enhanced to auto-populate comparisons of the LSE portfolio to the Reference System Portfolio, which could then be directly used in the IRP Narrative
- The requirement to use "transfer_sale" and "transfer_purchase" for certain entries in the resource field caused a loss of information. It would be better to allow the actual resource information to be entered in the resource field and include another field to indicate if the transaction is a sale or purchase with another load serving entity.
- The resource categories in the Clean System Power tool should be consistent with those in the Resource Data Template, and ideally a summary sheet would be created in the Resource Data Template to compile the Supply data needed for the Clean System Power calculator. For example, there is no category for a hybrid resource in the Clean System Power tool and no obvious category mapping.
- The Resource Data Template should include annual CAM capacity and allow the LSE to simply enter its load ratio share to auto-populate its CAM allocations.
- Reliability metrics should be standardized and specified to the extent that the NQC dashboard presented in the RDT does not capture required reliability attributes.

The late receipt of final templates and instructions makes it extremely challenging complete the IRP and obtain Board approval before the filing deadline. There were many changes in the IRP requirements this cycle, which took considerable time to understand and get clarification where needed. CEA recognizes the challenge Commission staff faces in trying to refine and manage the IRP process, but more consideration must be given to the burdens this process puts on respondent load serving entities, many of which are small entities with limited staff. In this cycle, updated guidance was provided by the Commission as late as August 11th, which is

unreasonably late in the process, considering the unchanged September 1st filing deadline. The Commission should establish rules that require a minimum of four months from the time that final templates, guidance, and instructions are published and the due date for filing the IRPs.

CEA also found that the directions and guidance provided by the Commission and staff for this IRP cycle suffered from lack of clarity and inconsistencies in certain key respects. Again, we recognize that the IRP process is evolving, but there is tremendous room for improvement in providing clear and consistent instructions in a timely manner.

Glossary of Terms

Alternative Portfolio: *LSEs are permitted to submit "Alternative Portfolios" developed from scenarios using different assumptions from those used in the Reference System Plan. Any deviations from the "Conforming Portfolio" must be explained and justified.*

Approve (Plan)*: the CPUC's obligation to approve an LSE's integrated resource plan derives from Public Utilities Code Section 454.52(b)(2) and the procurement planning process described in Public Utilities Code Section 454.5, in addition to the CPUC obligation to ensure safe and reliable service at just and reasonable rates under Public Utilities Code Section 451.*

Balancing Authority Area (CAISO): *the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.*

Baseline resources: *Those resources assumed to be fixed as a capacity expansion model input, as opposed to Candidate resources, which are selected by the model and are incremental to the Baseline. Baseline resources are existing (already online) or owned or contracted to come online within the planning horizon. Existing resources with announced retirements are excluded from the Baseline for the applicable years. Being "contracted" refers to a resource holding signed contract/s with an LSE/s for much of its energy and capacity, as applicable, for a significant portion of its useful life. The contracts refer to those approved by the CPUC and/or the LSE's governing board, as applicable. These criteria indicate the resource is relatively certain to come online. Baseline resources that are not online at the time of modeling may have a failure rate applied to their nameplate capacity to allow for the risk of them failing to come online.*

Candidate resource: *those resources, such as renewables, energy storage, natural gas generation, and demand response, available for selection in IRP capacity expansion modeling, incremental to the Baseline resources.*

Capacity Expansion Model: *a capacity expansion model is a computer model that simulates generation and transmission investment to meet forecast electric load over many years, usually with the objective of minimizing the total cost of owning and operating the electrical system. Capacity expansion models can also be configured to only allow solutions that meet specific requirements, such as providing a minimum amount of capacity to ensure the reliability of the system or maintaining greenhouse gas emissions below an established level.*

Certify (a Community Choice Aggregator Plan)*: Public Utilities Code 454.52(b)(3) requires the CPUC to certify the integrated resource plans of CCAs. "Certify" requires a formal act of the Commission to determine that the CCA's Plan complies with the requirements of the statute and the process established via Public Utilities Code 454.51(a). In addition, the Commission must review the CCA Plans to determine any potential impacts on public utility bundled customers under Public Utilities Code Sections 451 and 454, among others.*

Clean System Power (CSP, formerly "Clean Net Short") methodology*: the methodology used to estimate GHG emissions associated with an LSE's Portfolio based on how the LSE will expect to rely on system power on an hourly basis.*

Community Choice Aggregator*: a governmental entity formed by a city or county to procure electricity for its residents, businesses, and municipal facilities.*

Conforming Portfolio*: the LSE portfolio that conforms to IRP Planning Standards, the 2030 LSE-specific GHG Emissions Benchmark, use of the LSE's assigned load forecast, use of inputs and assumptions matching those used in developing the Reference System Portfolio, as well as other IRP requirements including the filing of a complete Narrative Template, a Resource Data Template and Clean System Power Calculator.*

Effective Load Carrying Capacity*: a percentage that expresses how well a resource is able avoid loss-of-load events (considering availability and use limitations). The percentage is relative to a reference resource, for example a resource that is always available with no use limitations. It is calculated via probabilistic reliability modeling, and yields a single percentage value for a given resource or grouping of resources.*

Electric Service Provider*: an entity that offers electric service to a retail or end-use customer, but which does not fall within the definition of an electrical corporation under Public Utilities Code Section 218.*

Filing Entity*: an entity required by statute to file an integrated resource plan with CPUC.*

Future*: a set of assumptions about future conditions, such as load or gas prices.*

GHG Benchmark (or LSE-specific 2030 GHG Benchmark)*: the mass-based GHG emission planning targets calculated by staff for each LSE based on the methodology established by the California Air Resources Board and required for use in LSE Portfolio development in IRP.*

GHG Planning Price: *the systemwide marginal GHG abatement cost associated with achieving a specific electric sector 2030 GHG planning target.*

Integrated Resources Planning Standards (Planning Standards)*: the set of CPUC IRP rules, guidelines, formulas and metrics that LSEs must include in their LSE Plans.*

Integrated Resource Planning (IRP) process*: integrated resource planning process; the repeating cycle through which integrated resource plans are prepared, submitted, and reviewed by the CPUC*

Long term*: more than 5 years unless otherwise specified.*

Load Serving Entity*: an electrical corporation, electric service provider, community choice aggregator, or electric cooperative.*

Load Serving Entity (LSE) Plan*: an LSE's integrated resource plan; the full set of documents and information submitted by an LSE to the CPUC as part of the IRP process.*

Load Serving Entity (LSE) Portfolio*: a set of supply- and/or demand-side resources with certain attributes that together serve the LSE's assigned load over the IRP planning horizon.*

Loss of Load Expectation (LOLE): *a metric that quantifies the expected frequency of loss-of-load events per year. Loss-of-load is any instance where available generating capacity is insufficient to serve electric demand. If one or more instances of loss-of-load occurring within the same day regardless of duration are counted as one loss-of-load event, then the LOLE metric can be compared to a reference point such as the industry probabilistic reliability standard of "one expected day in 10 years," i.e. an LOLE of 0.1.*

Net Qualifying Capacity: *Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the California ISO pursuant to the provisions of this California ISO Tariff and the applicable Business Practice Manual.*

Non-modeled costs*: embedded fixed costs in today's energy system (e.g., existing distribution revenue requirement, existing transmission revenue requirement, and energy efficiency program cost).*

Nonstandard LSE Plan*: type of integrated resource plan that an LSE may be eligible to file if it serves load outside the CAISO balancing authority area.*

Optimization*: an exercise undertaken in the CPUC's Integrated Resource Planning (IRP) process using a capacity expansion model to identify a least-cost portfolio of electricity resources for meeting specific policy constraints, such as GHG reduction or RPS targets, while maintaining reliability given a set of assumptions about the future. Optimization in IRP considers resources assumed to be online over the planning horizon (baseline resources), some of which the model may choose not to retain, and additional resources (candidate resources) that the model is able to select to meet future grid needs.*

Planned resource: *any resource included in an LSE portfolio, whether already online or not, that is yet to be procured. Relating this to capacity expansion modeling terms, planned resources can be baseline resources (needing contract renewal, or currently owned/contracted by another LSE), candidate resources, or possibly resources that were not considered by the modeling, e.g., due to the passage of time between the modeling taking place and LSEs developing their plans. Planned resources can be specific (e.g., with a CAISO ID) or generic, with only the type, size and some geographic information identified.*

Qualifying capacity*: the maximum amount of Resource Adequacy Benefits a generating facility could provide before an assessment of its net qualifying capacity.*

Preferred Conforming Portfolio*: the conforming portfolio preferred by an LSE as the most suitable to its own needs; submitted to CPUC for review as one element of the LSE's overall IRP plan.*

Preferred System Plan: *the Commission's integrated resource plan composed of both the aggregation of LSE portfolios (i.e., Preferred System Portfolio) and the set of actions necessary to implement that portfolio (i.e., Preferred System Action Plan).*

Preferred System Portfolio: *the combined portfolios of individual LSEs within the CAISO, aggregated, reviewed and possibly modified by Commission staff as a proposal to the Commission, and adopted by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Preferred System Plan.*

Reference System Plan: *the Commission's integrated resource plan that includes an optimal portfolio (Reference System Portfolio) of resources for serving load in the CAISO balancing authority area and meeting multiple state goals, including meeting GHG reduction and reliability targets at least cost.*

Reference System Portfolio*: the multi-LSE portfolio identified by staff for Commission review and adopted/modified by the Commission as most responsive to statutory requirements per Pub. Util. Code 454.51; part of the Reference System Plan.*

Short term*: 1 to 3 years (unless otherwise specified).*

***Staff**: CPUC Energy Division staff (unless otherwise specified).*

***Standard LSE Plan**: type of integrated resource plan that an LSE is required to file if it serves load within the CAISO balancing authority area (unless the LSE demonstrates exemption from the IRP process).*

CEA 2030 Resource Mix – 38 MMT BAPP

Resource Type	Existing Resources (Owned/Contracted)	Existing Resources (Planned Procurement)	Existing Resources (CAM)	New Resources (In Development)	Future New Resources	Total
Nuclear						0
CHP						0
Natural Gas						0
Coal						0
Hydro (Large)		13				13
Hydro (Scheduled Imports)		6				6
Biomass						0
Geothermal						0
Hydro (Small)						0
Wind		32			75	107
Out-of-State Wind on New Transmission						0
Solar		50			150	200
Customer Solar						0
Battery Storage						0
Pumped (long-duration) Storage						0
Shed Demand Response						0
Capacity-Only						
Natural Gas		72	45			117
Battery Storage						0
Long Duration Storage					7	7

CEA 2030 Resource Mix – 46 MMT PCP

Resource Type	Existing Resources (Owned/Contracted)	Existing Resources (Planned Procurement)	Existing Resources (CAM)	New Resources (In Development)	Future New Resources	Total
Nuclear						0
CHP						0
Natural Gas						0
Coal						0
Hydro (Large)						0
Hydro (Scheduled Imports)						0
Biomass						0
Geothermal						0
Hydro (Small)						0
Wind		19			75	94
Out-of-State Wind on New Transmission						0
Solar		30			150	180
Customer Solar						0
Battery Storage						0
Pumped (long-duration) Storage						0
Shed Demand Response						0
Capacity-Only						
Natural Gas		72	45			117
Battery Storage						0
Long Duration Storage					7	7

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 4: Clean Energy Alliance Credit Solution Update

RECOMMENDATION:

1) Authorize the Interim Chief Executive Officer to execute a Promissory Note with Calpine Energy Solutions, subject to General Counsel approval, for $400,000, to provide funding for CEA operational costs through February 2021; and
2) Direct the Interim Chief Executive Officer to continue to work towards a credit solution for the remaining CEA start-up funding needs and to return with options at the November 19, 2020 CEA Regular Board Meeting.

BACKGROUND AND DISCUSSION:

At its regular meeting June 18, 2020, the Clean Energy Alliance (CEA) Board received a report from staff regarding two financing options to provide the necessary funds for CEA's fiscal year 20/21 cash needs. The options included offers from River City Bank (RCB) and JP Morgan, received through a request for proposals process. The CEA Board considered the two options and based on the credit terms of the proposed solutions selected the RCB option to pursue. The Board directed staff to reach out to the Member Agencies to determine whether there was the potential for assistance by providing the security required by the RCB option through either a guaranty or cash collateral.

Total funding needs for CEA include:

$1,000,000	Funding for FY 20/21 Operating Budget
$450,000	Repayment of Initial Advances to Member Agencies
$500,000	CAISO Deposit
$2,500,000	Lockbox Reserves and Cash Flow
$4,450,000	Total Funding needed

The guaranty is proposed to be allocated to the Member Agencies based on percentage of load as reflected below:

AGENCY	% OF LOAD	PRO-RATA SHARE $ OF GUARANTY
CARLSBAD	90%	$2,250,000
DEL MAR	3%	$75,000
SOLANA BEACH	7%	$175,000

The Solana Beach City Council considered the request at its July 8 meeting and authorized the City Manager to execute the guaranty up to $175,000.

The Del Mar City Council considered the guaranty at its July 20 meeting and authorized the City Manager to execute the guaranty up to $75,000.

The Carlsbad City Council considered the request at its July 14 meeting, however, in addition to consideration of providing the guaranty, the Carlsbad staff included an alternative option whereby the City of Carlsbad would provide the needed funding to CEA, to be reimbursed by CEA from operational revenues. The Carlsbad City Council directed staff to develop terms related to such a loan arrangement with CEA and to bring them back to the City Council for consideration.

The Carlsbad City Council considered proposed terms and conditions for a loan to CEA at its meeting July 28, 2020. After consideration, the Carlsbad City Council did not approve the loan to CEA. In its deliberations, the Carlsbad City Council cited concerns related to the uncertainty regarding the potential delay in the CEA launch date and the impact of SDG&E's rate proceedings including the 2021 ERRA and the PCIA Trigger Application.

CEA had received advances from the member agencies in a total amount of $450,000 to fund initial operating costs. These funds have been sufficient to cover costs into the current fiscal year, however, are projected to be fully spent in September 2020. As such CEA needs to identify funding for continuing operations while staff continues to work on its long-term credit solution.

Advance for CEA Operations through February 2021

As part of its agreement with CEA, Calpine Energy Solutions provides for an advance of funds to fund CEA launch and startup operations, up to a maximum $650,000. Staff has reviewed its cash flow needs and determined that a $400,000 advance would cover projected costs through February 2021. The advance would not provide funds to repay the initial advances from the cities of Carlsbad, Del Mar and Solana Beach.

Projected uses of the Calpine Advances are as follows:

Professional Consulting Services	98,000.00
Technical Consulting Services	118,000.00
Legal Services	115,000.00
CalCCA Membership Dues	15,000.00
Balance due on CCA Bond	47,000.00
Total Operational Costs October 2020 - February 2021	$ 393,000.00

The interest rate on the advance is based on the 1-month LIBOR plus 2% per annum, with interest accruing from the date funds are deposited in CEA's account. The interest rate applied shall be calculated using the posted 1-month LIBOR rate available on the date funds are wired from Calpine's account. If the funds were wired on August 14, 2020, the 1-month LIBOR rate was .15150, resulting in an interest rate of 2.15150% on the advance. Advances are to be repaid in twelve equal monthly installments beginning 90-days after the Power Start Date (or date CEA begins serving customers).

Assuming a May 2021 launch, repayments would begin in August 2021 with full repayment by July 2022. The loan is between CEA and Calpine, with no recourse to the Member Agencies.

Executing the promissory note (Attachment A) with Calpine provides needed cash to fund operations while the issues of concern identified by the Carlsbad City Council, such as the impact of the delay in San Diego Gas & Electric's (SDG&E) billing system on CEA's launch schedule, the SDG&E ERRA Rate Proceeding and the SDG&E PCIA Trigger Application, are resolved and resulting impact to CEA are known. During this time staff would continue to work on credit solution options, monitor the issues affecting CEA launch and rates and assess their impact on CEA, and will return to the Board at its November regular Board Meeting with an update and credit solution recommendation.

FISCAL IMPACT

The cost of the advance from Calpine has been factored into the CEA proforma, Option 2, which assumes a 2% rate discount to customers and achieves 100% Portfolio Content Category 1 renewable energy by 2023 (Attachment B).

ATTACHMENT

Attachment A - Promissory Note to Calpine
Attachment B – Clean Energy Alliance Pro Forma Option 2

PROMISSORY NOTE

June 1, 2020

FOR VALUE RECEIVED, the undersigned, the CLEAN ENERGY ALLIANCE (the "Borrower"), hereby unconditionally promises to pay to the order of CALPINE ENERGY SOLUTIONS, LLC ("Calpine") the unpaid principal amount of each Advance (as defined in the Agreement referred to below) made by Calpine to the Borrower on the Maturity Date and on such other dates and in such other amounts as set forth in the Agreement (as defined below). All payments of principal of the outstanding amounts of all Advances evidenced by this Promissory Note shall be made in the manner specified in the Agreement (as defined below).

Borrower hereby further promises to pay interest in like money and funds on the daily outstanding balance of each Advance for the period commencing on the date of each such Advance until repaid in full, at the rate determined pursuant to, and in the manner specified in, the Agreement (as defined below).

All payments of principal of and interest under this Promissory Note shall be made by the Borrower not later than [2:00 pm] (Pacific Standard Time) on the date when due to Calpine at its office located on the date hereof at 401 West A St., Suite 500, San Diego, CA 92101 (or such other address as Calpine may designate in writing to the Borrower) in lawful money of the United States of America, in immediately available funds without setoff, deduction or counterclaim and free and clear of any present or future taxes, levies, imposts, duties, fees, assessments or other charges.

Calpine is authorized to make notations of all Advances made to the Borrower by Calpine pursuant to the Agreement (as defined below) and all repayments of the outstanding principal amounts and accrued interest on such Advances on the schedule attached to and made part of this Promissory Note. Such notations, if made, will be conclusive and binding absent manifest error.

This Promissory Note is the Note referred to in the Professional Services Agreement dated as of June 1, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Agreement") between the Borrower and Calpine.

In addition to all principal and accrued interest on this Promissory Note, the Borrower agrees to pay (a) all costs and expenses incurred by all of the holders of this Promissory Note in collecting this Promissory Note, whether through probate, reorganization, bankruptcy or other proceedings and (b) attorney's fees when and if this Promissory Note is placed in the hands of an attorney for collection.

Presentment, demand, protest and notices of any kind with respect to this Promissory Note are hereby expressly waived by the Borrower.

Notwithstanding any other provision of this Promissory Note, in the event that any change in any applicable law or regulation or in the interpretation thereof by any Governmental Authority shall make it unlawful for Calpine to honor its obligation to make, issue or maintain any Advance hereunder, then Calpine shall promptly notify Borrower thereof and Calpine's obligation to make

such Advance, or to continue the Advance, shall be suspended until such time as Calpine may again lawfully make and maintain the Advance and, on the date specified *b1* Calpine in light of legal requirements applicable to Calpine, the Advance shall become payable at a rate per annum established by Calpine in the Agreement.

THIS PROMISSORY NOTE AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS PROMISSORY NOTE SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF CALIFORNIA.

CLEAN ENERGY ALLIANCE

By: _____

Name:_____

Title:_____

Date:_____

Schedule to Promissory Note
of
the CLEAN ENERGY ALLIANCE
Dated June 1, 2020

Date of Borrowing	*Principal Amount*	*Interest Rate*	*Payment Date*

Annual DRAFT Pro Forma Projections for a Community Choice Aggregation Program - 2% Discount and 100% PCC1 by 2023
Clean Energy Alliance

Fiscal Year Ending:	2020	2021	2022	2023	2024	2025
I. Revenue	-	9,634,093	67,733,082	69,062,278	70,413,027	71,785,662
II. Operating Expenses						
Power Supply	-	8,988,017	61,018,825	60,161,460	61,785,316	62,526,043
Staff	50,000	235,000	600,000	618,000	636,540	655,636
Administrative Costs*	253,000	1,108,938	2,459,357	2,498,727	2,559,714	2,617,600
Subtotal Operating Expenses	303,000	10,331,956	64,078,183	63,278,187	64,981,570	65,799,279
Operating Margin	(303,000)	(697,862)	3,654,899	5,784,091	5,431,458	5,986,383
III. Financing						
Interest	-	123,333	146,250	116,038	69,822	22,280
Principal	-	450,000	500,000	1,287,015	1,332,791	1,380,194
Subtotal Financing	-	573,333	646,250	1,403,053	1,402,613	1,402,474
Operating Margin Less Financing	(303,000)	(1,271,195)	3,008,649	4,381,038	4,028,845	4,583,909
IV. Cash From Financing	450,000	4,500,000	-	-	-	-
V. Other Uses						
CPUC and CAISO Deposits	147,000	500,000	-	-	-	-
Collateral Deposits	0	2,500,000	-	-	-	-
Reserve Additions	-	228,805	3,008,649	3,453,114	3,520,651	3,589,283
Subtotal Other Uses	147,000	3,228,805	3,008,649	3,453,114	3,520,651	3,589,283
VI. Net Surplus/(Deficit)	-	(0)	0	927,924	508,193	994,626
VII. Cumulative Reserve	-	228,805	3,237,454	6,690,568	10,211,219	13,800,502
VIII. Cumulative Net Surplus	-	(0)	0	927,924	1,436,117	2,430,743
VI. Combined Cumulative Reserve & Cumulative Net Surplus	-	228,805	3,237,454	7,618,492	11,647,336	16,231,245

* Comprised of Technical and Legal Services, Customer Outreach and Communications, Utility Services Fees, Data Management Services, Uncollectibles

Attachment B

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 5: Clean Energy Alliance Inclusive & Sustainable Workforce Policy

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RECOMMENDATION:
Review, provide input and approve Clean Energy Alliance (CEA) Inclusive & Sustainable Workforce Policy.

BACKGROUND AND DISCUSSION:
At its special meeting on July 23, 2020, the CEA Board of Directors was provided a draft Inclusive & Sustainable Workforce Policy (Policy) (Attached) for consideration. The Board directed staff to bring the draft Policy back at the next regular CEA Board meeting.

FISCAL IMPACT
There is no fiscal impact by this action.

ATTACHMENTS:
Attachment A - Clean Energy Alliance Draft Inclusive & Sustainable Workforce Policy

Clean Energy Alliance
JOINT POWERS AUTHORITY

INCLUSIVE & SUSTAINABLE WORKFORCE POLICY

The Clean Energy Alliance (CEA) Board of Directors desires to establish a policy that supports local jobs, sustainable and inclusive workforce opportunities, local economic sustainability, and diversity through contracting for power sources, procuring goods and services, and implementing hiring initiatives where appropriate, without limiting fair and open competition for projects or programs implemented by CEA.

CEA Staff

CEA relies on its employees to provide clean, cost-effective, alternative energy to its customers. These customers live in diverse communities and an inclusive workforce of staff who reflect and are invested in these communities allows CEA to serve them more effectively. An inclusive staff also provides good jobs for people from diverse communities.

To help maintain and strengthen CEA's inclusive staff, CEA will strive to:

1. Engage in broad outreach efforts in diverse communities, including disadvantaged and low-income communities, to ensure a diverse pool of candidates for open positions;
2. Provide fair compensation that aligns with regional market indicators for compensation levels for each position;
3. Be transparent about these practices and lessons learned; and
4. Provide contact information for staff who can answer questions about this policy.

Supply Chain

CEA also strives for inclusion in its supply chain. Where and from whom CEA purchases good and services have important consequences for businesses, customers, and their communities. Where appropriate, an inclusive supply chain is an important driver for successful delivery of CEA's services to its customers, and of fair and equitable economic development generally.

Where appropriate, and without limiting fair and open competition, to support an inclusive supply chain, CEA will strive to:

1. Use local businesses and provide fair compensation in the purchase of services and supplies;
2. Proactively seek services from local businesses that are taking steps to protect the environment;

3. Engage in efforts to reach diverse communities to ensure an inclusive pool of potential suppliers;
4. Collect information from suppliers and contractors on the inclusivity of their workforce;
5. Include questions about supplier inclusivity in requests for proposals (RFPs) for services;
6. Encourage reporting from developers and vendors on inclusivity in business ownership and staff;
7. Be transparent about these practices and lessons learned; and
8. Provide contact information for staff who can answer questions about this policy.

Inclusive Business Practices

To fulfill its goals of providing a range of energy product and programs, available to all CEA communities and customers, that best serve their needs and their local communities, and support local sustainability efforts, CEA will strive to:

1. Provide information in the multiple languages commonly spoken in CEA's service area (including mailers, tabling materials, customer service, call center, workshops and outreach events, advertisements, and other means of customer engagement);
2. Conduct marketing and outreach in diverse communities to increase awareness of CEA's services and programs;
3. Attend multi-cultural community events with multi-lingual materials and speakers;
4. Share information about activities and initiatives that promote inclusion, access, and diverse engagement in the community.

Non-Discrimination Pledge

CEA will not discriminate, and will ~~strive to work~~require in its contracts with suppliers that ~~do~~ they will not discriminate, on the basis of race, color, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy), medical condition (cancer-related), military service, or genetic information.

Sustainable Workforce

Support of local businesses, fair compensation, apprenticeship and pre-apprenticeship programs that create employment opportunities, without limiting fair and open competition, are important components of building and sustaining healthy and sustainable communities. It is in the interest of CEA to provide fair compensation and sustainable workforce opportunities, within a framework of fair and open competition and the promotion of renewable energy, energy efficiency and greenhouse gas reduction.

CEA recognizes the importance of locally-generated renewable energy (local is defined as within the San Diego County region) in assuring that California is provided with (1) adequate

supplies of renewable energy for economic growth, (2) sustained local job opportunities and job creation, and (3) effective means to reduce the impacts of greenhouse gas emissions. CEA also recognizes the opportunities that energy efficiency programs provide for local workforce training and employment.

CEA encourages fair compensation in direct hiring, renewable development projects, energy efficiency programs and in procurement of CEA services and supplies. CEA also encourages use of State of California approved apprenticeship and pre-apprenticeship training programs in construction craft occupations to foster long-term, fairly compensated employment opportunities for program graduates.

Where appropriate, without limiting fair and open competition, CEA will strive to accomplish the following objectives:

1. Support for and direct use of local businesses;
2. Support for and direct use of green and sustainable businesses;
3. Encourage the use of skilled and trained workers who receive fair compensation;
4. Encourage the use of State of California approved apprenticeship programs, and pre-apprenticeship programs within CEA's service territory.

CEA Power Purchase Agreements with Third Parties

CEA will encourage the submission of information from respondents to any bidding and/or RFP/RFQ process regarding planned efforts by project developers and their contractors to achieve the following goals:

- Employ workers and use businesses from the San Diego county area.
- Employ properly licensed ~~(A, B, C10, C7, C46)~~ contractors and California Certified electricians.
- Utilize local apprentices, particularly graduates of San Diego County pre-apprenticeship programs.
- Pay workers prevailing wage for each craft, classification and type of work performed.
- Display a poster at jobsites informing workers of prevailing wage requirements.
- Provide workers compensation coverage to on-site workers.
- Support and use State of California approved apprenticeship programs.

Relevant information submitted by proposers will be used to evaluate potential impact on local jobs and workforce of the planned project.

CEA Owned Generation Projects

Each construction contractor or subcontractor performing work on any CEA-owned project is encouraged to use local labor and apprenticeship programs and follow fair compensation

practices including proper assignment of work to crafts that traditionally perform the work. Contractors and subcontractors shall pay at least prevailing rate of wages, as defined in Article 2 (commencing with Section 1770) of Chapter 1 of Part 7 of Division 2 of the California Labor Code and encouraged to use a skilled and trained workforce, as defined in Chapter 2.9 (commencing with Section 2600) of Part 1 of Division 2 of the California Public Contract Code.

CEA Feed-In Tariff Projects

CEA will encourage construction contractors or subcontractors performing work on any CEA Feed-In Tariff project utilize local businesses and local apprenticeship programs, and fair compensation practices including proper assignment of work to crafts that traditionally perform the work.

CEA encourages contractors and subcontractors performing work on any CEA Feed-In-Tariff project to pay at least prevailing rate of wages, as defined in Article 2 (commencing with Section 1770) of Chapter 1 of Part 7 of Division 2 of the California Labor Code and encouraged to use a skilled and trained workforce, as defined in Chapter 2.9 (commencing with Section 2600) of Part 1 of Division 2 of the California Public Contract Code.

CEA Energy Efficiency Projects

CEA will strive to support local businesses and apprenticeship programs, in the implementation of its energy efficiency programs. CEA will encourage construction contractors or subcontractors performing work on any CEA energy efficiency program utilize local businesses and apprenticeship programs and fair compensation practices including proper assignment of work to crafts that traditionally perform the work.

Union Neutrality Pledge

CEA will remain neutral regarding whether its employees choose to join or support labor unions and will not interfere with decisions by its contractors' and suppliers' employees about whether to join or support labor unions.

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 6: Clean Energy Alliance Community Advisory Committee Work Plan

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RECOMMENDATION:
Review, provide input and approve Clean Energy Alliance (CEA) Community Advisory Committee (CAC) scope of work and desired outcomes for the CAC Work Plan.

BACKGROUND AND DISCUSSION:
The Clean Energy Alliance (CEA) Board has taken the following actions related to the CEA Community Advisory Committee (CAC):

July 16, 2020 Approved Community Advisory Committee Policy (Attached)
July 23, 2020 Approved Community Advisory Committee Timeline

The Board approved timeline is as follows:

ACTIVITY	DATE	STATUS
Open Application Process	August 3, 2020	Applications Open
CEA Board Approve Initial CAC Workplan & Meeting Schedule	August 20, 2020	
Applications due to CEA Board Secretary	August 28, 2020	
Applications distributed to CEA Board Member	September 4, 2020	
CEA Board Member Application Review & Evaluation	September 7 – October 2	
CEA Board Meeting Review Recommendations & Approve Appointees	October 15, 2020	
First Meeting of CAC	November/December 2020	

The application window opened August 3, 2020 with the application being available on the CEA website at www.TheCleanEnergyAlliance.org/About/CommunityAdvisoryCommittee. Applications are due to the Board Secretary by August 28, 2020.

The next step in the CAC process is for the Board to approve the CAC work plan and meeting schedule. At its special meeting May 7, 2020, the Board identified the following initial scope of work:

- Community Outreach
- Social Equity Issues

- CEA Program Review for meeting CEA Goals of equity & innovation
- Monitoring Climate Action Plan goals
- Play role in strategic plan process

Staff is seeking input from the Board regarding the initial scope of work and the desired outcome the Board is seeking from the CAC's work effort in the areas of focus. The input will inform the development of the final work plan to be brought forward to the Board for approval at its September 17, 2020 Board meeting.

FISCAL IMPACT
There is no fiscal impact associated with this action.

ATTACHMENTS:
Attachment A - Community Advisory Committee Policy

Clean Energy Alliance
JOINT POWERS AUTHORITY

COMMUNITY ADVISORY COMMITTEE
PURPOSE AND SCOPE

Community Advisory Committee (CAC) Authorization

Section 5.9 of the Clean Energy Alliance (CEA) Joint Powers Authority (JPA) Agreement provides the authority for the CEA Board to establish an advisory committee to assist the Board in implementing and operating its CCA program. Pursuant to the JPA Agreement, the committee should have equal representation from the member agencies. The Board may establish criteria to qualify for appointment to the committee, and establish rules, regulations, policies or procedures to govern the committee.

CAC Membership Criteria

- The CAC membership shall consist of two (2) appointees from each CEA member agency and 1 Board Alternate. CAC committee members shall serve staggered three (3) year terms with a two-term limit. In the inaugural year, one appointee seat from each member agency shall serve two (2) years.

- Committee members serve at the pleasure of the Board.

- CAC members will be subject to all applicable conflict of interest laws and may be required to disclose potential conflicts by filing a Form 700. (Information about conflicts of interest and Form 700 can be found here: http://www.fppc.ca.gov/Form700.html.

- Members shall be residents (property owners or renters) or business owners within the service territory of CEA.

- CAC membership will be considered for those that have a relevant background in or expertise related to one or more of the following fields: electricity, community outreach or engagement, or policy advocacy.

- Applicants must be committed to serving on the CAC and attending regular committee meetings, and occasional CEA Board meetings. Committee meetings will be held quarterly unless additional meetings are directed by the Board. Members are expected to maintain a good attendance record. A committee member will be removed from the CAC if the member has two consecutive unexcused absences from CAC meetings or has unexcused absences from more than 25% of the CAC meetings in a calendar year.

- The CAC is subject to Brown Act and all meetings will be publicly noticed and held in public settings pursuant to requirements of the Brown Act.

- CAC meetings, times and location will be determined by the CEA Board.

- The CAC will elect a Chair who will facilitate meetings and provide reports to the Board as needed.

CAC Purpose & Objectives

The purpose of the CAC is to advise the CEA Board of Directors on those matters concerning the operation of its Community Choice Aggregation (CCA) program as directed by the Board of Directors in an annual workplan for the CAC that is adopted by the Board The objectives of the CAC are to provide feedback to the Board, act as a liaison between the Board and the community and serve as a forum for community input on those matters assigned to the CAC in the annual workplan. The CAC shall not have any decision-making authority but will serve as an advisory body to the Board of Directors.

CAC Member Selection Process

Applicants must complete and submit the Clean Energy Alliance Community Advisory Committee Application (Attachment A). Board Members will nominate two applicants from their respective communities to the full Board for approval. In addition, the full Board will select one Board Alternate to participate on the CAC.

Attachment A
Clean Energy Alliance
Community Advisory Committee Application

CAC Purpose & Objectives

The purpose of the CAC is to advise the CEA Board of Directors on those matters concerning the operation of its Community Choice Aggregation (CCA) program as directed by the Board of Directors in an annual workplan for the CAC that is adopted by the Board The objectives of the CAC are to provide feedback to the Board, act as a liaison between the Board and the community and serve as a forum for community input on those matters assigned to the CAC in the annual workplan. The CAC shall not have any decision-making authority but will serve as an advisory body to the Board of Directors.

NAME: _____

ADDRESS: _____

PHONE: _____ EMAIL:_____

Are you a resident/business owner of one of the CEA member cities?

If yes, which city: _____

Please attach a current resume and respond to the following questions. Please attach a separate sheet if additional space is needed.

What experience/perspective will you bring to the committee?

Describe any relevant background in or expertise related to one or more of the following fields: electricity, community outreach or engagement, or policy advocacy.

Do you have any interests or associations that might present a conflict of interest? If yes, please explain:

What do you hope to accomplish as a member of the Clean Energy Alliance Community Advisory Committee?

Please provide three references

NAME	Phone Number	Relationship

By signing below I acknowledge that I have sufficient time to actively participate in the Clean Energy Alliance Community Advisory Committee for the benefit of the program and the communities it serves. I understand that committee members are subject to conflict of interest laws and required to disclose potential conflicts by filing Form 700.

Signature: _____

Date: _____

Completed applications should be emailed to: Secretary@TheCleanEnergyAlliance.org

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 7: Clean Energy Alliance Award Request for Qualifications 2020-004 Portfolio Manager Services

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RECOMMENDATION:
Authorize Interim Chief Executive Officer to execute an agreement with Pacific Energy Advisors to provide Portfolio Management Services, through June 30, 2023, for an amount not to exceed $120,000 annually, subject to General Counsel approval.

BACKGROUND AND DISCUSSION:
At its May 21, 2020 regular meeting the Clean Energy Alliance Board authorized the issuance of a Request for Qualification (RFQ) for Portfolio Management/Energy Advisory and Scheduling Coordinator Services. RFQ 2020-004 was issued on May 26, 2020, with proposals due June 17, 2020.

The RFQ separated Portfolio Management/Energy Advisory and Scheduling Coordinator Services into two separate tasks and responders could propose on either or both tasks.

The scope of work for Task 1 – Portfolio Management/Energy Advisory Services included:

- Portfolio Management Strategy
- Energy Risk Management Policy Development
- Power Procurement – conventional, short term renewable, and carbon free energy
- Policy and Program Development – support local renewable energy development, energy storage initiatives, community solar & storage programs, and energy efficiency program development
- Other services the responder deemed beneficial to CEA

CEA received four responses for the Task 1 scope of work:

- Pacific Energy Advisors
- Pilot Power
- The Energy Authority
- Zglobal, Inc.

The proposals were reviewed by a committee made up of Jason Haber, City of Carlsbad, Cathy DeFalco, California Choice Energy Authority and Barbara Boswell, Interim Chief Executive Officer.

The responses were evaluated based on four categories:

- Background and experience: demonstrated experience performing the scope of work;
- Management, personnel and qualifications: Qualifications of personnel, familiarity with CCA requirements and issues;
- Approach to performing scope of work: Approach demonstrated ability to perform tasks and meet critical deadlines;
- Project costs: Fees were realistic for services being performed.

A short list of firms to be interviewed was developed based on the results of the RFQ evaluations. Firms invited to interview were: Pacific Energy Advisors, The Energy Authority and ZGlobal. The same committee members participated in the interviews.

Fees proposed by the three short listed firms are summarized below:

FIRM	NOT TO EXCEED AMOUNT	NOTES
Pacific Energy Advisors	$100,000 FY 20/21 $120,000 FY 21/22 & FY 22/23	Additional services added: Rate Setting Reporting included Monthly EIA and Quarterly QFER, and Joint Rate Comparison Preparation
The Energy Authority	$103,000 FY 20/21 $198,000 FY 21/22 & FY 22/23	
ZGlobal	$69,100 FY 20/21 $82,920 FY 21/22 & FY 22/23	

Pacific Energy Advisors, while not the lowest cost, was selected by the committee for recommendation to the Board as having the most experience providing the scope of work, firm is dedicated to providing only these services to CCAs, and included services beyond those in the required scope of work.

Staff is continuing to evaluate the responses related to Task 2 – Scheduling Coordinator Services and anticipates bringing a recommendation to the Board at its meeting September 17, 2020.

FISCAL IMPACT
The fees for the recommended firm for Task 1 are within the current approved CEA FY 20/21 budget as well as in the future year pro forma expenses.

ATTACHMENTS:
None

Clean Energy Alliance
JOINT POWERS AUTHORITY

Staff Report

DATE: August 20, 2020

TO: Clean Energy Alliance Board of Directors

FROM: Barbara Boswell, Interim Chief Executive Officer

ITEM 8: Clean Energy Alliance Interim Treasurer

RECOMMENDATION:
Authorize Clean Energy Alliance Interim Chief Executive Officer to execute an agreement with Marie Berkuti for Interim Treasurer services, through June 30, 2021, for an amount not to exceed $10,000, subject to General Counsel approval.

BACKGROUND AND DISCUSSION:
Section 5.4 of the Clean Energy Alliance (CEA) Joint Powers Agreement establishes the requirement for the Board to appoint a Board Treasurer/Chief Financial Officer and Auditor (Treasurer). The Treasurer is responsible for cash management, financial transactions and audits for CEA activity, including being the depository and maintaining custody of all money of CEA, making disbursements as approved by the Board, causing an independent audit of the finances of CEA, pursuant to Section 6505.5 of the California Government Code.

At its Board meeting November 4, 2019 the CEA Board appointed Marie Berkuti, City of Solana Beach Finance Director as Interim Treasurer of CEA. The services were provided through the Administrative and Fiscal Services Agreement between CEA and City of Solana Beach. Ms. Berkuti has recently announced her retirement from City of Solana Beach, effective September 9, 2020.

Upon learning of Ms. Berkuti's retirement, CEA reached out to the Member Agencies to determine whether their Finance Directors could take on the responsibilities of the CEA Interim Treasurer. Through the inquiry it was determined that their Finance Directors did not have the available bandwidth to take on the additional duties.

In discussions with Ms. Berkuti she is interested in continuing to provide the Interim Treasurer services, and Solana Beach has confirmed it can continue to provide the finance staff support for the day to day accounting functions such as processing invoices for payment. The services for Ms. Berkuti can be engaged through a professional services agreement. The arrangement would continue through the current fiscal year, and the Board would determine how to fulfill the position through its Fiscal Year 21/22 budget process.

FISCAL IMPACT
Sufficient funds are available in the approved FY 20/21 CEA budget.

ATTACHMENTS:
None