

CALIFORNIA COMMUNITY CHOICE ASSOCIATION (CalCCA)

COMMENTS ON THE STAFF WHITE PAPER

June 11, 2018

Introduction

CalCCA appreciates the opportunity to provide informal comment on the staff white paper, California Customer Choice: An Evaluation of Regulatory Framework Options for an Evolving Electricity Market (“Staff White Paper”). CalCCA is a nonprofit organization formed in June 2016 to represent the interests of California’s Community Choice Aggregation (“CCA”) programs in regulatory and legislative matters.¹

CCAs play a major role in upholding the three principles that guide evaluation of California’s changing energy market:

- Affordability: Design Rates and Charges So That Bills Are Affordable
- Decarbonization: Meet California’s Environmental and Climate Goals
- Reliability: Maintain Safety, Reliability, and Resiliency of Electricity Services

In addition, CalCCA believes it is important to add *social equity* as a fourth core principle.² As public agencies operating within our local communities, CCAs, as well as the California Legislature, have supported a sustained focus on social equity as a key aspect of transitioning to the decarbonized grid of the future. These four goals are integral components of communities’ motivation to undertake the often years-long process of forming a CCA.

In past comments to the Commission, CalCCA has highlighted ways in which CCAs are taking action on each of these four topics. In those comments, CalCCA discussed: (1) the opportunity California’s changing energy landscape presents; (2) the ways in which CCAs are crucial partners with the state in meeting AB 32 goals; (3) how CCAs are not like other LSEs; (4) how CCA growth is consistent with current planning and procurement policies; (5) the need to

¹ The operational CCA programs in California – Apple Valley Choice Energy (“AVCE”), CleanPowerSF, Clean Power Alliance of Southern California (CPA), Desert Community Energy, East Bay Community Energy (“EBCE”), Lancaster Choice Energy (“LCE”), Marin Clean Energy (“MCE”), Monterey Bay Community Power (“MBCP”), Peninsula Clean Energy Authority (“PCE”), Pioneer Community Energy (“Pioneer”), Pico Rivera Innovative Municipal Energy (“PRIME”), Redwood Coast Energy Authority (“RCEA”), San Jose Community Energy (“SJCE”), Silicon Valley Clean Energy Authority (“SVCE”), Sonoma Clean Power Authority (“SCPA”), and Valley Clean Energy Alliance – comprise CalCCA’s current voting members. In addition, CalCCA’s affiliate members include: County of Santa Barbara, City of San Luis Obispo; the cities of Corona, Hermosa Beach, and Industry; San Jacinto Power; Solana Energy Alliance; and Western Community Energy.

² See CalCCA Comments available at:

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CA%20Community%20Choice%20Aggregators.pdf

fundamentally reform the utility business model; (6) the need for access to customer data to drive innovation; and (7) ways in which CCAs are demonstrating leadership on the four goals above.³ We will not repeat these comments in detail, but offer the following high-level comments on the core principles identified above.

General Response to Staff White Paper

We share the Commission's desire to navigate this time of transition in a way that minimizes costs to energy consumers from decarbonizing our grid and transportation system, while also ensuring continued high levels of reliability. However, as the Staff White Paper points out in Appendix III, there are already over twenty proceedings dedicated to advancing the three core principles while facilitating the growth of decentralized energy technologies and alternative energy suppliers. Accordingly, almost all the issues raised in the Staff White Paper are already being addressed in existing dockets at the Commission. Given these ongoing efforts, we recommend that the Commission allow each proceeding to address relevant issues rather than opening a new omnibus docket. If further coordination of these efforts is needed, the Commission should consider developing an Action Plan that demonstrates how the issues and current proceedings are interrelated.

CalCCA also recommends that the Staff White Paper remove comparisons between the growth of CCAs and the lead-up to California's 2000 energy crisis.⁴ The paper conflates two different issues from California's restructuring of the electricity industry – increasing customer choice and over-reliance on short-term energy markets – and then appears to cast blame for its concerns on increased customer choice. In this regard, the Staff White Paper posits a false comparison while also ignoring subsequent safeguards and structural changes to California's market that reduce the risk of another crisis. These changes include:

- **The development of distributed generation and community choice aggregation.** These additional generation sources reduce the risk inherent in depending on one IOU provider for service.
- **The establishment of a Resource Adequacy (RA) requirement to ensure that LSEs procure sufficient capacity to protect reliability,** which was not in place prior to or during the energy crisis. Concerns raised in the Staff White Paper that this is not a multi-year requirement, cost recovery is insufficient, or that locational concerns are not being met can be addressed in the RA proceeding (R.17-09-020).

³ See, CalCCA Comments on the Customer and Retail Choice En Banc and White Paper, submitted June 16, 2017 (available at: ftp://ftp.cpuc.ca.gov/workshop/energy/2017/RetailChoiceEnBancComments/CalCCA_Comment_s.pdf); CalCCA Comments on the California Consumer Choice Project Workshop submitted November, 11, 2017 (available at: [http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy - Electricity and Natural Gas/CA%20Community%20Choice%20Aggregators.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/CA%20Community%20Choice%20Aggregators.pdf)).

⁴ See, California Customer Choice Draft Report, May 2018; p. iii, pars 1-3; p. iv, pars 1, 3, 7; p. 16, para 5.

- **The absence of utility divestiture.** Rather than divesting their energy resources the way they did prior to the energy crisis, the incumbent utilities are retaining their assets, almost all of which are secured under ownership or long-term contracts. At issue in the PCIA OIR and elsewhere is how the attributes and costs from these resources can be better allocated between the IOUs' bundled and delivery-only customers in ways that preserve their value. However, no party is proposing abrogation of these contracts, so the resources will continue to serve load no matter how they are paid for or their products are distributed.
- **Decreased reliance on the spot market.** Analyses of the energy crisis and utility actions during the crisis have focused on the fact that there was over-reliance on spot market purchases within a flawed spot market design. RA requirements, long-term RPS contracting requirements, and the overhang of existing long-term IOU resources all result in a market that is unlikely to over-rely on short-term purchases for the foreseeable future.

These features combined ensure that today's California energy market is a fundamentally different creature from the market that existed prior to and during the energy crisis. This changed landscape does not mean that continued planning and dialogue are not necessary to achieve California's energy goals. As discussed below, ongoing regulatory reform is needed to foster the innovation and customer choice that will drive decarbonization, increase affordability, and ensure reliable electric service.

CCAs have sought to reduce ratepayer exposure to market changes with careful procurement, while also fostering greater regulatory certainty through participation in numerous Commission dockets. However, the draft Staff White Paper suggests that CCAs may fail, that ratepayers may be stranded, and that a new energy crisis could be looming. We reject these assertions. The Commission has never presented any data in any docket that supports these insinuations, and the Staff White Paper presents no evidence to support them either. Moreover, as discussed below, the Commission has robust policies in place to prevent these outcomes. CalCCA therefore requests that the Staff White Paper remove statements equating CCAs with reliability issues or other unsubstantiated concerns.⁵ Unfounded assertions do nothing to foster the certainty and trust necessary to allow California stakeholders to focus on our common goals.

Decarbonization

CCAs are supporting the construction of billions of dollars of renewable energy projects under long term power purchase agreements at a pace faster than required by current state law. As noted in the attached letter that CalCCA recently sent to the Office of Governor Jerry Brown, California CCAs are undertaking 1,136 MW of new renewable projects, of which approximately 1,014 MW, or 89%, are supported by long-term contracts of more than 10 years. Of the approximately 276 MW of facilities already in operation, 53% have long term power purchase agreements (PPAs). Of the 747 MW under development in the list, 100% are supported by long term contracts. Projects supported by CCAs span the full range of facilities being built in California today, from smaller distribution-scale solar facilities to utility-scale facilities coupled

⁵ See footnote 4 infra.

with the latest energy storage offerings. As the share of customer load served by CCAs grows, more facilities will be built at a faster pace than would have occurred otherwise, because most CCAs have higher greenhouse gas free or renewable content goals than the state currently requires. The demonstrated ability of CCAs to procure the resources necessary to serve their load on reasonable commercial terms should lay to rest concerns that sufficient renewable energy resources will be built to meet California’s renewable energy goals.

These activities demonstrate the wisdom of AB 32 in anticipating voluntary action as a component of California meeting its decarbonization goals, and the Legislature’s foresight in authorizing CCAs via AB 117 after the last energy crisis. CCAs, which are entities formed by local governments, take state mandates concerning renewable energy resources, GHG-free power, and affordability as targets to meet or exceed. As the ARB’s 2017 Scoping Plan notes:

“However, to definitely tip the scales in favor of rapidly declining emissions, we also need to reach beyond State policy-making and engage all Californians. Further progress can be made by supporting innovative actions at the local level—among governments, small businesses, schools, and individual households.”⁶

CCAs are a key component of the movement by local governments to localize state climate change efforts through accelerated GHG reductions and engagement with California’s citizens, businesses, schools, and other stakeholders.

The Staff White Paper raises questions of how to ensure that California continues to lead on decarbonization efforts. The Commission’s ongoing Integrated Resource Planning (“IRP”) docket (R.16-02-007) is the forum for ensuring load serving entities achieve the state’s decarbonization goals. Current state law provides the Commission with the authority it needs to ensure the state’s goals are met.

Resiliency and Reliability

One of the Staff White Paper’s key areas of focus is how to maintain reliability during this time of transition. CCAs share the Commission’s view that reliability is a critical focus of state oversight and coordination. At present, the data available from the ISO and the Commission do not appear to support any systemic concerns about reliability. As the Commission itself concluded in its recent decision in the Integrated Resource Plan proceeding (D.18-02-018), as long as California addresses revenue sufficiency for those natural gas plants needed for reliability and continues its energy efficiency and behind-the-meter solar development (two issues not fully addressed in the Staff White Paper), and if LSEs continue to procure RPS-eligible resources to meet or (as many CCAs are doing) exceed their requirements, California will have:

⁶ 2017 Scoping Plan. November 2017. p. 96. (available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).

- A reliable electric system with a 130% reserve margin, 15% above the required 115%⁷
- An electric system that is equivalent to being 58% RPS-eligible⁸
- Affordable rates that are only 1% higher (in real terms) than the baseline forecast⁹

These goals will be achieved even with:

- The retirement of the Diablo Canyon power plant in 2024-2025¹⁰
- The retirement of all once-through cooling (OTC) natural gas plants¹¹

California’s RA framework is currently under review in R. 17-09-020. Through this proceeding, the Commission is actively exploring what changes may be necessary to facilitate continued reliability as California transitions to a decarbonized grid. A May 22, 2018 Proposed Decision in Track 1 of this docket calls for stakeholder proposals (due July 11, 2018) to guide Commission implementation of new three- to five-year local RA obligation, along with centralized procurement for local RA resources. This docket is the key Commission-led forum for addressing the reliability questions raised in the Staff White Paper. Additional proceedings that touch on reliability and resiliency include general rate cases, distributed energy resources and grid modernization (R.14-08-013), demand response (R.13-09-011), and energy storage (R.15-03-011). CalCCA looks forward to a robust discussion, premised on data and tested in hearings if necessary, that will recraft resource adequacy and other Commission rules as warranted.

The Commission is not the only entity tasked with ensuring system reliability. The California Independent System Operator (“ISO”) has a broad oversight role in ensuring system reliability, with the Commission evaluating the compliance of individual LSEs. To meet its mandates, the ISO is currently engaged in its own efforts to ensure that market rules continue to facilitate the procurement of resources that meet grid needs. However, despite the Staff White Paper’s concerns about reliability, it does not appear to incorporate significant input from the ISO. CalCCA is actively engaged at the ISO on proposals to develop new market products or reform current ones in order to meet reliability needs during the transition from a grid supported primarily by natural gas to one supported by renewables. We urge the Commission to seek ISO input before any further steps are taken. Between the ISO and the Commission, with robust stakeholder input, CalCCA believes California can get it right.

We do not see any need at present for a wholesale upending of California’s reliability framework. Moreover, vague claims of a looming crisis do nothing to provide the market certainty needed to build new resources. However, there appears to be clear room for improving coordination between the ISO and CPUC on the resource adequacy front. The current framework is inefficient, with the two agencies using different evaluation metrics and timelines for resource

⁷ Proposed Reference System Plan, September 19, 2017, p. 68.

⁸ “An RPS of ~58% is a byproduct of achieving the 42 MMT carbon goal” established in the IRP (Proposed reference System Plan, p. 58)

⁹ The “total incremental cost is \$239 million/year, equivalent to approximately a 1% increase in system average rates by 2030.” (Proposed Reference System Plan, September 19, 2017, p. 9)

¹⁰ Proposed Reference System Plan, September 19, 2017, p 27

¹¹ Proposed Reference System Plan, September 19, 2017, p 27, 34

adequacy planning and compliance. CalCCA looks forward to working with all stakeholders to continue California's robust resource adequacy program, and support the continued growth of CCAs, DERs, and new market actors.

As noted in CalCCA's previous comments, CalCCA believes it is critical to focus Commission efforts on ensuring that the state's investor-owned utilities ("IOUs") are well positioned to maintain a reliable transmission and distribution grid that will allow CCAs to procure energy resources to serve their communities. Going forward, a key area of focus for the Commission should be ensuring the IOUs are investing in the right resources to maintain transmission and distribution system resiliency and safety, while ensuring the IOUs do not leverage their monopoly power over this essential component of the energy system in ways that undermine the ability of CCAs and other energy providers to serve their customers. Leveraging of monopoly power has been consistently identified as inimical to innovation. The Staff White Paper notes how New York is seeking to open up its distribution system to greater competition in order to spur innovation, with the IOUs moving to a role of overall coordinator rather than being the sole provider. IOU general rate cases and rate-design-related dockets are the natural forums for considering how the IOUs receive compensation for the services they provide, while not hindering continued evolution in California's energy markets.

CCAs have also offered robust solutions to unlock the excess resources the IOUs currently possess in a transparent and market-oriented fashion within the Commission's Power Charge Indifference Adjustment docket (R.17-06-026). As part of the proposals put forward in that docket, CalCCA proposed a Staggered Portfolio Auction as a means to realign generation assets bought by IOUs to serve California's customers to the entities now serving that customer load.¹² This forum is the appropriate place to discuss the status of contracts signed by the IOUs. We see no need to revisit this discussion in the broader context of the California Customer Choice Project ("CCCP").

Affordability

CCAs share the state and Commission's desire to ensure California's energy costs remain affordable. CalCCA's prior sets of comments highlighted ways in which CCAs are driving more affordable rates. Given CCAs' efforts to promote affordability, CalCCA anticipates CCA rates will remain comparably priced to IOU rates for several reasons.

First, as recently shown by MCE, CCAs can achieve credit ratings that are as robust as the IOUs' credit ratings. As the financial markets gain experience with CCAs and as CCAs become more established, additional CCAs are likely to achieve investment grade credit ratings. As demonstrated by the robust procurement of energy resources CCAs have undertaken to date, CCAs are credit-worthy entities despite most lacking credit ratings at this time.

Secondly, recent CCA contracts do not show a significant "non-IOU" cost premium. Although there has been no detailed analysis of contract prices associated with the more than 1,100 MW of

¹² See R.17-06-026 CalCCA Opening Testimony, Volume 3, Chapter 4, April 2, 2018: <https://cal-cca.org/wp-content/uploads/2018/04/R1706026-CalCCA-Volume-3-various.pdf>

new renewable capacity currently being procured by CCAs, publicly reported prices do not seem to show any price premium for these contracts. Indeed, some have argued that CCAs' greater flexibility in acquiring resources has resulted in lower prices and quicker turn-around from initial solicitation to a signed contract. To date, CCA solicitations for renewable power have resulted in numerous bidders, extensive competition, and what are widely considered reasonable prices.

Third, CCAs can take advantage of tax-exempt financing. As a result, similar to California's decades of experience with publicly-owned utilities (POUs), CCAs should be able to finance projects at significantly less cost than the IOUs. Given the current federal tax breaks for renewable development, to date most CCA renewable projects are privately financed in order to take advantage of the available tax incentives. If and when these incentives diminish, CCAs will continue to be able to finance projects at less cost than the IOUs.

Consumer Protection

CalCCA does not see a consumer protection role for the Commission in the services CCAs provide, nor does state law give the Commission jurisdiction to impose any customer protection requirements upon CCAs. CCAs are and will continue to be governed by Boards of local elected officials who ensure that CCA customers are protected. CCA Board meetings are open to the public, and CCA activities are subject to the Brown Act and other state laws designed to foster transparency. We note that the for-profit utilities operate under a different construct, which requires public oversight to ensure that they do not reward shareholders to the detriment of their ratepayers.

The Staff White Paper raises questions around the return of CCA customers to IOUs. However, we do not see a need to revisit the current framework embodied in Rule 23, which governs the return of CCA customers to IOUs through robust, cost-based rules. In the unlikely event that a CCA should fail, these rules provide a clear path to facilitate mass return of a CCA's customers to the regional IOU. The Commission just revisited CCA bonding requirements in light of state law and addressed that issue in D.18-05-022 issued on May 31, 2018. CCAs are not aware of any need to revisit these rules. Accordingly, the Commission should strike this issue from the Staff White Paper or more substantively justify its inclusion.

Review of the Roles of the CPUC and IOUs

As all stakeholders are aware, California has worked rigorously for many decades to adjust the regulatory frameworks of prior eras in a consistent effort to foster customer choice, either through distributed energy resources or alternatives to the IOUs. This systemic effort to foster choice is based upon an understanding that innovation does not come from the monopoly service provider. Instead, innovation comes when the market is appropriately unlocked to enable other actors the opportunity to meet customer needs.

Given this long-term policy framework, CalCCA was surprised to see little attention given to the proper role for the CPUC in California's transitioning energy system. The Commission is an agency of constitutional origin that is tasked with regulating the state's investor-owned utilities ("IOUs") to protect energy consumers from abuse, and with ensuring that IOUs achieve the

state's energy policy objectives at reasonable cost. It is critical that the CPUC continue to focus on this enormous task rather than seek expansion of its oversight function to new market actors in the absence of any clear need or consumer harm. Many of the questions asked regarding the need for expanded regulatory oversight of other market actors seem to miss the mark in this regard.

Moreover, as a prior 2015 staff white paper discussed, the current utility business model is ill-suited to the changes taking place within the state's energy system. The Staff White Paper identifies decoupling as one type of regulatory reform that was needed to foster energy efficiency. However, other reforms, such as moving the IOUs to a distribution system operator model, may be necessary to fully unlock opportunities for innovation and service offerings.

These reforms become more salient as CCAs move beyond initial start-up and more deeply into program offerings. The transition of state energy programs from a one-size-fits-all framework of IOU-led programs overseen by the Commission to one that is more outcome-oriented, flexible, and open to alternative providers will be critical. As public agencies overseen by elected officials, CCAs are well positioned to oversee programs operating in our local communities. Because CCAs are embedded within our communities, we can particularize state energy priorities for our territories based on local needs and preferences, while providing reporting to the state that ensures state policies are being achieved. If this transition is robust and cooperative, we anticipate greater success in achieving our collective goals. Moreover, growth of CCAs can allow the Commission to focus their programmatic efforts in areas of the state that do not have a CCA.

Next Steps

As demonstrated above, the Commission has numerous dockets open to address the issues raised by the Staff White Paper. CalCCA believes these forums provide sufficient opportunity for stakeholders to collectively develop the regulatory and market mechanisms necessary to meet California's energy goals. There is no need to open a separate docket to address these issues.

The Commission should consider developing an Action Plan that demonstrates how the issues and current proceedings are interrelated. Similar to the Distributed Energy Resources Action Plan¹³ approved in 2017, the 2018 Energy Action Plan (an overhaul of the 2003 EAP) could articulate a vision with supporting principles, identify current and continuing efforts, and assess and direct further near-term action needed to support a long-term vision that includes evolution in the role of the Commission. Such a framework would serve as a roadmap for stakeholders, including decision-makers, to facilitate proactive, coordinated policy development. The Action Plan could guide development and implementation of policy related to affordability, reliability, and decarbonization, without determining the outcome of individual proceedings or prejudicing the jurisdictional domain of other agencies.

¹³ CA's DER Action Plan: [http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Commissioners/Michael_J_Picker/DER%20Action%20Plan%20\(5-3-17\)%20CLEAN.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Commissioners/Michael_J_Picker/DER%20Action%20Plan%20(5-3-17)%20CLEAN.pdf)

Conclusion

CalCCA appreciates the opportunity to continue a dialogue with all stakeholders regarding how to best meet shared goals of reliability, decarbonization, social equity, and affordability. As discussed in these comments and our prior two sets of comments, CCAs are well positioned to advance these goals:

- CCAs are reducing rates and working to stabilize rates.
- CCAs are increasing the use of renewable energy, often ahead of state requirements.
- CCAs are augmenting state efforts to decarbonize the transportation and building sectors through innovative programs grounded in community needs and preferences.
- CCAs are meeting all state reliability requirements, and are engaging with the Commission and ISO to develop updated rules, frameworks, and market products that will protect and foster reliability in the future.

Attachment A

CalCCA May 9, 2018 Letter to Governor Brown's Office



May 9, 2018

Apple Valley Choice Energy

Clean Power Alliance

CleanPowerSF

Desert Community Energy

East Bay Community Energy Authority

Lancaster Choice Energy

MCE

Monterey Bay Community Power Authority

Peninsula Clean Energy

Pioneer Community Energy

PRIME

Redwood Coast Energy Authority

San Jose Clean Energy

Silicon Valley Clean Energy Authority

Sonoma Clean Power

Valley Clean Energy Alliance

Saul Gomez
Catalina Hayes-Bautista
Alice Busching Reynolds
Office of Governor Edmund G. Brown
State Capitol, Suite 1173
Sacramento, CA 95814

RE: New Renewable Procurement by CCAs

Dear Saul, Catalina and Alice:

The California Community Choice Association (CalCCA) is the trade association representing operational community choice aggregators (CCAs), as well as local governments exploring CCA formation. We support the growth of CCAs across the state by providing information, education, and resources to communities that are establishing CCAs. We also advocate for CCAs in the legislature and before regulatory agencies, and welcome the opportunity to provide information about the recent expansion of CCAs throughout California.

Thank you for your interest in the procurement practices of operating CCAs. Historically it has taken three to four years for an operating CCA to create a diverse, long-term portfolio. However, as described below, many of the new CCAs are executing long term renewable contracts in their launch year.

The first CCAs to launch service in California between 2010 and 2016, were the first to execute contracts to build new renewable projects. CCAs have supported or are supporting over \$2.5 billion in construction of California renewables with the majority being built with project labor agreements. The attached fact sheet provides a list of more than 1,136 MW of renewables contracted by the initial five operating CCAs, as of January 2018.

Of the approximately 1136 MW of projects listed, approximately 1014 MW or 89% are supported by long term contracts of more than 10 years. Of the approximately 276 MW of facilities already in operation, 53% of the projects have long term power purchase agreements (PPAs). Of the 747 MW under development in the list, 100% of the projects are supported by long term contracts.

Below is a summary by CCA:

- i. MCE began service in 2010 and has the most diverse and largest portfolio of any CCA with 105 total energy contracts and 44 active energy contracts delivering energy that serve MCE's load of 5,052 GWhs in 2018. MCE has met the 65% long term contracting requirement for RPS compliance years

ahead of schedule. MCE contracts have start dates ranging from 2012 to 2023 with scheduled deliveries of both energy and capacity through 2040.

- ii. Sonoma Clean Power (SCP) launched in 2014 and has 8 contracts for 134 MWs of new solar and wind projects. SCP recently ran an RFP and received over 80 bids for long-term (greater than 10 years) Category 1 RPS-eligible renewable resources ranging from wind, solar, and geothermal all over the Western interconnect. The projects are described below.
- iii. Lancaster Choice Energy (LCE) in 2015 was the first CCA to launch in Southern California. In its first year of operation, LCE solicited proposals for renewable project and executed a 20 year contract for a newly constructed solar project in the city of Lancaster, and a short-term agreement for wind.
- iv. Peninsula Clean Energy launched less than two years ago in October 2016, issued an RFO for new renewables in November 2016, and has already contracted for 300 MW of new solar photovoltaic projects to be constructed in Merced and Kings Counties for contract terms of 20 years and 15 years. These new builds will start service in 2019. Peninsula Clean Energy issued another RFO in January 2018 and will be contracting for additional new long-term renewable projects this summer.
- v. San Francisco's CCA, CleanPowerSF, began serving customers in May 2016, starting in phases. It's supply portfolio includes long term contracts for 147 MW of California wind and solar with terms between 10 and 22 years. Two of these projects expect to complete construction and begin deliveries in 2019 and 2020.

In 2017, CCA expansion began to ramp up with four more CCAs starting service to communities ranging from northern California to southern California: Redwood Coast Energy Authority, Silicon Valley Clean Energy, Apple Valley Choice Energy, and Pico Rivera Innovative Municipal Energy (PRIME).

In the first five months of 2018 five new CCAs launched - northern to southern: Pioneer Community Energy, Monterey Bay Community Power, Clean Power Alliance, San Jacinto Power (SJP), and Rancho Mirage Energy Alliance (RMEA).

Remarkably, the CCAs that began service in 2017 are already negotiating contracts to procure approximately 800 MW of renewables from greenfield developments. Solicitations issued in the fall of 2017 and winter of 2018 are in the final stages of negotiations and the results will be available shortly. Below is a high-level overview.

1. Joint Procurement by Monterey Bay Community Power and Silicon Valley Clean Energy

Negotiations will be completed in May 2018 with three renewable developers for the following:

- a. 200 MW wind generation, 15-year term
- b. 150 MW solar, plus 45 MW, 4 hours of storage, 15-year term
- c. 150 MW solar, plus 45 MW, 4 hours of storage, 20-year term

These projects will be operational by 2021 and the notional value of the three contracts is \$1 billion. An additional RFO will seek 20 MW of distributed generation in the Monterey Bay region.

2. California Choice Energy Authority Joint Procurement (LCE, PRIME, SJP and RMEA)

LCE was instrumental in the formation the California Choice Energy Authority (CCEA), a joint powers authority formed to provide services, and economies of scale, to some of the smaller cities including the cities of Lancaster, Pico Rivera, San Jacinto, and Rancho Mirage. CCEA will be issuing a Request for Proposals (RFP) for approximately 150 MW of renewable power. CCEA will be seeking long-term Category 1 RPS-eligible projects with completion dates in 2020 - 2021.

CCEA, on behalf of RMEA awarded a contract for a 5 MW large hydro project that will account for 15% of RMEA's power supply needs.

3. Redwood Coast Energy Authority (RCEA) procurement

RCEA has a diverse portfolio and has some exciting new developments:

- a. Local biomass: 13 MW PPA for 5 years; 10 MW PPA for one year, with option to renew year-to-year.
- b. Developing a microgrid of RCEA owned and operated assets: 2.25 MW solar and 2 MW/8 MWh battery storage system (in partnership with PG&E).
- c. An RFQ for development partners has just been completed for what may likely be the first west coast offshore wind project (and possibly the first floating wind project in the U.S.). RCEA anticipates approximately 7 years of planning and construction toward the development of a targeted 100-150 MW project.

4. Sonoma Clean Power New Renewable Projects

SCP is in the final stages of entering into three additional PPAs for Northern California projects totaling 70 MW of solar, 80 MW of wind and 5 MW of storage. These new projects will start production at varying times between 2020 and 2023.

5. East Bay Community Power (EBCE) joint RFO with PG&E

EBCE, in partnership with PG&E, recently announced the Oakland Clean Energy Initiative RFO. The RFO is soliciting competitive offers for energy, capacity, and reliability products in the local geographical area of Alameda County in order to enable the retirement of Dynegy's aging Oakland Power Plant as of summer 2022. The Dynegy Oakland Power Plant is a 165 MW jet fuel-powered generating facility, located near Jack London Square in Oakland, which began commercial operations in 1978 and currently operates under an annual Reliability Must Run (RMR) Contract with the California Independent System Operator (CAISO). The solicitation is seeking new distributed energy resources projects to ensure reliability in Oakland when the Dynegy plant is retired. Depending on the exact resource mix, the solicitation is expected to result in 20 to 45 megawatts of clean energy resources. EBCE will consider purchasing energy (including RPS-eligible renewable energy) and capacity products from projects that produce energy storage and/or front-of-the-meter renewable generation, and PG&E will consider purchasing reliability products. Each partner will contract for its respective products in separate agreements with sellers. EBCE is also launching an RFO for California-sited renewable energy projects in Q2 2018 with a goal of procuring hundreds of MWs of new, California renewable energy projects.

These are some of the procurement projects CCAs are currently negotiating. Both MCE and Peninsula Clean Energy (PCE) have developed internal Integrated Resource Plans (IRPs) that describe their procurement strategies:

(i) MCE IRP: (<https://www.mcecleanenergy.org/wp-content/uploads/2017/11/MCE-2018-Integrated-Resource-Plan-FINAL-2017.11.02.pdf>), and

(ii) PCE IRP: (<https://www.peninsulacleanenergy.com/wp-content/uploads/2018/01/PCE-FINAL-2017-IRP-Updated.pdf>).

Additionally, each CCA is also developing an Integrated Resource Plan (IRP) to meet the CPUC's August 1, 2018 deadline. The development of these plans provides an opportunity for each CCA to consider and discuss with their boards and communities, the best procurement strategies to adopt going forward.

I hope these examples provide an illustration of the diverse procurement activities happening across the CCAs. We will be updating our renewables fact sheet as the results of the negotiations become available. As demonstrated above, CCAs are committed to procuring renewable energy. The key factor that has slowed the amount of renewable procurement in the market is the long-term contracting that has already occurred by the IOUs, and the established CCAs. Once these LSEs enter into 20 year contracts for all of their renewable needs, unless electricity demand drastically increases, there is no need to procure more for 20 years. The only need for new renewable supply would relate to the RPS moving up or CCAs voluntarily purchasing more until the RPS moves up. However, given current CAISO requirements to curtail solar resources, solar may not be as cost-effective as it has been without the option of regionalization to offset excess resources.

Please do not hesitate to contact me if you have any questions or comments.

Yours sincerely,



Beth Vaughan
Executive Director

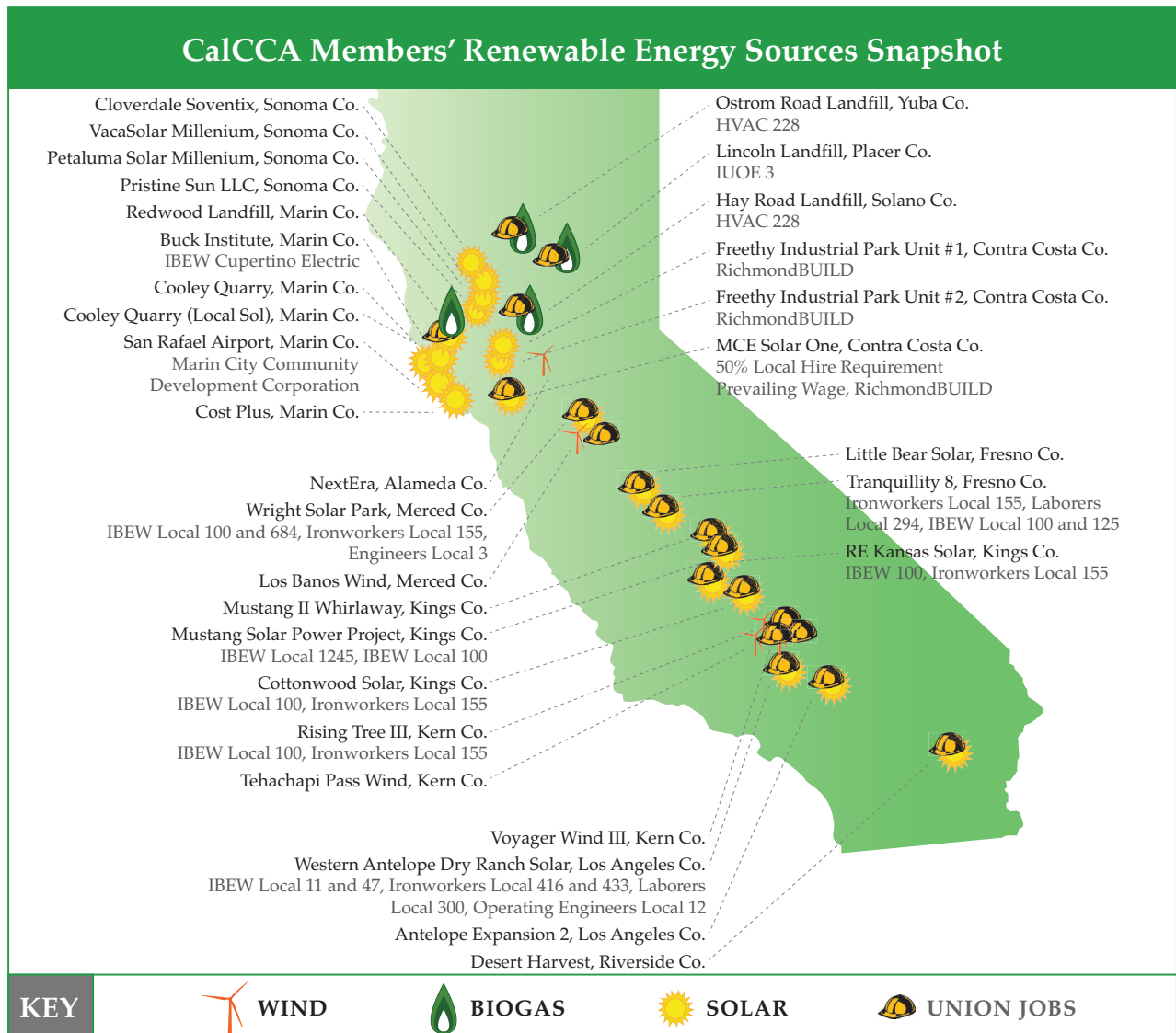
Together We're Building a Cleaner Energy Future for California

BUILDING NEW RENEWABLES

CCAs have over \$2.5 billion in construction of California renewables, and the majority of spending on the projects are with project labor agreements. It takes three to four years for an operating CCA to create a diverse, long-term portfolio. See the reverse side for a list of new renewable energy projects in California currently under contract with CCAs.

2,800+ CALIFORNIA JOBS

MCE's renewable projects have supported more than 2,800 California jobs* resulting in 1.2 million union labor hours in 2016. Lancaster Choice Energy's projects have created 80 jobs since 2015.



* MCE uses the National Renewable Energy Laboratory's Jobs and Economic Development Impacts Model to provide consistent and reasonably accurate estimates of direct and indirect jobs involved in CCA power contracting efforts and general operations.

RESOURCE & CONTRACT TYPE	RESOURCE PROVIDER / PROJECT NAME	LOCATION	PROJECT CAPACITY (MW)	SERVICE START DATE	CONTRACT LENGTH (YEARS)		
MCE	Solar FIT	San Rafael Airport	San Rafael, Marin Co.	1	2012	20	
	Solar PPA	Dominion / Buck Institute of Research on Aging	Novato, Marin Co.	1	2016	25	
	Solar FIT	Rawson, Blum & Leon / Cost Plus Plaza	Larkspur, Marin Co.	0.265	2016	20	
	Solar FIT	North Shore Solar Partners LLC / Freethy Industrial Parkway Unit #1	Richmond, Contra Costa Co.	1	2016	20	
	Solar FIT	North Shore Solar Partners LLC / Freethy Industrial Parkway Unit #2	Richmond, Contra Costa Co.	1	2016	20	
	Solar FIT	REP Energy / Cooley Quarry	Novato, Marin Co.	0.5	2017	20	
	Solar FIT	REP Energy / Cooley Quarry	Novato, Marin Co.	1 Local Sol**	2017	20	
	Biogas PPA	Waste Management / Redwood Landfill	Novato, Marin Co.	3.6	2017	20	
	Solar PPA	MCE / Solar One	Richmond, Contra Costa Co.	10.5	2017	25	
	Biogas PPA	G2 Energy / Hay Road Landfill	Vacaville, Solano Co.	1.6	2013	18	
	Biogas PPA	Genpower / Lincoln Landfill	Lincoln, Placer Co.	4.8	2013	20	
	Biogas PPA	G2 Energy / Ostrom Road Landfill	Wheatland, Yuba Co.	1.9	2013	18	
	Solar PPA	Dominion / RE Kansas Solar	Stratford, Kings Co.	20	2015	3	
	Solar PPA	Dominion / Cottonwood Solar	Stratford, Kings Co.	23	2015	25	
	Wind PPA	EDP Renewables / Rising Tree III	Mojave, Kern Co.	99	2015	3.5	
	Solar PPA	Recurrent Energy / Mustang Solar Power Project	Lemoore, Kings Co.	30	2018	15	
	Solar PPA	Recurrent Energy / Tranquillity 8	Tranquillity, Fresno Co.	100	2018	25	
	Solar PPA	sPower / Antelope Expansion 2	Lancaster, Los Angeles Co.	105	2018	20	
	SCP	Wind PPA	Terra-Gen / Voyager Wind III	Mojave, Kern Co.	42	2018	12
		Wind PPA	Terra-Gen / Los Banos Wind	Los Banos, Merced Co.	125	2018	12
Solar PPA		First Solar / Little Bear Solar	Mendota, Fresno Co.	40 up to 160***	2020	20	
Solar PPA		EDF Renewables / Desert Harvest	Desert Center, Riverside Co.	80	2020	20	
Solar		Cloverdale Soventix	Cloverdale, Sonoma Co.	1	2017	20	
Solar		VacaSolar Millenium	Petaluma, Sonoma Co.	1	2017	20	
LCE	Solar	Petaluma Solar Millenium	Petaluma, Sonoma Co.	1	2017	20	
	Solar	Pristine Sun LLC	Multiple sites, Sonoma Co.	12.5	2017	20	
PCE	Solar	Recurrent Energy / Mustang Solar Power Project	Leemore, Kings Co.	70	2016	20	
	Wind	NextEra / Golden Hills	Livermore, Alameda Co.	46	2018	20	
LCE	Solar	sPower / Western Antelope Dry Ranch	Lancaster, Los Angeles Co.	10	2016	20	
	Wind	3 Phases Renewables, Inc. / Tehachapi Pass Wind	Kern Co.	2	2016	3	
PCE	Solar	Frontier Renewables / Wright Solar Park	Santa Nella, Merced Co.	200	2019	20	
	Solar	Mustang II Whirlaway	Lemoore, Kings Co.	100	2019	15	

FIT=Feed-In Tariff, PPA=Power Purchase Agreement, SCP=Sonoma Clean Power, LCE=Lancaster Choice Energy, PCE=Peninsula Clean Energy

** 100% solar energy service option produced by a local solar farm within MCE's service area.

*** Project size will increase to 160 MW with inclusion of new MCE communities.