

My name is Rebecca Band, and I am here representing the International Brotherhood of Electrical Workers Local 1245 and I am also a delegate to the Contra Costa Central Labor Council. I would like to speak to Agenda Item #D5, Community Choice Energy.

IBEW 1245 and the Central Labor Council respectfully urge the Board of Supervisors to conduct the full Technical Study on CCE for the following reasons.

Embarking on CCE is a huge decision that effects every resident and business, and there are many possible options to explore. Skipping the Technical Study out of sheer convenience would preclude the Board from knowing for certain that they are embarking down the avenue that is best for our County.

It is our position that any CCE in Contra Costa County must embrace several worker-friendly principles in order to ensure benefits to the local economy. Those principles include

- 1) **Informing customers of the percentage of truly renewable, greenhouse-gas-free electricity** generated from solar, wind, geothermal and other eligible renewable energy resources in California and defined as Category 1, Qualified Renewable by California Public Utilities Code.
- 2) Minimizing or eliminating the use of Energy Credits called **Renewable Energy Certificates (RECs)**. The underlying power supplied in conjunction with unbundled RECs is dirty fossil fuel power; therefore it must not be marketed as “clean” or “green” so as not to mislead the public.

- 3) **Sending at least three written notices to potential CCA customers** that include a description of the percentage of the power mix that comes from California state-certified green power sources.
- 4) Procuring power from **Union generated sources**; employing **unionized customer service representatives** as well as recognize possible adverse impacts on existing energy workers; signing **Project Labor Agreements** on each Power Generation Project and any Energy Efficiency Projects/Programs that the CCE operates or signs onto.
- 5) Signing Community Benefits Agreements to include **local projects and local hiring**.

Marin Clean Energy (MCE) has not embraced these principles. In fact, they have flagrantly disregarded workers and local economies in almost every locality that they have entered. Additionally, despite the claims they've made regarding Renewable Portfolio Standards, MCE has not effectively accomplished any of its stated goals. They rely heavily on unbundled RECs and utilize a much lower percentage of truly greenhouse-gas-free energy compared to other utilities.

As part of its Technical Study, we urge the board to take a closer look at MCE's Power Source Disclosure Schedule (2011 through 2014), which is available upon request from Kevin Chou at the Energy Commission Kevin.Chou@energy.ca.gov. When compared side by side to the Power Source Disclosure Schedules from other utilities – including PG&E, SMUD and the City of Healdsburg -- it is evident

that MCE has fallen far short on their claims of cleaner, greener and cheaper power.

Contra Costa county deserves the best possible CCE, but without completing the full Technical Study, there's simply no way to know what that looks like.

Thank you for your time.

Principles for Labor Friendly Community Choice Aggregation Energy Program

In order to ensure the greatest transparency for consumers and the greatest opportunity for workers to benefit from local clean energy production jobs, the following Principles must be adopted by any Community Choice Aggregation entity, including one operating in Contra Costa County.

- 1. Energy Identification** – Any Community Choice Aggregation will inform customers of the percentage of renewable, greenhouse-gas-free electricity offered. Power may be labeled as “clean” or “green” if it comes from renewable energy generated from solar, wind, geothermal and other eligible renewable energy resources in California and defined by California law in the Public Utilities Code as Category 1.
- 2. Exclude RECs** – Any Community Choice Aggregation must provide renewable energy from actual renewable sources customers can trust while creating union jobs in the community for local workers. Renewable Energy Certificates (RECs) undermine these goals. There is no guarantee power that includes unbundled RECs is clean or green; therefore it must not be marketed as “clean” or “green” so as not to mislead the public.
- 3. Communication to Consumers** – The new Contra Costa CCE will send at least three written notices to potential CCA customers, and each notice will include a description of the percentage of the power mix that comes from California solar, wind, geothermal, small hydro-electric or other state certified green power sources.
- 4. Creating Union Jobs** – Any Community Choice Aggregation will procure Power from Union generated sources; employ unionized customer service representatives as well as recognize possible adverse impacts on existing energy workers; sign Project Labor Agreements on each Power Generation Project and sign Project Labor Agreements on any Energy Efficiency Projects/Programs that the CCA Operates or signs onto.
- 5. Community Benefits** - Any Community Choice Aggregation will sign Community Benefits Agreements to include local projects and local hiring.

Just the Facts: Worker-Friendly Community Choice Aggregation

BACKGROUND: Any Contra Costa Community Choice Energy agency **must** be evaluated upon the benefits it provides to Contra Costa County, its cities and its residents

- SB-350 Mandates that all customers receive 50% of electricity from Renewable Energy by 2030
- AB 32 regulations designate certified Renewable Energy sources from which this power comes
- The CPUC has created a pathway for Utilities and CCAs to phase in more Renewable energy
- CPUC has identified that 12,000 MW of Renewable Energy must be added to reach 33% RPS
- The new renewable sources have been built, are being built or are being planned to be built.
- These Projects are being built under PLAs, employing Union Members for 35 Million Man hours
- California produces more Renewable Energy in the U.S. and will be one of the largest 15 producers in the world when the 33% RPS is achieved in 2020

A Successful CCA is one that produces additional Renewable Energy and employs local residents

But there is a big challenge to any CCA – how to produce more and greener energy above the existing State Requirements? In other words, how to get above 33%/50% by 2020/2030 with lower GHG levels?

SUCCESSFUL CONTRA COSTA COUNTY COMMUNITY CHOICE AGGREGATION ENTITY MUST:

- Procure Power from Union generated, in-California sources
- Protect existing highly skilled electrical workers from being displaced due to the launch of CCE
- Sign PLAs on each Power Generation Project and fund these projects BEFORE Launching CCE
- Sign PLAs on any Energy Efficiency Projects/Programs that the CCA Operates or signs onto
- Sign Community Benefit Agreements to include local projects and local hiring

Sadly, the model adopted by the existing CCAs does not contain any of these critical elements.

MARIN CLEAN ENERGY HAS PURSUED A BUSINESS PLAN WHICH REJECTS A LOCAL BASED CCA:

- MCE signed Power Procurement contract with Shell Energy North America of Houston, TX.
- In the 5 years MEA has supplied power, almost 90% of that electricity has come from out of State, Non-Union generators, meaning ratepayer \$s are going out of State
- MCE relies heavily on energy credits, called Renewable Energy Certificates (RECs).
- These RECs are not electricity, they are pieces of paper. MCE uses RECs to Greenwash their dirty imported fossil fuel generated power, instead of investing in renewable energy projects
- Recent studies have demonstrated that buying RECs do NOT result in construction of Renewable Energy projects or even an increase in the amount of Renewable Energy available

Local Union Members and Contra Costa County residents need more renewable energy and local renewable projects. The new CCE must be good for workers, good for the environment and provide energy from sources that customers can trust. Current implementation of CCA by Marin and Sonoma are enriching the energy traders (Shell Oil) and consultants while delivering **DIRTIER** power than PG&E.

The Facts – Marin Clean Energy

SUMMARY: When is clean energy not clean energy? When it's actually energy from fossil fuels greenwashed with paper credits. The energy provided by Shell Oil to Marin purports to be "clean" but is in fact mostly from greenhouse gas producing sources.

Marin Clean Energy is Full of Carbon- They Just Don't Want You to Know It

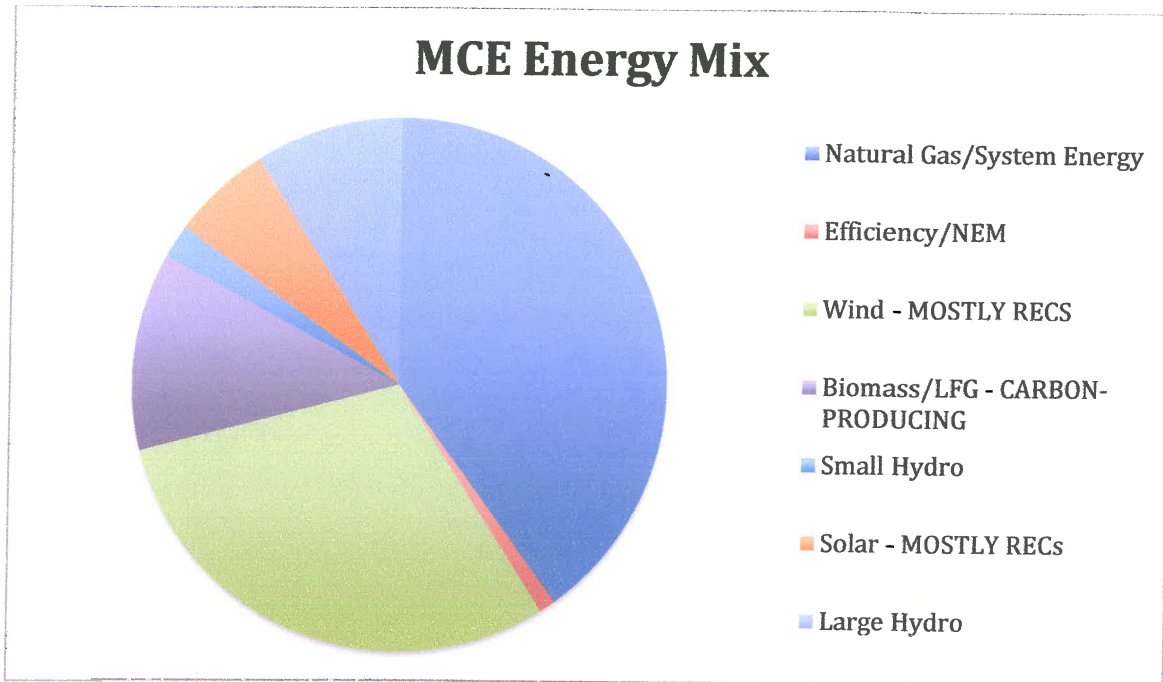
According to MCE's own documents, **less than 22%** of its power supply comes from true renewable energy (Figure 4 pg 13; Table 4 pg 16; Appendix A pg 23; MCE Integrated Resource Plan, 2013, - all graphs attached at end of this document.

[http://marincleanenergy.org/sites/default/files/key-documents/Integrated Resource Plan 2013 Update.pdf](http://marincleanenergy.org/sites/default/files/key-documents/Integrated%20Resource%20Plan%202013%20Update.pdf))

Beyond that, MCE is overwhelmingly reliant on so-called "unbundled renewable energy certificates" amounting to at least 36% in 2012 (Source: MEA AB162 filing 2012). These certificates have been harshly criticized by environmental advocates as a form of "greenwashing".

- One recent article harshly criticizes the use of "unbundled RECS", noting, "Many states have laws that label dirty power generation like burning tires or trash as renewable. If these facilities are awarded RECs and can sell them across state lines, a city's purchase of "green" power may not be green at all." [Institute for Local Self-Reliance, <http://www.ilsr.org/illinois-cities-greening-or-greenwashing/>]
- Another expert called these types of RECS "a scam" writing, "It would be great if the purchase of certificates made up the difference between conventional and renewable power, but at best this is a token subsidy for renewable energy. Most sales don't do much beyond paying the salaries — of people selling certificates. Consumers and producers have embraced market-based solutions, but scams like this threaten to discredit the market." [Daniel Press, professor and chair of the Environmental Studies Department at UC-Santa Cruz, Mercury News, 4/1/2009, http://www.mercurynews.com/opinion/ci_12049267]
- In fact, RECs are not a form of power at all. They are merely certificates that accompany different power sources that can be sold or traded separate from their actual underlying energy. Because RECs aren't true renewable energy, California is phasing out their use, reducing maximum purchases from 15 percent to only 10 percent in 2018.
[<http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/33RPSProcurementRules.htm>]

By MCE's own accounting, they are buying unbundled RECs far above that level. Why? To hide the true origins of its power supply.



Source: MCE Integrated Resource Plan, 2013 – Updated to accurately reflect REC component from Marin Energy Authority's Proposed Annual Report to California Energy Commission, June 2012

Overstating Wind Power

- While MCE claims to receive significant amounts of power from “wind” (amounting to 30% of its total supply) their own documents say that non-REC wind amounts to only 4% of its supply (SOURCE: Proposed Annual Report to the California Energy Commission, June 2012; MCE Integrated Resource Plan, 2013, [http://marincleanenergy.org/sites/default/files/key-documents/Integrated Resource Plan 2013 Update.pdf](http://marincleanenergy.org/sites/default/files/key-documents/Integrated%20Resource%20Plan%202013%20Update.pdf))
- The remaining “wind” power claimed by MCE comes in the form of “RECs”.

Overstating Solar Power

- MCE claims to get 6% of its power mix from solar – in reality, MCE gets virtually no power at all from non-REC solar sources. The only solar project that directly supplies power to MCE is the San Rafael Airport Project which supplies 0.17% of power a year. (SOURCE: Proposed Annual Report to the

California Energy Commission, June 2012; Appendix A pg 23, MCE Integrated Resource Plan, 2013, [http://marincleanenergy.org/sites/default/files/key-documents/Integrated Resource Plan 2013 Update.pdf](http://marincleanenergy.org/sites/default/files/key-documents/Integrated%20Resource%20Plan%202013%20Update.pdf))

BioMass – The New Coal

- MCE does accurately claim that a significant portion of its power supply – between 9-12% comes from biomass. Unfortunately, this can hardly be characterized as “clean” energy. Recent studies have found biomass to be more polluting than coal.
 - “Biomass electricity generation, a heavily subsidized form of “green” energy that relies primarily on the burning of wood, is more polluting and worse for the climate than coal, according to a new analysis of 88 pollution permits for biomass power plants in 25 states.” [Partnership for Policy Integrity; “Trees, Trash and Toxics: How Biomass Energy Has Become the New Coal”, 4/2/14, <http://www.pfpi.net/trees-trash-and-toxics-how-biomass-energy-has-become-the-new-coal>]

Figure 4: MCE Renewable and Non-renewable Energy Volumes, 2013-2022

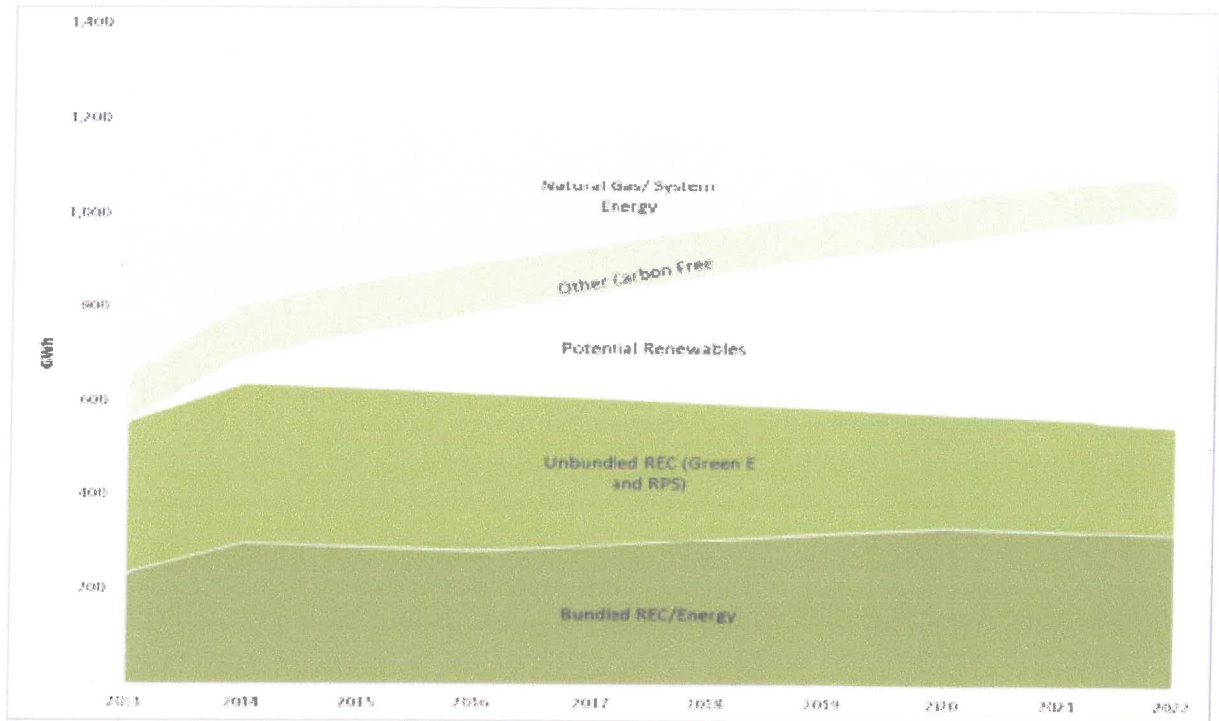


Table 4: MCE System Energy Balance, 2013-2022 (GWh)

Load	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Retail Sales	1,101	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275	1,275
UG and Efficiency	(9)	(23)	(40)	(63)	(85)	(107)	(129)	(152)	(174)	(196)
Distribution Losses	66	75	74	73	71	70	69	67	66	65
Total Load Requirement	1,158	1,328	1,309	1,285	1,261	1,238	1,214	1,191	1,167	1,144
Less Renewables/Carbon Free										
Existing and Planned Renewables, Bundled	231	293	285	278	289	305	320	334	327	320
Existing and Planned Renewables, Unbundled	321	352	352	349	327	301	276	256	252	248
Existing and Planned Other Carbon Free	104	106	104	101	98	95	92	84	81	79
Total Existing and Planned Carbon Free Energy	655	751	741	727	714	701	687	674	661	647
Total System/Null Energy Requirements										
Null Energy Associated with Unbundled RECs	321	352	352	349	327	301	276	256	252	248
Remaining System Energy Requirement	502	576	568	558	547	537	527	517	506	496
Less System/Null Energy Contracted	808	977	960	946	920	-	-	-	-	-
System/Null Energy Net Short/(Long)	15	(49)	(41)	(40)	(45)	838	803	773	759	744

Appendix A: Load and Resource Tables

Marin Clean Energy Resource Balance October, 2013

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Energy Requirements (GWh)										
Retail Load	1101	1275	1275	1275	1275	1275	1275	1275	1275	1275
New Energy Efficiency and Distributed Generation	(9)	(12)	(10)	(10)	(8)	(10)	(12)	(10)	(10)	(10)
Retail Load (Net of EE/DG)	1,092	1,262	1,265	1,265	1,267	1,265	1,263	1,265	1,265	1,265
Distribution Line Losses and Unaccounted For Energy	66	75	74	73	71	70	69	67	66	65
Total Energy Requirements	1,158	1,337	1,339	1,338	1,338	1,335	1,332	1,332	1,331	1,330
Renewable Energy Content (%)										
Light Green	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
RPS Qualifying	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
Deep Green Participation	1%	3%	3%	3%	4%	4%	4%	5%	5%	5%
Qualified MCE Renewable Energy Content (RPS and Voluntary)	51%	52%	52%	52%	52%	52%	53%	53%	53%	53%
Renewable Energy Requirements (GWh)										
PCC 0 (SENA P1)	30	30	14	-	-	-	-	-	-	-
PCC 1 (Bundled, In-State)	128	154	208	213	241	254	266	278	273	267
PCC 2 (Bundled, Firm and Shaped)	64	60	64	65	48	51	53	56	55	53
PCC 3 (REC Only)	64	45	58	40	32	34	35	37	36	35
Subtotal, RPS Renewable Energy Requirements	295	338	333	327	321	330	345	371	363	356
Voluntary Renewable Energy Certificate Requirements (GWh)										
Light Green Volume	251	288	284	279	274	245	218	191	187	183
Deep Green Environmental Volume	5	16	20	21	21	22	23	28	29	29
Subtotal, Voluntary RECs	257	307	304	299	295	267	241	219	216	213
Conventional Energy Requirements (Includes energy w/ unbundled RECs)	927	1,014	1,023	1,007	972	933	895	857	840	823
Renewable Resources Under Contract (GWh)										
Baseline (SENA P1)	30	30	14	-	-	-	-	-	-	-
PCC 1	-	-	-	-	-	-	-	-	-	-
SENA P2A	-	3	2	-	-	-	-	-	-	-
G2 Hay	6	12	12	12	12	12	12	12	12	12
G2 Ostrum	5	13	13	13	13	13	13	13	13	13
Cottonwood	-	-	63	63	63	63	63	63	63	63
SENA P2B	74	58	19	-	-	-	-	-	-	-
Genpower	34	34	34	34	34	34	34	34	34	34
RE Karcas	-	-	40	46	49	-	-	-	-	-
SENA P3	-	-	48	50	-	-	-	-	-	-
SR Airport	2	2	2	2	2	2	2	2	2	2
Calpine SE	-	26	-	-	-	-	-	-	-	-
Calpine LT	-	-	-	-	88	88	88	88	88	88
Subtotal PCC 1	121	148	208	230	261	272	272	272	272	272
PCC 2	-	-	-	-	-	-	-	-	-	-
SENA P2A	13	10	6	-	-	-	-	-	-	-
SENA P2B	49	42	12	-	-	-	-	-	-	-
SENA P3	-	20	47	51	-	-	-	-	-	-
Subtotal PCC 2	62	60	65	51	-	-	-	-	-	-
PCC 3	-	-	-	-	-	-	-	-	-	-
Unokunty	38	-	-	-	-	-	-	-	-	-
Middle Fork ID	22	11	-	-	-	-	-	-	-	-
Subtotal PCC 3	60	11	-	-	-	-	-	-	-	-
Subtotal, RPS Renewable Resources Under Contract	282	258	307	281	261	272	272	272	272	272
Voluntary RECs Under Contract										
3 Degrees	-	-	-	-	-	-	-	-	-	-
OneEnergy	250	-	-	-	-	-	-	-	-	-
Subtotal Voluntary RECs Under Contract	250	-	-	-	-	-	-	-	-	-
Open Position, RPS Renewables (GWh)										
PCC 1	7	47	(20)	(17)	(20)	42	56	56	61	56
PCC 2	2	(30)	(3)	14	48	51	53	56	55	53
PCC 3	4	34	58	49	32	34	35	37	36	35
Subtotal, Open Position, Renewables	13	80	27	47	61	127	143	159	152	144
Open Position, Voluntary RECs	7	307	306	299	295	267	241	219	216	213
Conventional Resources Under Contract (GWh)										
SENA Shaped Energy (Net of SENA RL and Unit Specific)	808	977	950	946	920	-	-	-	-	-
WAPA Base Resource	0	0	25	25	25	25	25	25	25	25
Donnell's Hydro	110	0	0	0	0	0	0	0	0	0
Subtotal, existing Conventional Resources	918	977	975	971	945	25	25	25	25	25
Open Position, Conventional Energy (GWh)	5	57	36	36	27	908	870	832	815	798
Total Energy Under Contract (GWh)	1,140	1,274	1,292	1,252	1,208	297	297	297	297	297
Not Open, All Physical Energy (GWh)	18	104	17	33	56	1,008	928	950	938	907
Total Energy Contract Coverage (%)	98%	92%	95%	93%	86%	19%	19%	20%	20%	21%

STAFF REPORT

DATE: February 16, 2016

TO: City Council

FROM: Mike Webb, Assistant City Manager
Mitch Sears, Sustainability Manager

SUBJECT: City Council Workshop: Community Choice Energy Draft Technical Study and Community Choice Energy Advisory Committee Recommendation

Recommendations

1. Receive the draft Community Choice Energy (CCE) Technical Study and the Community Choice Energy Advisory Committee Recommendation to establish a Davis+Yolo CCE.
2. Provide feedback on draft Technical Study and recommendation.

Executive Summary

Over the past 12 months the City, its consultants, and the CCE Advisory Committee have investigated Community Choice Energy (CCE) programs. Technical, financial, and risk findings related to the range of CCE options available to the City are contained in the draft Technical Study completed by the City's consultant team. These findings indicate that it is feasible to establish a local CCE program that delivers more renewable energy while offering consumer choice at competitive rates. Based on these findings, as well as its independent analysis and consideration of public input, the Advisory Committee voted to recommend the establishment of a Davis+Yolo CCE program.

The workshop provides an opportunity for the City Council and community to gain a deeper understanding of the draft Technical Study and the Advisory Committee's recommendations. The Advisory Committee summary report to the City Council on its work and recommendations is attached to this staff report. The Council is scheduled to consider adoption of a CCE option at its March 15th meeting.

Council Goals

Exploration of a Community Choice Energy program (CCE) addresses the Council goal of pursuing environmental sustainability and conserving natural resources and protecting the environment. Specifically, the action is an implementation step for Council Goal #3, Objective #5 to "Form advisory committee to explore options related to Community Choice Energy and make recommendations on CCE to City Council."

Overview

This report summarizes the key findings of the draft CCE Technical Study and the Advisory Committee's recommendation. The CCE Workshop will allow the City Council the opportunity

to discuss the draft Technical Study and consider the Advisory Committee's recommendation. In a subsequent action on March 15th, the Council will be asked to consider which CCE option best fits Davis.

The draft Technical Study is located on the City's CCE webpage at:

<http://cityofdavis.org/city-hall/community-development-and-sustainability/sustainability-program/cce-technical-study>

Fiscal Analysis

The Davis CCE Vision statement establishes fiscal goals to be rate competitive with PG&E and to build reserves to ensure a stable CCE that can deliver local benefits to ratepayers. The basic fiscal findings of the draft Technical Study indicate that competitive rates (lower than PG&E), and building a strong reserve (4% of annual revenues) are both possible in the short and long term under all CCE scenarios. These fiscal outcomes are primarily due to favorable wholesale energy markets and downward trends in renewable energy supply costs. While currently favorable, these market conditions can change thus potentially altering the findings found in the draft Technical Study. As noted in the Risk section of the draft Technical Study (Sec 8), this financial risk can be effectively mitigated and managed through update of the analysis as the CCE process proceeds and beginning active hedging against rising wholesale energy prices as soon as possible. These financial risk mitigation and management strategies are common in the energy industry and are practiced by investor owned utilities (PG&E) and by the three existing CCE programs in the State (Marin Clean Energy (MCE), Sonoma Clean Power, and City of Lancaster).

Joining MCE would shift these CCE establishment related risks to the existing joint powers agency. Davis would be a member of a large Board of Directors and part of the decision making process for MCE but would not directly face these risks.

City Fiscal Impact

Establishment of a CCE program is generally broken into four stages: (1) Investigation, (2) Implementation, (3) Program launch, and (4) On-going services. The direct fiscal impacts associated with each stage are outlined below and include an estimate of costs as identified and analyzed in the financial risk section of the draft Technical Study (Sec 8.1). In addition, there are general fiscal benefits of establishing a CCE associated with local capture and circulation of utility payments as well as investment in local renewable energy projects that a CCE would facilitate.

Formation stages – financial requirements

- Stage 1 (CURRENT) - Investigation: ~\$100k. Current expenditures budgeted
- Stage 2 – Implementation: ~\$100k. Staff/consultants and feasibility study for CPUC.
- Stage 3 – Launch: \$2.5 - \$3.5m. Loan or loan guarantee by City & County. Short-term funding for initial power contracts and CCE staff/consultants. Begin customer service but before revenues begin.
- Stage 4 – Ongoing: CCE self-supporting; loan payback period (5yr repayment schedule for MCE)

Timing notes: Stage 1: 12 months; Stage 2: 9 to 12 months; Stage 3: 3 to 6 months to initiate service to all customer classes; Stage 4 – ongoing/repayment of start-up loans.

Joining MCE is estimated to cost \$20,000, would effectively eliminate the City CCE establishment related risks, and reduce start-up time to an estimated 4 to 6 months total. Again, the City would be a part of a large Board of Directors (currently 17 members), with one vote in the decision making process for MCE.

Background

The City Council appointed the Community Choice Energy Advisory Committee in February 2015 to explore the possible establishment of a CCE program in Davis. In June 2015 the Council accepted the recommendation of the Committee and Staff that a CCE program was a good fit for Davis and directed the Committee and Staff to continue to explore the feasibility of CCE for the City. Council direction included the collection of load data from PG&E and preparation of a technical study to examine the City's (and unincorporated Yolo County's) load profile and energy needs, long term program management options, and the ability to achieve both economic and environmental goals through a CCE program. The Advisory Committee has held 17 public meetings, including three public forums, since its formation.

In September 2015 the Council approved a CCE Vision Statement and the selection of The Energy Authority (TEA) as the Technical Study consultant. Since September, with guidance from the Council CCE Subcommittee (Davis, Frerichs), a working group comprised of three Committee members, City and Yolo County Staff, and project consultants have developed a draft Technical Study, financial pro forma, and a decision support matrix to assess various options for implementing a CCE program in Davis and unincorporated Yolo County.

Utilizing the draft Technical Study, pro forma, and comparative matrix, the working group completed its assessment of the various CCE options available to Davis and Yolo County. On February 3rd, the full Advisory Committee considered the extensive research and analysis conducted by the City's consultants, its working group, and staff and unanimously adopted the recommendation of its working group to pursue a Davis+Yolo CCE program. Additional detail on the CCEAC's recommendation is found in its draft report to the City Council which is attached to this staff report.

The purpose of this staff report is to:

1. Transmit the draft Technical Study and the CCEAC's recommendation.
2. Outline next steps leading to the Council's consideration of CCE options and the Advisory Committee's recommendation in March.

Public Outreach

The City has conducted the following outreach over the past year related to its investigation of CCE:

- 17 public meetings of the CCE Advisory Committee
- 3 public forums (including the latest on February 11, 2016)

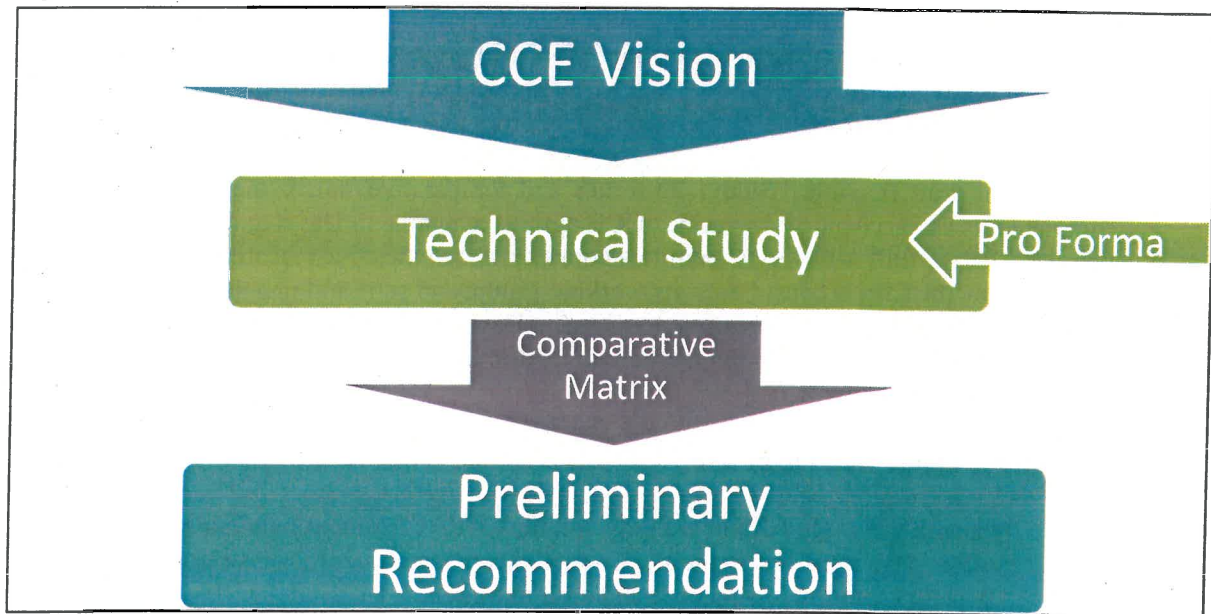
- 5 presentations to business and community organizations (including the latest on February 3, 2016 to the Davis Chamber of Commerce)
- City Hall at the Market (January 2016)
- Op-Ed in the Davis Enterprise (Council Sub-committee spring 2015)
- Notification of public forums via City's social media network (Nextdoor, Facebook)
- City CCE web page
- Multiple updates to the City/County 2x2

In addition, Yolo County staff have begun reaching out to key ratepayer groups in unincorporated Yolo County. City staff and the Advisory Committee have offered assistance in providing information and participating in these meetings.

Analysis

Davis and Yolo County have independently adopted policies to pursue local energy programs. Together they have agreed to explore options for implementation of a CCE program that would allow greater consumer choice and an increase in renewable energy supply while remaining cost competitive with the current investor owned utility (PG&E). A Technical Study, financial pro forma, and comparative matrix have been developed to inform this decision. The general structure of the analysis process is shown in Figure 1 below.

Figure 1 – Analysis Outline



Each of these components and how they were used to develop the Advisory Committee's recommendation are outlined in the sections below. The draft Technical Study describes each of these components in detail.

CCE Vision

The City Council adopted an Integrated Vision for Community Choice Energy in August 2015 which lays out short and long-term goals for a local CCE program. These goals include providing affordable electricity, increasing the use of renewable resources, and decreasing the amount of GHG emissions related to Davis' power supply. The Vision also includes accumulating financial reserves in order to implement a wide variety of programs for energy efficiency, rooftop solar electricity production, energy storage systems (batteries), and developing local renewable resources. The Vision statement contemplates achieving these goals while practicing "the best planning and operational management practices in the electricity service industry". The Vision informs and guides the Technical Study analysis and conclusions.

The Davis CCE Vision statement is included as an Attachment to this staff report.

Pro Forma

The Pro Forma is a detailed 10-year forward financial model that is used to develop a clear understanding of the financial prospects of a stand-alone CCE (i.e. Davis only or Davis/Yolo). Due to the evolving nature of the electricity market in California, the Pro Forma was constructed around hourly prices and electricity load shapes (i.e. how much electricity is being used at a particular time of day). Increasing amounts of solar and wind generation on the Western electric grid are having significant impacts on market prices which is accounted for in the analysis. This is especially important as these impacts become more pronounced over the 10 year time-horizon of the study.

Because the future is unpredictable, the Pro Forma is designed to permit analysis of various scenarios by altering significant assumptions within the study. Inputs such as power prices, supply portfolios, types of customers, Direct Access load participation, opt-out rates, rate discounts to PG&E, start-up costs, and reserve accumulation objectives can all be adjusted within the Pro Forma model to determine their impact on prospective electricity rates. The impact of specific load classes (e.g. agricultural), and the penetration of load-modifying resources such as rooftop solar, battery storage, and electric vehicles can also be assessed. The ability to model changes to these key inputs allows the Study to evaluate how financially sensitive a CCE program would be to such changes. For example, would the CCE still be rate competitive with the existing utility if opt-out rates are double those experienced by the existing CCE programs? The answer can be determined through adjustment of that variable in the Pro Forma model (and the answer is yes, a Davis/Yolo CCE would remain financially viable).

The Pro Forma serves as the key tool for informing the financial viability of a Stand-Alone CCE, comparing the financial performance of various CCE options against current utility rates, as well as forming the basis for future CCE operation and planning should Davis/Yolo decide to proceed with a Stand-Alone model.

Draft Technical Study

The draft Technical Study is a comprehensive evaluation of the feasibility of establishing a CCE program within the City of Davis (Davis) or in combination with unincorporated Yolo County (Davis+Yolo). Additionally, the Study evaluates a number of options for how Davis+Yolo may choose to implement a CCE.

The Energy Authority (TEA), working collaboratively with the Community Choice Energy Advisory Committee's (CCEAC) Technical Study working group, has explored all the known potential avenues for CCE formation currently available within California. This exploration included meetings with the three currently operating California CCE's – MCE, Sonoma Clean Power (SCP), and City of Lancaster (LCE). It also included meetings with two private companies that have offered to provide service to CCE's – California Clean Power (CCP) and Community Choice Partners.

Following this research it was determined that at the present time there are two viable options for implementing a Davis/Yolo CCE – (1) creating a stand-alone CCE or (2) joining an existing CCE. Additionally, the Study considered several permutations of these two options, including variations that did not include Yolo County in the CCE and variations that considered the outsourcing of nearly all CCE functions to a full service provider (CCP). The following is a list of all options considered:

- a. Davis-only, stand-alone CCE
- b. Davis+Yolo, stand-alone CCE
- c. Davis +/- Yolo, join MCE
- d. Davis-only, stand-alone CCE with CCP providing full services
- e. Davis+Yolo, stand-alone CCE with CCP providing full services

The Study provides a deep analysis of the pros and cons of each of the potential options. The analysis incorporates a comprehensive evaluation of the financial viability of each option. It also compares the different rates for each option with forecasted PG&E rates, as well as the qualitative aspects of the different CCE scenarios. The qualitative factors incorporated into the analysis include the governance structure, level of local control, and risk associated with each option. The objective is to determine which option(s) provide the greatest opportunity for realizing Davis/Yolo's vision for CCE while adequately balancing risk. The ultimate purpose of this study is to provide the City of Davis and Yolo County clear direction on how to proceed in their efforts to take ownership of their energy futures through the vehicle of Community Choice Energy.

The results from the draft Technical Study analysis are compared to the Davis CCE Vision statement for consistency with desired outcomes.

Key sections of the draft Study include:

- **Executive Summary.** Overview of the purpose, structure, methodology, findings, and recommendations of the Study.
- **Davis CCE Vision.** Restatement of the Davis CCE vision.
- **Study Methodology.** Detailed description of the quantitative financial analysis (Pro Forma), and qualitative analysis (Comparative Matrix). This section includes forecasting of PG&E rates and development of scenario testing to allow modification of key factors

such as the number of CCE participants, accumulation of reserves, electricity supply costs, start-up costs, etc.

- **Results on Rates and Costs.** This section includes outcomes from modeling the four basic electricity portfolios : (1) Least Cost (2) Resource-specific with 50% Renewables (base case), (3) 50% increasing to 75% Renewables, and (4) MCE-like Portfolio. The modeling results show that:
 - All scenarios are competitive with PG&E's rates over the 10 year time horizon while allowing the CCE to accumulate significant reserves over the time period.
 - All portfolios show rate discounts to PG&E in the first year of operation.
 - All Davis plus Yolo scenarios show 10-year average rates that are at least 9% lower than PG&E.

The base case was subjected to sensitivity analysis to test results. The sensitivity analysis shows that the larger the load over which costs can be spread, the better the financial outcomes. Even with double the opt out rates seen in other CCE programs, all but the smallest CCE program (Davis only), continue to show rate savings over PG&E. This section also provides estimates for rates and costs associated with joining an existing CCE (MCE), and an outsource CCE model (California Clean Power).

- **Options for CCE Implementation.** Four CCE implementation options are analyzed: (1) Davis only, (2) Davis/Yolo, (3) join an existing CCE (MCE), and (4) private outsourced CCE (California Clean Power). This section describes each option and lays out the process and timeline for implementing and operating each type of CCE. This section groups implementation of each option into Initial Steps, Build-Out, and Execution phases. The section also examines the anticipated organizational structure and governance associated with each option.

In general, forming a new CCE will take an estimated 9-12 months to begin serving customers. Joining MCE results in a shortened implementation period with customers served in 3-6 months.

- **Local Programs and Resource Development.** One of the goals of the Davis CCE Vision statement is the development of local energy efficiency programs and renewable energy projects. This section analyzes the opportunity to pursue these goals under each CCE option.
- **Risk.** The three general risk categories for CCE's are: (1) Financial, (2) Regulatory and Political, and (3) Operational. This section analyzes the primary risks associated with each CCE option and risk mitigation/management strategies.

Risk is also addressed in the summary of discussions with existing CCE programs (Section 10 of the draft Technical Study). As demonstrated by the successful launch and operations of three CCEs in California since 2010, the CCE business model has been proven feasible. While each operating CCE has implemented a different governance structure, each has demonstrated that it is possible to offer electricity service to retail

customers with higher renewable electricity content at a rate competitive with the utility service provided by the incumbent utility. Further, each CCE has been able pay back initial start-up loans (MCE and SCP), or begin repayment in the case of LCE that launched in 2015, and accumulate financial reserves that may be directed toward investment in local resource programs. These proven successes achieved by the three operating CCEs indicate that key elements of Davis' Vision Statement for CCE are achievable.

Each existing CCE has its own business culture and philosophy, but there are common attributes and experiences worth noting:

- Each operating CCE obtained its initial pre-operational financing ("seed capital") from non-commercial sources. Sonoma (SCP) and Lancaster (LCE) obtained financing from a sponsoring government entity, while MCE received financing from three local individuals.

Once operational, each existing CCE has successfully obtained commercial banking facilities (e.g., lines and letters of credit) sufficient to support ongoing operations. Investigatory discussions with representatives of River City Bank have indicated a willingness on the part of commercial banks to provide necessary finance services once a Davis/Yolo CCE is operational, even before revenue is received. The economic feasibility outlined in the draft Technical Study, and the experiences of the currently operating CCEs, indicates that Davis and Yolo should be able to obtain the necessary financing if they elect to move forward with CCE. If there is an overriding concern about the availability of pre-operational financing from the City and/or County or the risk associated with providing or guaranteeing such financing, then there is a bias toward implementing CCE either by joining an existing CCE or moving forward with an out-sourced solution.

Start up financing for a Davis/Yolo CCE is estimated to be between \$2.5 million and \$3.5 million. The vast majority of this start-up financing is for initial power purchases which can come in the form a direct loan or loan guarantee(s) from the City and County. Based on the experiences of the existing CCE programs, these loans are paid back within several years of a CCE beginning service. Initial discussions related to the start-up funding needs of a Davis/Yolo CCE have begun between the City and County.

- **General Conclusions.** This section summarizes the findings and conclusions of the CCE options analysis. Conclusions are offered based on the following factors:
 - Rate competitiveness.
 - Implementation complexity.
 - Ability to build supply portfolio to meet CCE Vision goals.
 - Degree of local control.
 - Risk/Risk Mitigation.
- **Comparative Analysis/Matrix.** The Study includes a comparative analysis of alternative implementation models for establishing and operating Davis-only and Davis/Yolo CCEs. The alternative models evaluated in the comparative analysis include:

- Davis Only
- Davis/Yolo Joint Powers Authority (JPA)
- Join an existing CCE
- Contract with a for-profit entity to provide a turn-key CCE solution

Each implementation option, as well as maintaining status quo (PG&E), was evaluated against three primary criteria:

- Rate Competitiveness (50% weight)
- Governance and Local Control (15% weight)
- Risk and Mitigation (35% weight)

Within each of the primary criteria, several sub-criteria were evaluated. Scores ranged from highly favorable to highly unfavorable. The Comparative matrix was evaluated and scored by the Technical Study working group which, after detailed analysis and discussion, arrived at a general consensus that the Davis+Yolo CCE model offered the best opportunity for implementing a local CCE program. Additional detail related to the use of the comparative matrix to arrive at the CCEAC's recommendation is provided in the next section of this staff report (CCEAC Recommendation).

The form of Comparative matrix is included in the draft Technical Study and is attached to this staff report.

- **Recommendations.** This section provides the recommendations of TEA based on the analysis included in the Technical Study. In summary, TEA finds that the combined quantitative and qualitative analysis point towards a Davis+Yolo stand-alone CCE model as being the best option to achieve the CCE Vision. The combination of lower market and renewables prices allow for a positive portfolio cost. The combined Davis+Yolo CCE allows for the new CCE to spread the administrative costs across a wider footprint. These factors place the Davis+Yolo stand-alone CCE option in a strong financial position. That financial outcome, combined with complete local control, also positions this option to have the greatest chance to enact the environmental and local program development objectives which are key to the CCE Vision.

CCEAC Recommendation

As part of the Technical Study, TEA worked collaboratively with the CCEAC's Technical Study working group and staff to investigate all known potential avenues for CCE formation including self-build and partnering alternatives. To inform the City's evaluation of alternatives, a comparative evaluation was developed to assist the City in making a decision about which CCE option puts the City in the best position to achieve the objectives outlined in the CCE Vision statement. The CCEAC report to the City Council summarizing its recommendation is included as an attachment to this report.

After careful review and use, the CCEAC, staff, and the consultants ultimately concluded that the primary value of the comparative matrix was to spur discussion about the key criteria being used to evaluate each CCE option. These criteria were:

- Rate Competitiveness

- Governance and Local Control
- Risks and Mitigation

Within each of the primary criteria, a number of sub-criterions were evaluated and scored. All criteria were scored on a scale of '+2' to '-2' where a score of:

- +2 is considered highly favorable
- +1 is considered moderately favorable
- 0 is considered neutral
- -1 is considered moderately unfavorable
- -2 is considered highly unfavorable

Recognizing the importance of rate competitiveness to early and long-term success of the CCE, the CCEAC assigned Rate Competitiveness an overall weighting of 50 percent of the total score for each implementation option. Rate Competitiveness is a quantitative evaluation based on results from the Pro forma analysis and considers factors such as rate savings relative to PG&E, as well as the ability of Davis to accumulate financial reserves for the purpose of investing in local energy resources and programs. Ultimately, there was general consensus between the CCEAC, staff, and the consultant that CCE rates for each option would be roughly equivalent to each other and fiscally better in comparison with PG&E over the 10 year period analyzed in the draft Technical Study. Therefore, the subjective measures related to local control/governance and risk became the primary evaluation factors when assessing the CCE options.

Assessing issues related to governance and local control of different implementation options is a subjective evaluation. The sub-criterions in this portion of the assessment evaluated the efficiency and effectiveness of the City/County to create policies, establish goals, adopt and implement business practices and direct long-term resource investments that meet the unique requirements of Davis/Yolo rate payers. Although subjective, the analysis of how a CCE would be governed and the amount of local control desired is intuitive. The CCEAC ultimately weighted this criteria higher than risk due to the importance of local control in achieving the long-term vision of a Davis CCE (e.g. more influence over development of local renewable energy supplies, etc.). This emphasis on local control did not modify the Advisory Committee's primary recommendation to form a Davis+Yolo CCE but did influence its secondary recommendation to form a Davis stand-alone CCE should Yolo County choose not to participate. Staff continues to study contingency options should Yolo County choose not to participate.

The final primary evaluation criteria considered in the comparative analysis are Risks and Mitigation. The sub-criterion in this section evaluated the relative riskiness of each implementation option, as well as the ability to manage and mitigate the identified risks. The criteria included in this section of the comparative analysis attempted to assess the likelihood of Davis being successful in meeting its stated goals and objectives.

Recommendation

While there were slight variations in evaluations by the CCEAC working group, staff, and the consultants, all reached the conclusion that the Davis+Yolo CCE option provided the strongest combination of rate competitiveness and governance/local control balanced with reasonable risk mitigation/management strategies. The full Advisory Committee considered the full range of

CCE options analyzed in the draft Technical Study at their February 3rd meeting and voted unanimously to recommend the Davis+Yolo CCE option to the City Council.

As noted, the Advisory Committee selected the Davis stand-alone CCE as its backup option should Yolo County choose not to participate – additional detail is provided by the Advisory Committee’s report. Staff continues to study contingency options.

A staff summary of the findings supporting the primary recommendation are included in Table 2 below. Note: The comparative matrix analysis resulted in a clear ranking of the Davis/Yolo CCE as the top choice. The next two highest ranked options (Davis only and MCE), are alternatives if the City and County do not choose to move forward together. The CCEAC’s report to the City Council summarizes the Committee’s findings and conclusions.

Table 2 – Primary Recommendation Findings - Staff

Factor	Findings	Conclusion
Rate Competitiveness	All CCE options are roughly equal with the combined Davis/Yolo CCE marginally better than MCE, Davis stand-alone, and CCP. Generally all options provided better than PG&E financial outcomes for local rate payers and allowed for build-up of reserves.	<u>Davis/Yolo CCE</u> : Highest ranked option in this category. <ul style="list-style-type: none"> • Highest ranked option: Davis/Yolo CCE • Lowest ranked option: CCP
Governance	The combined Davis/Yolo CCE provided the most challenging governance structure to establish and most complex decision making process once the CCE is established. This is somewhat off-set by the familiarity the City and County have in participating together in existing joint governance organizations (e.g. Yolo Co Transit Authority, Yolo Habitat JPA, etc.)	<u>Davis/Yolo CCE</u> : Lowest ranked option in this category. <ul style="list-style-type: none"> • Highest ranked option: MCE • Lowest ranked option: Davis/Yolo CCE
Local Control	The combined Davis/Yolo CCE provided good opportunity for local control. The only option that provided better control was the Davis only CCE.	<u>Davis/Yolo CCE</u> : High rank in this category. <ul style="list-style-type: none"> • Highest ranked option: Davis only CCE • Lowest ranked option: MCE
Risk and Mitigation	The combined Davis/Yolo CCE provided a moderate risk level relative to the other options but a better ability to manage/mitigate risk than the Davis only CCE option. The risk to rate payers is virtually non-existent due to their ability to choose to return to the exiting utility. Significant risk to the City related to power purchase contracts is mitigated if a JPA is formed. Start-up cost risk to the City is shared with the County; experience of existing California CCE’s indicates low financial risk related to start-up costs.	<u>Davis/Yolo CCE</u> : Moderate rank in this category. <ul style="list-style-type: none"> • Highest ranked option: MCE • Lowest ranked option: CCP (due in part to uncertainties of business model with no clients to date).

As noted, the Technical Study working group is composed of Advisory Committee members Braun, Kristov, and McCann with support and active involvement by City staff and LEAN Energy. As the City's technical study consultant, TEA has actively sought the on-going input and feedback of the working group, City staff, and LEAN Energy in the development of the draft Technical Study, Pro Forma, and comparative matrix. This integrated and highly collaborative approach by TEA included multiple day-long working sessions and weekly conference calls to incorporate suggestions and feedback from the working group, the City, and LEAN Energy. This approach by TEA resulted in a consensus primary recommendation supported by the Advisory Committee, City staff, project consultants, and County staff.

Next Steps

The City has agreed to notify MCE by March 31st if it is interested in applying to join its JPA. The County is operating under the same timeline. Based on this timeline, the City Council is scheduled to consider which CCE option is the best fit for Davis at its regular meeting on March 15th.

The Yolo County Board of Supervisors is scheduled to make its decision regarding CCE in early March. As noted in the Analysis section of this report, if the County decides not to participate in a Davis+Yolo CCE, the City will need to consider one of the remaining options if it chooses to pursue CCE.

Attachments

1. Davis CCE Vision Statement
2. Comparative matrix – form
3. CCE Advisory Committee Report to City Council – 2/10/16

Note: the Draft Technical study is not attached to this staff report but is located on the City's CCE web page at: <http://cityofdavis.org/city-hall/community-development-and-sustainability/sustainability-program/cce-technical-study>

Printed loan copies of the draft Technical Study are available at the City's Community Development and Sustainability Department at City Hall.

Davis, California

Integrated Vision for Community Choice Energy

Community Choice Energy (CCE) is a state-authorized partnership with PG&E that lets Davis decide how the electricity used in our homes and businesses is produced and at what cost to Davis customers. PG&E would continue to deliver the electricity procured by the CCE and would perform billing, distribution system maintenance, and other utility functions. Davis customers would not be required to participate in the CCE program.

Start-up Phase Vision

The near term vision for Davis Community Choice Energy is to provide Davis residents and businesses greater choice as to the sources and prices of the electricity they use, by:

- Offering basic electricity service with higher renewable electricity content at a rate competitive with current utility service;
- Offering other low carbon or local options at modest price premiums;
- Establishing an energy planning framework for developing local energy efficiency programs and local resources in the near future; and
- Accomplishing the above while accumulating reserve funds for future Davis energy programs and to manage energy costs and risks.

Long Term Vision

The future vision for Davis Community Choice Energy is to continuously improve the electricity choices for Davis residents and businesses, while expanding local energy-related economic opportunities, by:

- Evaluating and adopting the best planning and operational management practices in the electricity service industry;
- Substantially increasing the renewable electricity content of basic electricity service over time;
- Developing and managing customized programs for energy efficiency and on-site electricity production and storage;
- Accelerating deployment of local energy resources to increase local investment, employment, innovation and resilience;
- Working together with other Davis and Yolo County efforts, and in alignment with city goals, to achieve climate action goals and shape a sustainable energy future; and
- Saving Davis ratepayers money on their energy bills.

Attachment 3

Comparison Matrix

		Score:						
		2	1	0	-1	-2		
		Highly Favorable	Moderately Favorable	Neutral	Moderately Unfavorable	Highly Unfavorable		
Comparative Criteria	Considerations	Weight	Status Quo (PG&E)	Davis Only	Davis / Yolo Enterprise	Davis / Yolo JPA	Join Existing CCA	Outsourced CCA
1 Rate Competitiveness	Are rate payers expected to pay no worse than the same, and preferably less than, the status quo?			Yes	Yes	Yes	Uncertain	Uncertain
	Level of anticipated rate payer savings under range of future scenarios		0.0	0.0	0.0	0.0	0.0	0.0
	Accretion of financial reserves for energy investment, financial and risk management		0.0	0.0	0.0	0.0	0.0	0.0
	Score - Rate Competitiveness	50%	0.0	0.0	0.0	0.0	0.0	0.0
2 Governance & Local Control	Weight of individual vote in governing board decisions							
	Complexity of decision making process		0.0	0.0	0.0	0.0	0.0	0.0
	Ability of community to interact with governing board		0.0	0.0	0.0	0.0	0.0	0.0
	Directing energy investments to meet local objectives		0.0	0.0	0.0	0.0	0.0	0.0
	Adoption of planning, management and business practices consistent with local objectives		0.0	0.0	0.0	0.0	0.0	0.0
	Flexibility to adopt to evolving market, regulatory, legislative conditions		0.0	0.0	0.0	0.0	0.0	0.0
	Score - Governance & Local Control	15%	0.0	0.0	0.0	0.0	0.0	0.0
3 Risks & Mitigation	Startup risk							
	Customer opt out risk		0.0	0.0	0.0	0.0	0.0	0.0
	Operating risk (excluding market and counterparty risk)		0.0	0.0	0.0	0.0	0.0	0.0
	Market and counterparty risk		0.0	0.0	0.0	0.0	0.0	0.0
	Incumbent utility opposition risk		0.0	0.0	0.0	0.0	0.0	0.0
	Legislative and regulatory risk		0.0	0.0	0.0	0.0	0.0	0.0
	Host entity risk		0.0	0.0	0.0	0.0	0.0	0.0
	Management of unwinding partnerships		0.0	0.0	0.0	0.0	0.0	0.0
	Management of CCA shutdown		0.0	0.0	0.0	0.0	0.0	0.0
	Score - Risks & Mitigation	35%	0.0	0.0	0.0	0.0	0.0	0.0
4 Overall Rating	Total Weighted Score where Max Score = 2	100%	0.0	0.0	0.0	0.0	0.0	0.0

Table x: Comparative Analysis of Implementation Models

Recommendations on Community Choice Energy Implementation for Davis, California

**Report of the Community Choice Energy Advisory Committee to the Davis City Council
February 10, 2016**

Introduction

Early in 2015 the City of Davis decided to evaluate the feasibility of using the Community Choice Aggregation (CCA) provisions of California state law to form a community choice energy (CCE) service to source electricity for delivery to Davis electricity users. The Davis City Council appointed a Community Choice Energy Advisory Committee (CCEAC) to conduct a preliminary feasibility analysis.¹ The CCEAC considered two CCE implementation scenarios: 1) formation of a new stand-alone CCE, and 2) applying for membership in an existing CCE, i.e., Marin Clean Energy (MCE). Each of these scenarios has sub-choices for Davis, i.e. joining with Yolo County or going alone. The CCEAC concluded that both scenarios would be feasible and preferable to the status quo, i.e., continuing to rely on retail electric generation service from PG&E.² The City Council then approved the CCEAC's recommendation to proceed with a detailed evaluation of CCE options and authorized funding of a technical study to assess costs of service, potential rate reductions and reserve accumulation, local flexibility and control, risks, and governance structures under a range of implementation options.

A working group (WG) of three CCEAC members³ was charged by the full CCEAC with drafting an RFP and assisting the city in selecting a technical study contractor and monitoring/advising the contractor's work. In parallel, energy usage data to be used by the technical contractor was secured from PG&E for both Davis and unincorporated Yolo County electricity customers. The City also submitted a preliminary application for membership in MCE, which the City must finalize by end of March if it is to be considered by MCE. Following selection of The Energy Authority (TEA) to conduct the study, the CCEAC worked with the TEA to define implementation options and evaluation criteria. The WG conferenced by phone weekly with the TEA and city and county staff and consultants during the study period and offered specific data recommendations, supplemental analysis and advice.

The TEA technical study considered the following options:

1. CCE formed by Davis and unincorporated Yolo County under a Joint Powers Authority (JPA)
2. Davis City CCE
3. Davis joining MCE

¹ CCEAC members include Chris Blackman (Davis Chamber of Commerce), Mark Braly (Natural Resources Commission), Gerry Braun (Vice-chair) (Utility Rates Advisory Committee), Yvonne Hunter (Local Government Commission-Retired), Lorenzo Kristov (Coalition for Local Power), Richard McCann (Coalition for Local Power), Rachel Milbrodt (Ex-officio) (Davis Joint Unified School District, John Mott-Smith (Ex-officio) (Yolo County Government), Alan Pryor (chair) (Natural Resources Commission), and Chris Soderquist (Repower Yolo).

² Note that PG&E will continue to provide transmission and distribution services as well as public goods programs such as energy efficiency and low-income assistance.

³ G. Braun, L. Kristov, and R. McCann

4. Davis and Yolo County joining MCE
5. Davis outsourcing CCE implementation and operation to a full-service contractor, California Clean Power (CCP)
6. Davis and Yolo County outsourcing CCE implementation and operation to a full-service contractor, California Clean Power (CCP)
7. As a baseline for comparison, the option of continuing with PG&E retail electric service

As the TEA technical study concluded in January 2016, the CCEAC held public meetings on January 27 and February 3 to consider the results of the study and develop its recommendation to the City Council. This report provides the recommendation that was adopted unanimously by the CCEAC at its February 3 meeting.

Summary of CCEAC Recommendations to the Davis City Council

The CCEAC recommends that the City of Davis and unincorporated Yolo County form a CCE under the structure of a JPA (option 1 above). Because this option requires an affirmative decision by Yolo County, the CCEAC recommends as a second choice, should Yolo County not decide to form a CCE JPA with Davis, to form a Davis City CCE (option 2 above).⁴

These first and second choice recommendations assume that the City and County (if joining the City) are fully committed to timely, sufficient funding, and competent, diligent leadership and staffing in all cases.⁵ Specifically, it assumes: 1) a properly staffed level of effort in the next phases of Yolo/Davis CCE formation, and 2) timely funding to fill organizational leadership and initial permanent staff positions prior to commencement of service.

Attachment 2 outlines the process steps (political, community, technical/legal, and financial) required in the next two phases of CCE formation. The CCEAC recommends that the City Council act to ensure continuity of advisory support and assistance throughout these phases.

Comparative Matrix

A comparative matrix was prepared by TEA and used by the WG to score each CCE implementation option against three major criteria, each with several sub-factors, specified and weighted by the CCEAC. The scoring methodology accounted for the importance of each major criterion and each sub-factor by adjusting its relative weighting. Scoring was according to the probability of achieving a positive result on a scale of 0 to 2 or a negative result on a scale of 0 to -2. Major criteria, i.e., rates, risk, and local control and governance, were initially weighted 50, 35, and 15 percent respectively, with sub-factors weighted equally. Scoring of the rate sub-factors was directly and quantitatively linked to rate analysis results. Because all implementation options delivered comparable rate savings over ten years, and all were

⁴ Note that this option is distinct from and specifically excludes the option of Davis outsourcing CCE formation to a full-service contractor such as CCP (option 5 above).

⁵ Initial staffing can be minimized by competitively outsourcing core functions to properly qualified contractors.

favorable when compared to retaining PG&E retail service, the CCEAC realized that the most important differences between the implementation options would appear in the risk and local control aspects. While some differences exist between the projected rates of the various CCE options, those differences are deemed small compared to the uncertainties inherent in forecasting rates over a 10-year horizon, which leads into the discussion of the risk criterion below. In any event, the large rate differences of all CCE options compared to PG&E gave the CCEAC confidence that local customers were highly likely to realize bill savings regardless of which CCE option is pursued.

Risks are greatest in early years for local CCE implementation options, due to having to create a new organization and perform effective outreach to the community to retain customers. By contrast, we believe risks for non-local options, including Stay with PG&E and Join MCE, have the potential to increase over time.

The benefits of local control are minimal in early years for local implementation options but can rapidly and steadily increase over time as the local CCE becomes established, accumulates reserve funds and begins to develop local programs and resources. The added benefits of local control are discussed further below.

With the above considerations in mind, we adjusted the weightings of Rates, Risk and Local Control and Governance to 50%, 20% and 30% to correct for initial CCEAC over-weighting of short-term risk and under-weighting of long-term benefits of local control.

The resulting quantitative scoring is shown in detail in an appendix. Scoring for first level criteria is summarized in the table below.

	Weight	Status Quo (PG&E)	Davis Only	Davis + Yolo JPA	Join MCE – Davis Only	Join MCE – Davis + Yolo	Out-source Davis Only	Out-source Davis + Yolo
Score - Rate Competitiveness	50%	-1.9	1.7	1.9	1.7	1.6	1.4	0.5
Score - Governance & Local Control	30%	-2.0	1.7	1.7	1.1	1.1	0.8	0.8
Score - Risks & Mitigation	20%	0.4	-0.4	-0.5	0.5	0.4	-0.6	-0.6
Total Score	100%	-1.5	1.3	1.4	1.3	1.2	0.8	0.3

In general, quantitative scores suggest a strong preference for CCE implementation vs. staying with PG&E, except that the option of outsourcing all business functions of local CCE implementation to a full-service contractor was not found to be an attractive option. Current candidate contractors have no operational track record, resulting in significant risks that are not offset by rate savings.

The reader will note that the total scores for Davis Only and Join MCE – Davis Only are close and might infer that these options are equally attractive. This interpretation might invite a decision to take the “path of least resistance” by joining MCE. However, we recommend a strong preference for locally governed implementation, i.e., Davis + Yolo JPA or Davis Only for reasons outlined in the following sections.

Non-Quantitative Analysis

The Case for Locally Governed Implementation. Of all options considered our recommended first and second choices afford the greatest flexibility to adapt to and accelerate local consumer adoption of on-site solar and plug-in vehicles, and to develop localized energy resources such as community solar and storage facilities. This ability to adapt likely will be very important, as the utility industry is entering a period of rapid transformation reminiscent of the recent changes in the telecommunications industry. It also calls for and enables:

- Integrated local energy analysis and planning
- Local climate action, i.e., investments necessary to fulfill local climate action plans
- Development of community renewable energy projects
- Integration of local energy, water and waste resources
- Local economic benefits, including local jobs and recirculation of energy service revenues locally

Further, the CCE movement in California is in an early stage, with more than twenty additional counties recently becoming involved in exploring CCE service or forming CCEs. It is likely that new and more effective implementation models will emerge as the basic CCE model is adapted to diverse local opportunities and needs. Retaining the flexibility to adopt or initiate innovations of particular relevance to Yolo County and Davis is an important benefit of locally governed implementation. Moreover, as the number of CCEs in California increases, they will be able to coordinate on their common interests and form an effective force in promoting legislative and regulatory changes that favor energy programs tailored to local goals, conditions and needs.

1st Choice – Davis + Yolo JPA. This choice is feasible and attractive and contingent on compatible, closely timed decisions between county and city. A Davis + Yolo JPA would initially have a revenue base double that of Davis with a combined load profile that will yield significant procurement savings. The JPA CCE would thus have somewhat greater flexibility than a Davis City CCE to fund locally targeted programs and integrate local supply. Risk sharing would also be a plus. The JPA structure would be an established, suitable framework for expansion to include other Yolo County jurisdictions, to the mutual benefit of all jurisdictions.

2nd Choice – Davis Only. This choice is feasible and attractive even without compatible, and closely timed decisions by either Yolo County or MCE. A Davis Only CCE would have a smaller but still adequate revenue base, sustainably lower rates than PG&E, manageable risks, and the option for later expansion in Yolo County.

Perspective on Local Control

The primary immediate benefit of CCE is community control of electricity supply sourcing. It makes sense therefore to consider the degree of control possible in the alternative implementation options. PG&E service is at one end of the spectrum where local control of electricity supply sourcing is outsourced, and local jurisdictions have practically no influence. At the other end of the spectrum, a city-governed CCE program would have as much control as possible under wholesale electricity sourcing rules. It could, for example, determine the extent to which electricity is sourced locally. Being part of a CCE serving multiple local jurisdictions (e.g., MCE) would outsource control as in the PG&E scenario, but would afford Davis a certain degree of influence as one of a number of other participating local jurisdictions on the governing board.

It now seems plausible that most California CCE programs will evolve toward supply portfolios approaching 100 % renewables over a decade or so. Some will specialize in importing renewable electricity from outside their areas. Others will strike a balance between the convenience of electricity imports and the local projects, jobs, investment and even electricity exports CCEs can potentially enable. Others will develop innovative strategies and locally tailored programs to reduce local carbon footprints as fast and economically as possible.

Where individual CCE evolutions may diverge may have less to do with differences in imported electricity portfolios and more to do with how each CCE is organizationally positioned to adjust to technology, cost and structural changes in the electricity sector. (For example, much greater levels of local supply, usage, storage and delivery integration than today.) These changes are as hard to forecast in detail as they are increasingly likely. Positioning for maximum flexibility to take advantage of the changes rather than be hostage to them seems advisable. Outsourcing control to a large and growing existing CCE sacrifices some of the flexibility that a more geographically compact and climatically homogeneous CCE might enjoy.

One additional concern is about how the MCE governance system might evolve both over time and if additional communities join. MCE now has nearly 20 cities and counties, each with one vote. To date, MCE has a strong record of consensus decision making, but that process has maintained by practice. It has not been codified. At some future date, MCE members likely will face a matter with conflicting sides. Without being able to anticipate those situations, we cannot predict how MCE will make decisions in these situations. In the past, such matters have cleaved along lines of vintage, economic situation or geography. In some dimensions, Davis differs significantly from other MCE members. For example, Davis is located in a much more extreme climate which can lead to a different load pattern. That difference may lead to substantial differences in cost of service that other MCE members may want to exploit to lower their own rates in some fashion. On the other hand, a Davis CCE likely will be governed with a traditional board structure. We see this difference in certainty regarding governance processes as an added factor in considering our recommendation.

Table _____
Davis Technical Study
Comparative Analysis of Implementation Models

Appendix 1									
Score:									
<div>2</div> <div>1</div> <div>0</div> <div>-1</div> <div>-2</div>									
<div>Highly Favorable</div> <div>Moderately Favorable</div> <div>Neutral</div> <div>Moderately Unfavorable</div> <div>Highly Unfavorable</div>									
Comparative Crit	Considerations	Weight	Status Quo (PG&E)	Davis Only	Davis+ Yolo	Join MCE - Davis Only	Join MCE - Davis+Yolo	CCP - Davis Only	CCP - Davis+Yolo
1	Rate Competitiveness			Yes	Yes	Uncertain	Uncertain	Yes	Yes
	Are rate payers expected to pay no worse than the same, and preferably less than, the status quo?								
	Level of anticipated rate payer savings under range of future scenarios	50%	0.00	1.43	1.92	2.03	1.97	1.80	1.47
	Accretion of financial reserves for energy investment, financial and risk management	50%	-3.84	2.03	1.95	1.39	1.29	1.59	-0.53
	Score - Rate Competitiveness	50%	-1.9	1.7	1.9	1.7	1.6	1.4	0.5
2	Governance & Local Control								
	Weight of individual vote in governing board decisions	5%	-2.0	2.0	1.5	1.0	1.0	2.0	2.0
	Complexity, contentiousness & transparency of decision making process	5%	-2.0	0.0	-0.5	1.0	1.0	-1.0	-1.0
	Ability of community to interact with governing board	10%	-2.0	2.0	2.0	1.0	1.0	2.0	2.0
	Directing energy investments to meet local objectives	40%	-2.0	2.0	2.0	1.0	1.0	1.0	1.0
	Adoption of planning, management and business practices consistent with local objectives	20%	-2.0	2.0	2.0	1.0	1.0	0.0	0.0
	Flexibility to adopt to evolving market, regulatory, legislative conditions	20%	-2.0	1.0	1.2	1.5	1.5	0.5	0.5
	Score - Governance & Local Control	30%	-2.0	1.7	1.7	1.1	1.1	0.8	0.8
3	Risks & Mitigation								
	Startup risk	15%	2.0	-1.0	-1.5	1.5	1.5	-1.0	-1.0
	Customer opt out risk	10%	1.0	-1.0	-1.5	-0.5	-0.5	-2.0	-2.0
	Operating risk (excluding market and counterparty risk)	15%	0.0	-1.0	-0.5	1.0	1.0	-1.5	-1.5
	Market and counterparty risk	35%	0.0	1.0	1.0	1.0	1.0	1.0	1.0
	Incumbent utility opposition risk	5%	2.0	0.0	-0.5	0.0	-0.5	-0.3	-0.3
	Legislative and regulatory risk	15%	-1.0	-2.0	-2.0	-1.5	-1.5	-2.0	-2.0
	Host entity risk	2%	1.0	-1.0	-1.0	0.0	0.0	-2.0	-2.0
	Management of/unwinding contracts & partnerships	2%	2.0	-2.0	-1.0	0.0	0.0	0.0	0.0
	Management of CCA shutdown	1%	2.0	-2.0	-1.0	0.0	0.0	-1.0	-1.0
	Score - Risks & Mitigation	20%	0.4	-0.4	-0.5	0.5	0.4	-0.6	-0.6
4	Overall Rating	100%	-1.5	1.3	1.4	1.3	1.2	0.8	0.3
	Total Weighted Score where Max Score = 2		7	2	1	3	4	5	6
	Governance & Local Control + Risks & Mitigation Separately		-1.03	0.85	0.82	0.84	0.83	0.22	0.22



The Formation Process in CA

	Political	Community	Tech/Legal	Financial
Phase I Pre-Planning & Due Diligence (0-8 mo.)	<ul style="list-style-type: none"> Steering Cmte. Staff Lead Resolutions of Support 	<ul style="list-style-type: none"> Local leader engagement Communication strategy Public Polling 	<ul style="list-style-type: none"> Load Data Tech. Study Peer Review Local "asset mapping" 	<ul style="list-style-type: none"> Budget Devt. Grants and local funders Local govt. contributions
Phase II Build-Up & Development (8-18 mo.)	<ul style="list-style-type: none"> Pass JPA/CCA Ordinance JPA membership and governance 	<ul style="list-style-type: none"> Outreach & presentations Website/FAQs Community endorsements 	<ul style="list-style-type: none"> Implementation Plan/CPUC RFI JPA Formation 	<ul style="list-style-type: none"> ID financing partners; secure terms & conditions
Phase III Final Agreements Supply Contract, & Launch (18-24 mo.)	<ul style="list-style-type: none"> JPA Board formed Final Vote re. municipal service 	<ul style="list-style-type: none"> Community outreach campaign Call Center Opt-Out notices 	<ul style="list-style-type: none"> JPA staffing/organization Energy supply & other vendor contracts Bond, Utility Svc Agreement 	<ul style="list-style-type: none"> Bridge financing to first revenue Long-term working capital

Red text = Statutory requirements

