

CCA

ACSC

The American Coalition for Sustainable Communities

COMMUNITY CHOICE AGGREGATION: A FALSE CHOICE



*low-resolution
Internet Version
Hard Copies Available
iAgenda21.com*

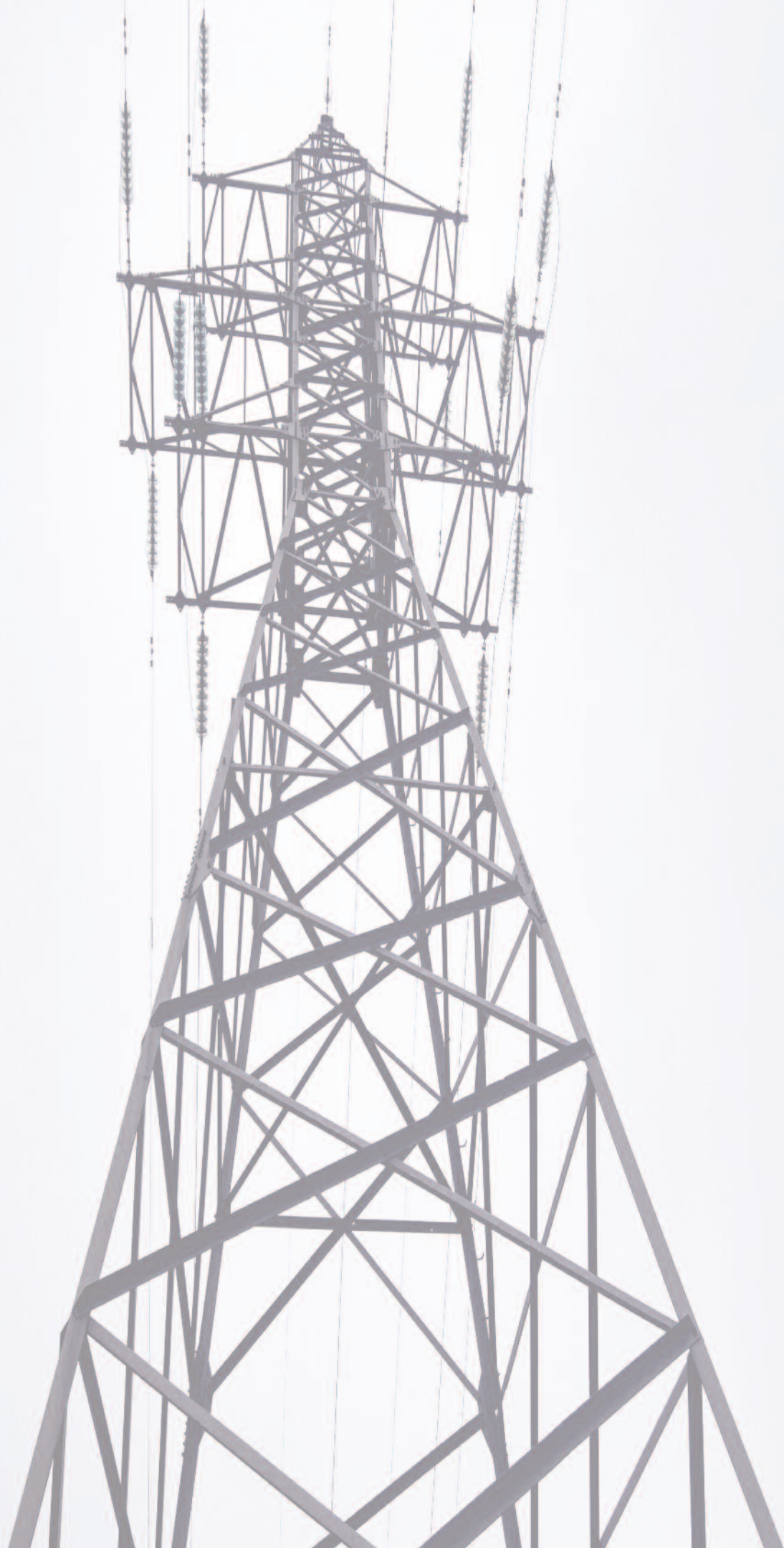


Special Message for Elected Officials and Staff

Are you aware of all liabilities contained in CCA Joint Powers Authority Agreements?

- What is your response to the public when you favor CCA, and yet CCA exposes the City's general funds to millions of dollars in liability — outside of the so called “financial firewall”?
- Do you favor joining a CCA that has the right to terminate your city from the CCA JPA while subsequently holding the city responsible for paying off multi-million dollar power purchase contracts?
- Are you aware that your city may remain responsible for paying off power purchase agreements if it finds lower cost energy elsewhere?
- Are you aware that your city is may not indemnified if a secondary purchaser of the city's power — following city's departure or involuntary termination from CCA — decides it no longer wants the power?
- Are you aware that a CCA will save the average resident of your city little if any money, and that Marin Clean Energy CCA — the blueprint for CCA *industry* — saves its customers typically less than one percent?
- Are you aware that many CCAs deliver energy that is no cleaner than what power utilities deliver because CCA engages in green-washing with RECs, and that much of CCAs “clean” energy is rebranded coal and gas-fired power?

Questions



Introduction

Scope 1.1
Background
Summary Arguments 1.2
Inland Choice Power
South Bay Clean Power
Key Findings 1.3
LA CCE 1.4
Summary Points
Lack of Accountability 1.5
ACSC CCA Warning Bulletin

Overview

CCA History 2.1
The Architect of CCA
California 2.3
Decentralized Power Model
Energy Companies 2.4
Deregulation
Gaming the Power System
Regulatory Environment 2.5
Cost Recovery 2.6
CCA Opt Out: A Crony Business Model
Power Companies React to Opt Out 2.7
CCAs Want to Appropriate Benefits
*Marin Clean Energy: California's Blue
Print Model for CCAs*
Renewable Energy Certificates 2.9
Green-washing 2.10
Green-washing in Action
Green-washing: Misrepresentation 2.11
Transparency 2.11
CCA Contracts: Caveat Emptor 2.12
CCA: A Panacea?

Sustainable Development, Renewable Energy and Business Plan Reviews

Sustainable Development 3.1
Renewable Energy 3.10
Cronyism in Energy Production 3.13
Inland Choice Power Business Plan Review 3.15
Prices 3.17
Greenhouse Gas Reduction 3.20



Community Choice Aggregation *a false choice*

The American Coalition for
Sustainable Communities

ACSC

Table of Contents

Start-up Costs	3.22
Insider Conflict of Interest	
South Bay Clean Power Business	
Plan Review	
SBCP's Vision	3.23
Scope of SBCP CCA	
Governance Problems	3.25
Lawsuits	3.26
JPA Agreement	3.17
Southern California Edison and SBCP	3.28
Conflicts & Contradictions	3.29
GHG Goals and Inconvenient Truths	
SBCP's Control Over Citizens	3.31
<i>Money Management & Municipal Financial</i>	
<i>Obligations</i>	
Net-New GHG Reductions	3.34
The Cost of Local Solar	
Required Acreage for Solar Panels	3.35
<i>Solar Power Production Decline Due to</i>	
<i>Aging Solar Panels</i>	

Appendix

LA CCE Business Plan Review

Executive Summary	1
3rd Party Review by ARC Alternatives	2
Renewable Energy	
RPS Requirements	4
Green-Washing with RECs	6
GHG Reductions	8
Finance - Power Supply Cost Problem	9
Plan Uncertainty and Prices	10
Implementation / Completion	11
Solar Panel Decline Due to Aging	14
JPA Agreement	
Footnotes	16

ACSC CCA Warning Bulletins	
Central Coast CCA Study Highlights	
Peninsula Clean Energy Technical Study:	
Comments	
Sources	
Contributors	



Community Choice Aggregation: A False Choice

© 2017 Monolith Press
ISBN1-58291-141-X

American Coalition for Sustainable Communities

Sustainable Freedom Lab
sustainablefreedomlab.org

Citizens' Alliance for Property Rights (CAPR)
San Diego/ Orange County, California Chapters
caprsdoc.org

iAgenda 21
iagenda21.com

Scope

The American Coalition for Sustainable Communities (ACSC) is a voluntary coalition. National in scope, our mission is sustaining representative government, and protecting our elected representative's authority, which is being usurped, and in many cases, abdicated to unelected agencies, boards, bodies and commissions.

This report is offered as a counterweight argument for elected representatives and staff personnel who are reviewing, or may be considering Community Choice Aggregation (CCA).

The report begins with a history of CCAs; then, moves into an overview of sustainable development and its impacts. A review of renewable energy and three case studies are presented.

This introduction provides an overview and background of the genesis of this report. Also, cited are key summary arguments and findings for three CCAs reviewed in the report.

1. Inland Choice Power
2. South Bay Clean Power
3. LA CCA

The first two reviews are provided within the body of the report. The LA CCA is provided in the appendix because of its late date in completion prior to publication of the report.

Finally, because of the fluid nature of CCAs, ACSC "felt compelled distribute" a bulletin recommendation to cities and counties in California. See the appendix for additional bulletins and references.

Background

The genesis of this report can be summed up in a press release dated Apr 6, 2017 when Inland Choice Power Business Plan failed to move forward because of fatal flaws. Here is an excerpt:

"The newly formed Foothill Tax Payers Association (FHTP) in association with the American Coalition for Sustainable Communities (ACSC) successfully executed a campaign involving local activists to stop the San Bernardino Council of Governments (SBCOG) from continuing collaborative research efforts in starting a Community Choice Aggregation (CCA). At a SBCOG board meeting on Wednesday, a staff recommendation to move forward with a CCA was defeated when no elected city members of the board would second a motion by Jon Harrison of Relands, to vote on the recommendation. When Chairman Robert Lovingood asked for a second motion, the room went silent. The issue never made it to a floor vote. It died right there.

Community Choice Aggregation is a policy where local governments aggregate (add up) electricity demand in order to procure alternative renewable energy (wind and solar) supplies while maintaining the existing electricity provider for transmission and distribution services. It promotes expensive renewable energy over traditional forms of energy.

"A six page critique of the Inland Choice Power: Community Choice Aggregation Business Plan - Final Draft, prepared by

Introduction

EES Consulting for SBCOG, was found to be fatally flawed," said Linnie Drolet, president of FTPA. Dan Titus, who administers the Web site iAgenda21.com and is affiliated with ACSC concurred. "We found problems with the recommendation to move forward because the benefit of saving people 5% on their electric bill did not merit the millions of dollars of startup costs associated with the plan. We also fundamentally disagreed that people would automatically enrolled in a new government CCA without advance permission."

Summary Arguments

Inland Choice Power

The Inland Choice Power (ICP) Community Choice Aggregation Business Plan document contains fatal flaws for the program, which negates the feasibility of establishing a CCA.

- **ICP assumes \$1.25 billion of debt** The Business Plan's proforma tables identify that ICP CCA assumes \$1.25 billion of non-bypassable charges (Exit Fees, Cost Responsibility Surcharges, and Bond Costs) through 2036 that are levied by Southern California Edison. Even one-tenth of this sum is a huge debt burden for any upstart.
- **ICP makes no warranty that it will pay exit fee costs** that it triggers when automatically switching consumers into its program. It should be noted that model CCA, Marin Clean Energy (MCE), did commit to pay all of its own consumer costs in 2010 before reneging on its pledge 9-months after business launch. MCE offloaded its

exit fee liability onto consumers in exchange for a temporary rate reduction that vanished when MCE subsequently raised its prices.

- **ICP's success based upon inaccurate Opt Out claim** - ICP's financial model is based upon customer participation projections that are wrong. Page 24 of the Business Plan states that Phase 2 (largest enrollment phase) assumes a 25% Opt Out, and that "These opt-out assumptions are conservative estimates when compared to participation rates in other CCAs." However, MCE's Opt Out numbers were 30% as it expanded into Richmond, a sizable amount considering that MCE had previously experienced a 20% Opt Out rate. This is all the more troubling when considering that ICP's conservative "Domestic" ratepayer class assumption represents 50% of ICP's total revenue.

At the Western Regional Council of Governments (WRCOG) board meeting agenda for May 1, 2017, the ICP CCA review was presented for the boards consideration in moving ahead with more study. This was a wake up call for board members because the only information that they had been exposed to were staff reports.

South Bay Clean Power

In April 2017 ACSC reviewed documents presented by advocates of South Bay Clean Power. On April 18th, activists armed with this information attended a Redondo Beach city council meeting, where talking points were read into the record.

"Our primary finding of the Business Plan

Draft for South Bay Clean Power and Joint Powers Authority Agreement is that the plan is overly ambitious and glazes over pitfalls, risks and potential liability for member cities, and ratepayers. We find that these points outweigh any potential benefits suggested by the plan.”

Letter of Introduction: South Bay Clean Power (SBCP) promises local jobs (net-new of the SBCP enterprise itself), local power generation; local economic investment. These are the same commitments made by Marin Clean Energy (MCE). However, after 7 years, MCE has failed on most promises:

- Only 2% of MCE’s net-new renewable power is generated locally.
- 3 full-time local jobs (excludes the 35+ staff employees at MCE) rather than major employment of Marin’s skilled workforce.
- More than \$2 billion of Marin’s “local” money was exported to: Shell (The Hague), Electricity de France (Paris), Exelon (Chicago), Calpine (Houston), G2 Energy (Atlanta).
- MCE alienated local labor – MCE made an enemy of IBEW 1245, the electrical workers largest branch in Northern California and brought in out-of-area Cupertino Electric in order to advertise “partnership” with local labor unions.

Key Findings

- **To attain even a fraction of plan stated objectives requires unrealistic commitments** from cities, including real estate and capital investment. For example, Total Cost to install original solar panels and maintain MWh output as panels degrade is

estimated to be over \$13 billion dollars assuming use of U.S. domestic solar panels.

- The plan puts the city into a potentially acrimonious situation with other Joint Power Authority (JPA) cities. Real estate needed for solar installations and gathered through possible eminent domain, will pit residents against of their own city — Where’s all that “local” solar going to be installed? There simply is not enough land available for the number of solar farms needed.

Total Cost to install original solar panels and maintain MWh output as panels degrade is estimated to be over \$13 billion dollars.

- **The JPA Agreement makes it all but impossible to leave the JPA**, especially if the JPA makes decisions that trigger lawsuits if the city wants to leave;
- **The plan causes the cities to get into a new business** — SCE is already in compliance with California’s renewable targets through the California Global Warming Solutions Act (AB32) — why would staff even consider this given that the cities are struggling to take care of there own obligations such as pensions, infrastructure and other programs?
- Up to 5% savings on electricity does not merit starting a business.

Introduction

- **Forcing people into the CCA without their permission is disingenuous.** SBCP advocates state that customers must be moved to the new program in order to ensure its survival. Therefore, people will automatically be enrolled; then, they will have to react and opt-out within a specified time period. This is dictating demand, not people's wants.

ACSC recommends that cities simply say no to SBCP; the risks outweigh marginal benefits. Furthermore, cities need to proceed with caution when considering a CCA membership. The grass is not always greener on the other side of the fence – no pun intended. SBCP advocates have cited the primary reason for establishing a CCA is environmental justice. We all want to be good stewards of the environment; however, environmental justice has been politicized and therefore is subject to the whims of politicians and stakeholders. Finally, elected representatives must understand the financial, legal and potential political ramifications of joining a CCA.

LA CCE

Summary Points

A detailed review of LA CCE's Business Plan examined all aspects of the document. It can be stated with certainty that:

- The Business Plan includes basic mis-

takes about the renewable Portfolio Standard (RPS) that reveal the Business Plan author(s) do not understand the renewable energy market, which under-



- mines LA CCE, from concept to roll out;
- The Business Plan fails to address all GHG emissions for which LA CCE is responsible, which eliminates most, or all, of the "GHG reductions" that LA CCE claims;
- Recent litigation of exit fees (PCIA) at the CPUC puts LA CCEs economic gains on uncertain ground. A changing PCIA can have a significant effect on the competitive position of LA CCE compared to SCE prices. Furthermore, this (stealth) cost is not transparently borne out by the Business Plan (p. 57), which states: Customers will pay the power supply charges set by LA CCE and no longer pay the higher costs of SCE power supply. LA

CCE is responsible for triggering the PCIA, yet LA CCE does not pay this cost on behalf of consumers;

- Price savings for consumers are not defined. The Business Plan states “it is likely” that some of the program’s rate savings (savings compared to SCE prices) will be placed into a financial reserve account (rather than passed along to consumers). How much is “some”? This eliminates, or minimizes the core deliverable of the LA CCE program as written on page 57 of the Business Plan — RATE IMPACTS AND COMPARISONS — “The first impact associated with forming LA CCE will be lower electricity bills for LA CCE customers.” As a comparison, MCE’s rates are less than 1% lower than Pacific Gas & Electric’s prices after seven years of operation.
- The Business Plan fails to specifically address the growth of local solar farms, the energy from which was available in early 2016 to individuals and communities in the form of SCE’s “Green Rate” (aka “Community Renewables”). Alternately, LA CCEs plan to construct fifty 1 MW solar farms will cost approximately \$4 million, which includes land-use costs based upon U.S. solar panels.
- The review concludes that the Business Plan’s omissions and flaws may be termed ‘fatal’. Accordingly, the primary result of implementing LA CCE will be the creation of a new government agency of unsubstantiated economic or environmental value.

Lack of Accountability

Many consultants, staff, and lawyers are complicit in the promoting flawed reports. Elected representatives are negligent

because they typically do not read or understand CCA business plans. It is ironic that, in many cases, staff and elected representatives rely on the same consultants that write the business plans for “expertise”; some even jockey for positions on CCAs. This is very disconcerting because municipalities are open to potential litigation based upon partial information, skewed data and conflicts of interest.

Many consultants, staff and lawyers are complicit in the promoting flawed reports...

As more people become aware of this, it is getting more difficult for skewed information to be distributed. It is important that municipalities protect their investments by executing contracts that hold consultants accountable for the information and reports that they sell to municipalities.

...municipalities are open to potential litigation based on skewed reports.

ACSC CCA Warning Bulletin

On July 12, 2017, ACSC sent a bulletin to all cities and counties in California warning of fatal economic flaw developments regarding CCAs. Here is the text:

Introduction

To: Council members considering joining or launching Community Choice Aggregation (CCA)

RE: ACSC Bulletin: CCA Fatal Flaw Developments

Recent regulatory developments now render the economics contained in Community Choice Aggregation (CCA (CCE)) Business Plans and Feasibility Studies obsolete and potentially fatal, and may put your municipality in financial jeopardy. The two developments occurred mid-June 2017:

1) Exit fees levied by investor-owned utilities (IOUs) on all departing loads are now being litigated at the California Public Utilities Commission (CPUC). IOUs propose that these fees, known as PCIA (Power Charge Indifference Adjustment), be changed or that a new rate structure known as “PAM” (Portfolio Allocation Method) be implemented. LA CCE and ICP Business Plans’ Sensitivity Analysis state: The level of the PCIA (and the amount of franchise surcharges) will impact the cost coemptiveness of (CCA). In order to be cost-effective, (CCA) power supply costs plus PCIA and other surcharges must be lower than (IOUs) generation rates. The outcome of PCIA and PAM will likely not be known until mid-2018.

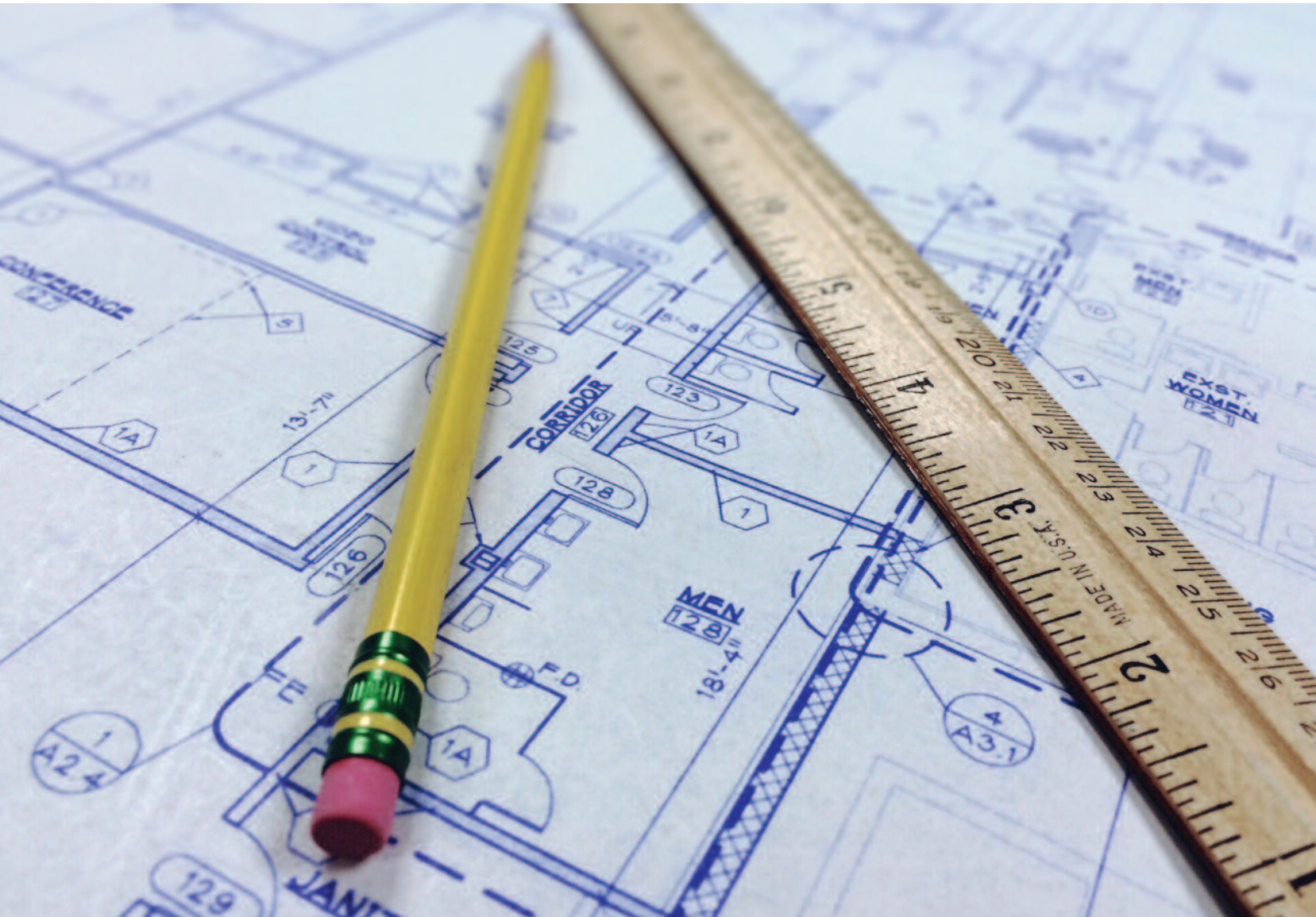
2) AB 1110 anti-REC legislation. CCAs use renewable energy certificates (RECs) as a low-cost method for keeping prices low and advertising low greenhouse gas (GHG) emissions. The recently released draft implementation for AB 1110, prepared by California Energy Commission, identifies that RECs can no longer be used for (misrepresented) GHG reductions and GHG

The prudent course of action would be to delay further action on CCA until regulatory unknowns may be better quantified.

emission rates. This puts CCAs on a level field with IOUs and means CCAs must procure more expensive “bundled” (true) renewable energy for their standard default product. Additionally, RECs will not be allowed in CCA’s 50% and 100% green energy products; the inherent cost issue of bundled energy is compounded by a lack of cost-effective renewable energy as CCAs enter the market en masse, as well as transmission constraints for that energy. The net is that renewable energy prices will increase significantly, changing the associated economics of CCA from what Business Plan authors could not know.

In the event that municipalities elect to join CCA in the interim, it should be noted that the JPA “financial firewall” does not protect individual municipalities from action against it by the JPA, nor insulate it from power contract resale liability, should the municipality attempt to subsequently opt out of CCA.

With respect to the above, the prudent course of action would be to delay further action on CCAs until regulatory unknowns may be better quantified.



History of CCA

The Architect of CCA

Clean energy pioneer, Paul Fenn professed a community cooperative idea, where savings could be realized for electricity customers by aggregating demand (adding up), in order to achieve volume discounts from power producers. To accomplish this, he wrapped his argument around climate change. In order to save the envi-

ronment, renewable energy would be the key in his new scheme.

In his article titled, *Power to the People*, Bryce Hubner provides a historical account about Fenn. As a history major at Bates College in Maine, Fenn has opined that he was influenced by the Marxist philosopher Georg Lukács, “who basically said that the problem with the world is the commoditization of everything.” That is, we want everything to be tradeable — capitalism seems to be viewed as a problem.

Overview

After Bates, Fenn traveled to Berlin, where he was a rabble-rousing civil rights activist with the left-wing (and often militant) Autonomen movement. Later, he earned a Master's degree in intellectual history at the University of Chicago, where he got interested in energy policies.¹

Hubner states that, "During his years as a graduate student in the early 1990's, Fenn became interested in emissions credit trading theory, known today as cap and trade. Particularly interesting to Fenn was emission credit trading, which at the time was just beginning at the Chicago Board of Trade. His basic premise, echoing Georg Lukács, was that, "climate change was caused by excess trading and commoditization." He contacted Professor Ronald Coase at the Chicago School who thought carbon trading – a hidden tax scheme that subsidizes renewable energy – would actually fail because it had the potential to be corrupt. Coase compared emissions credits to the Russian stock market where there was fraud in the system, as opposed to a simple flat tax, which could be implemented immediately.

After Fenn graduated with his master's degree in intellectual history, he moved to Massachusetts with the goal of getting a job in the legislature. His first real job came in 1994 when he joined the staff of Massachusetts state senator, Mark Montigny, who had just been appointed chair of the Committee on Energy. Fenn took the job so he could write a bill on energy policy that treated electricity as a "physical and local thing rather than a simply commodity."² His bill recused Ronald Coase's global trading commodities cap and trade ideas with an alternative promoting local

government control of energy. His idea was simple: put local government between energy suppliers and the people."

Fenn stated that the bill, "... would enable cities to force climate protection into a policy because electricity is the largest single cause of GHG emissions in the world."¹ However, he fails to address GHG emissions from other contributing sources, like the transportation sector.²

the bill, "... would enable cities to *force* climate protection into a policy because electricity is the largest single cause of GHG emissions in the world."

Fenn's solution was to create a legal condition of choice – through ordinance – for customers to have the legal right to buy power. The Massachusetts bill promoted control of energy suppliers through a "simple ordinance" structure. The first step was to provide municipalities control of energy suppliers:

- Insert the government,
- Give them the authority to aggregate electricity billing accounts,
- Represent the demand of the community and then,
- Control the selection of the suppliers.

A self-identified intellectual, Fenn co-authored the original "Community Choice" law. The nation's first-ever CCA bill, Massachusetts Senate Bill 447, was submitted by Montigny in December 1994. Fenn viewed the bill as a historical exercise and he has stated that, "it never occurred to me that it would actually pass". He promoted it as a solution for climate change: "I got sucked into this and managed to convince some people in Cape Cod that it was a good idea for the purposes of climate change."²

"...I just cooked up the bill. Nobody was asking for it, no cities wanted to aggregate, no environmental groups wanted city government involved, and the utilities were obviously against it."

But shortly after the bill was filed, Montigny was stripped of his chairmanship of the Massachusetts Senate Committee on Energy after a losing political battle with then-Senate President Billy Bulger.

Senate Bill 447 was quickly laughed out of the Massachusetts State House. "It was an awkward moment," Fenn says. A bitter political lesson followed. Fenn learned what

happens when a legislator submits legislation that no one wants. "I mean, I just cooked up the bill. Nobody was asking for it, no cities wanted to aggregate, no environmental groups wanted city government involved, and the utilities were obviously against it."¹

With deregulation being encouraged at the federal level a couple of years later, CCA was part of a sweeping deregulation of Massachusetts utilities. Several communities on Cape Cod later established the Cape Light Compact, the nation's first CCA.²

California

In California, Fenn authored California's 2002 Community Choice (CCA) law, Assembly Bill 117, allowing municipalities to choose alternative electricity providers for their communities, and has played a leading role in their implementation. He says the genesis of his bill came about because utilities were "gaming" the system after deregulation.²

Decentralized Power Model

Paul Fenn promotes decentralized renewable models. For example a few years ago in reference to bringing 360 megawatts of green power into San Francisco, he stated, "The complexity of our venture has to do with a decentralized model... The energy we're trying to bring to San Francisco would normally equal one big power plant. We'll have to build a thousand small, green generators to hit that number. This is why our experience with telecommunications and wireless networks has been invaluable: Those companies deal with thousands of sites to deliver a product, and so will we."³

Overview

In theory, networks may work well in the computer business where current is low; however, to scale that theory up for power distribution networks will be very expensive. Fenns decentralized model increases system complexity; therefore, the very essence of his proposed solution could have negative consequences. Discrete decentralization of renewable power is not efficient and costs more in infrastructure. Power companies have to build out and scale up thousands of miles of high current conductor lines to accommodate renewable power producing nodes in the network. CCAs need “roads” to get their electricity onto the “highway”. Building out this distribution to accommodate renewable energy won’t be cheap. That is a reason Investor Owned Utilities (IOUs) are raising rates. Furthermore, as more complexity is added into the system by adding more components into the system, potential for component failures increases exponentially.

Billionaire T. Boone Pickens got out of the renewable power business years ago because there was no distribution. He had the power, but no “on ramp” to get it on to the main high-power distribution lines.

Energy Companies

Deregulation

Paul Fenn was on board with the idea of deregulation of the power companies, but like many, he did not realize the potential unintended consequences associated with it. Ironically, the blueprint model CCA in California, Marin County Energy (MCE) used by Paul Fenn to bolster its public image during start-up; however, Fenn never received “compensation” for his investment.

His small company submitted energy bids to MCE, but he never prevailed in securing any contracts.

California’s deregulation effort was spearheaded by Dan Fessler, Chair of California Public Utilities Commission (CPUC). The original deregulation draft was called the “Yellow Book.” The implemented version was called the “Blue Book.” Deregulation took place where base load power plants that were owned by the IOUs were sold off to entities that were not under the state’s control.

Companies from as far away as North Carolina and Georgia purchased power plants from Southern California Edison (SCE), San Diego Gas & Electric (Sempra), and Pacific Gas & Electric (PG&E). Every one of them, including Los Angeles Department of Water & Power, rode the profitable upswing in California’s energy prices. Prices were even manipulated.

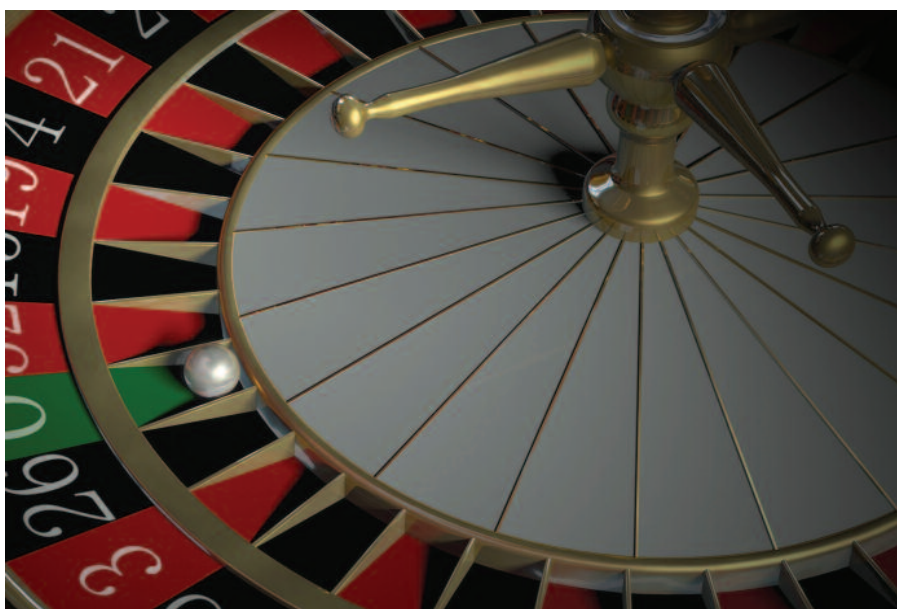
Deregulation took place where base load power plants that were owned by the IOUs were sold off to entities that were not under the state’s control.

Gaming the Power System

Architects of the deregulation of generated power expected power would flow transparently and smoothly into the California

Power Exchange (CAPX), contributing to supply and price stabilities. However, “prices were gamed” after deregulation when the new owners of California’s power plants realized they could manipulate the bidding system for power by withholding power generation; thus, creating artificial shortages, driving up the bid price for electricity.

Gaming was soon rampant in California. Enron and Shell were at the top of the pyramid of companies that extracted more than a billion dollars from California consumers. Enron invented accounting schemes such as Deathstar and Fatboy to drive up wholesale energy prices. Shell engaged in similar practices as evidenced by transcripts of its traders.



Regulatory Environment

Beginning in the late 1970s, IOUs were forced by Federal mandate known as Public Utility Regulatory Policy Act (PURPA), to purchase renewable generation under long-term contracts. Because PURPA provided favorable price terms to renewable generators, especially in California, renewable energy contracts flourished.

Because of PURA regulations:

- Independent power producers increased: The number of wind, biomass, biogas, and co-generation independent power producers grew quickly, especially in California.
- In California regulators exacerbated the problem. They forced the IOUs to continue paying for expensive renewables even

when the IOU wanted to replace that power with lower cost conventional generation, such as combined cycle gas turbines.

- In California, IOU prices were higher than many of today’s spot-market prices, which are daily natural gas turbine prices.

- IOUs lost their primary customers: As IOU prices climbed, their biggest customers—Commercial & Industrial— left California for lower-cost electricity markets. This resulted in the IOU’s fixed costs being spread over a shrinking customer rate base, driving up prices for remaining California ratepayers.

Renewable proponents today claim they can reduce energy prices now offered by IOUs such as SCE, Sempra, and PG&E. However, renewable proponents are partially

Overview

responsible for creating the problem of high prices.

Cost Recovery

The Power Charge Indifference Adjustment (PCIA) is a charge assessed by the IOUs to CCAs to cover renewable energy generation costs. Sometimes referred to as stranded costs, or legacy costs, they are because of early expensive long-term renewable energy contracts that are embedded into California's retail energy prices. These costs were incurred by the IOUs who invested in, and subsidized, the renewable energy sector in order to get it started.

The Power Charge Indifference Adjustment (PCIA) is a charge assessed by the IOUs to CCAs to cover renewable energy generation costs.

Stranded costs are still on the IOU's books, contributing to California's high energy costs. Contracts are staggered in length, and run for decades. The prices per megawatt-hour for these older renewable contracts are 2-3 times higher than today's current renewables energy prices. This is because the renewable energy market is maturing and economies of scale are being realized; thereby, decreasing prices. For

example, in the early emerging computer technology market, a gigabyte of storage originally cost a quarter of a million dollars, compared today's cost of a few dollars today.

IOUs agreed to expensive long-term contract risks based on a certain number of customers.

CCA Opt Out: A Crony Business Model

California law is supposed to make the idea of CCAs more palatable for IOU's by promoting the scheme to pay them for the loss of their customers called "exit fees". The rationale: to make IOU's "whole" when customers "depart", or "exit" their IOU. The law, AB117, authored by Paul Fenn, mandates that customers from a competing utility must be automatically enrolled into a new CCA – without their permission. This is called "Opt Out." This guarantees the CCA a customer base with the proviso that after consumers are switched into CCA, they can go back. There is a time limit to exercise this option; after that, consumers can incur a penalty from the CCA.

Opt Out is the core problem. If CCA was Opt In, CCA would have to rely on consumers' independent initiative to request being switched into CCA, and CCA would likely never get off the ground.

Most people never know they have been switched into a CCA. For example, after 7-years many residents in Marin County do not know what MCE is, or that part of their PG&E bills are siphoned off by this CCA agency middleman.

Opt Out is *the* core problem. If CCA was

Opt In, CCA would have to rely on consumers' independent initiative to request being switched into CCA, and CCA would likely never get off the ground.

Power Companies React to Out Opt

In 2010, PG&E authored Proposition 16, which was the utility's attempt to circumvent CCAs automatic enrollment "Opt Out" feature. Prop 16 required a 2/3 super-majority vote of the residents within a target municipality that was contemplating a CCA. PG&E spent millions of dollars on anti-CCA advertising. Proposition 16 lost by a large margin, and was a huge victory for MCE, which mounted a successful opposition campaign. It is ironic that during this era of extreme acrimony toward PG&E, the utility's San Bruno pipeline exploded, which galvanized most of the Bay Area against PG&E's campaign.

CCAs Want to Appropriate Benefits

- CCAs want the reward without the risk. They want to reap the benefits of IOUs long-term investments by entering a more mature market where renewable energy prices are cheaper.

- CCAs want an instant customer base through Opt Out.
- CCAs offer a false benefits because advocates claim that the IOUs prices are too high and they make too much profit. This argument does not hold because IOUs can only legally charge what it costs them. This is known as pass through cost.

CCAs want to reap the benefits of IOUs long-term investments. They want the reward without the risk

Marin Clean Energy: California's Blueprint Model for CCAs

Every single business plan being presented for a CCA references MCE. As the State's first operating CCA, consultants seem to believe that MCE should be ordained with credibility and awarded a "gold standard" just for existing. MCE's history and dubious operating transparency shows otherwise.

Because MCE is the blueprint model for the CCA industry, the company's pitfalls and schemes are showing up in business plan proposals. What is disconcerting is that consultants are selling these flawed ideas to municipalities, and elected representatives are buying into them. For example, South Bay Clean Power claims it will adopt Silicon Valley Clean Energy's "best practices" as stated in their business plan.⁷

Marin County Supervisor Charles

Overview

McGlashan wanted green energy, and he believed he could deliver it for less than PG&E's prices. To that end, he engaged several outside parties to study the issue of Community Choice Aggregation (CCA) several years before Marin Energy Authority's (MEA) launch in May 2010. MEA was the original name of the Joint Powers Authority (JPA), which eventually adopted the operating arm's name: Marin Clean Energy (MCE). Two consultants from Navigant were central in development of these entities: John Dalessi and Kirby Dusel.

After PG&E became aware of Marin County's foray into CCA, PG&E offered to help MCE by offering to act as MCE's wholesale energy provider. PG&E offered to work with MCE to accomplish their clean energy goals. PG&E's overtures were rejected.

The ultimate success of MCE was due to a perfect storm of political missteps by PG&E, and unrealistic energy promises made by MCE's two primary consultants from Navigant Consulting.

MCE's success was also driven by a combination of an ignorant resident population through a steady flow of propaganda and carefully worded advertisements promoting unrealistic promises. It is interesting to note that under AB 117 the CPUC has a fiduciary responsibility to check false claims and fraud, but the agency constantly disregards its responsibility to consumers.

In 2014, a proposed legislative bill (AB2145—Bradford) attempted to reform CCAs by making them Opt In to balance the scales with consumer choice. Lobbyists opposed to the bill and renewable energy proponents packed the Energy, Utilities, and Communications hearing room at the

Capitol building in Sacramento; the bill was defeated.

Because MCE is the blueprint model for the CCA industry, the company's pitfalls and schemes are showing up in business plan proposals.

MCE's interim director, Dawn Weisz, was appointed CEO by MCE board Chair Charles McGlashan after the agency conducted an executive search. Weisz was a County of Marin Planner, earning \$54,000 per year. Marin residents report that her primary success was supporting a lawsuit against the Town of Corte Madera for failing to adhere to low-income housing quotas. Less than a year on the job, the energy neophyte received a pay raise to more than \$250,000 per year.

MCE executed a full-services contract with Royal Dutch Shell subsidiary Shell Energy North America (SENA) to supply MCE's clean and fossil-fired energy. The SENA contract was loaded with RECs, and euphemistically also referred to them as "Environmental Products." In an attempt to add credibility to the REC paper-trading scheme, SENA noted that the environmental products must be registered through a recognized registry (an organization that claims

to track RECs) and are not geographically limited to a specific region or source. Translation: we can provide anything we want from, say, Somalia, so long as we can find a credible organization says they are legitimate.

MCE and its consultants told Marin County that it could provide clean, zero-emitting energy cheaper than PG&E. But MCE soon learned that the energy market was not as simple and predictable as it believed. MCE was unable to meet its commitment and needed a solution. Enter energy certificates.

Renewable Energy Certificates

A Renewable Energy Certificate (REC) is simply a document that proves to regulators that electric power was generated from a renewable resource. These certificates are not actual power; they are a receipt, or proof-of-generation of renewable energy. RECs are tradable commodities that certify that 1 megawatt-hour of electricity has been generated from an eligible renewable energy resource. REC trading *is not* regulated. The system of RECs was originally set up to help energy producers comply with Renewable Energy Certificates (RECs)

A REC demonstrates:

- a certain amount of renewable energy was produced
- by a renewable energy resource,
- on a certain date.

Types of RECs:

- Bundled REC = 1 mW of energy + certification
- Unbundled REC = 1mW of energy – certification (cert is stripped away). Then, it can be sold through a REC broker.



Reporting

In order to certify renewable resource energy deliveries to customers, IOU's and CCAs must report purchases to regulators. To accomplish this:

customers, IOU's and CCAs must report purchases to regulators. To accomplish this:

- A REC is created by the renewable generator resource that identifies the name of the renewable resource, the date of generation, and the volume of generation.
- RECs are reported to government regulators.
- Once RECs are certified and reported by the CCA or IOU, the RECs may be "retired" by a CCA, and are no longer usable.

Overview

Green-Washing

Green-washing is the relabeling of dirty generated power as green renewable generated power. It is evidenced when CCAs report zero greenhouse gases (GHGs) to regulators for power that is actually among the dirtiest available.

For example, MCE purchases unbundled RECs to cloak their use of "system power." System power, the mainstay of the electrical grid, consists mainly of energy generated by burning natural gas and coal. That is important because coal and gas produce greenhouse gas emissions, while renewable energy sources don't.

CCAs buy a REC, and it is pasted on the front of this brown power. Then they report to consumers, that this is clean energy; but it's not. All CCAs engage in this green-washing scheme. This contrasts with IOUs, which do not employ this.

CCAs claim REC purchases "support" clean energy. They basically agree to a voluntary tax by sending a small amount of their revenues to renewable power suppliers. This is a voluntary gesture of goodwill to suppliers for their contribution to climate

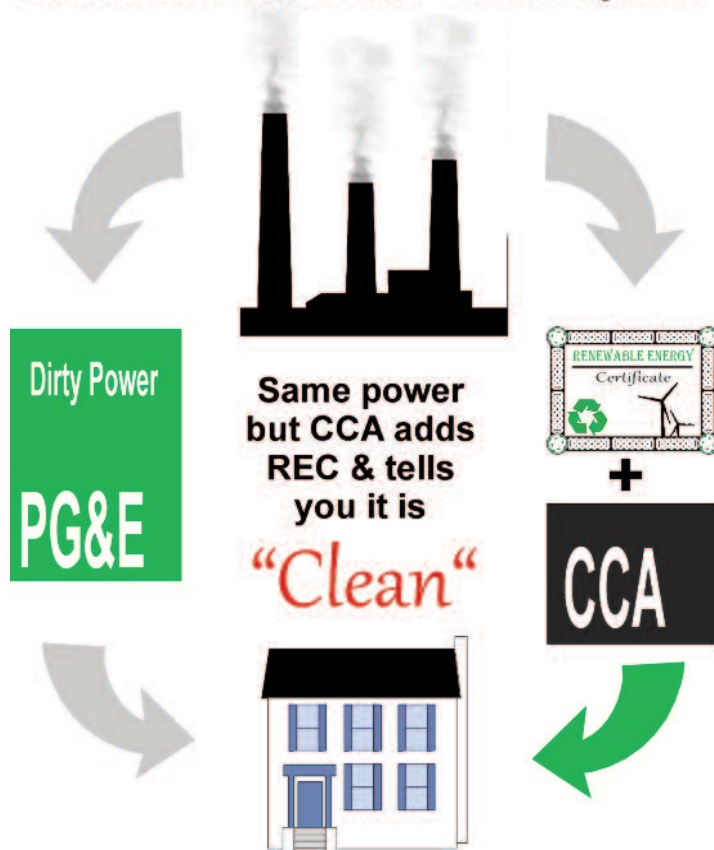
change and at the same time absolves CCAs of guilt as they rationalize their "Green Conscience". This stipend is a pittance. It works out to one dollar per REC, which is equal to 1 megawatt-hour (MWh). A typical California home uses about 7 to 8 MWh per year; therefore, the CCA kicks

back about 8 dollars per household to renewable energy suppliers.

Green-washing rigs operating expenses and at the same time promotes industry goodwill that can be used in marketing propaganda campaigns.

- CCAs report zero pounds of GHGs/MWh for its green-washed energy,
- when the actual emission rate is 944 lbs of GHG/MWh.
- conflate the voluntary tax paid by CCAs, through the purchase of RECs, with "clean" energy.

GREEN-WASHING With RECs Same Power From Grid - Electric System



Green-washing in Action

Marin Clean Energy (MCE) purchases and delivers to its customer's generic power, known as System Power. This energy is predominantly imported coal and gas-fired energy that is runs across California's grid. These are the large wires and transmission

towers that stretch across California. To create the appearance that the company is greener than it really is, it purchases unbundled RECs.

Nearly 75% of MCE's clean energy comes through the purchase of unbundled RECs. Once purchased, MCE advertises the "clean" energy – typically "wind" – represented by RECs, as the type of energy procured and delivered on behalf of its ratepayers. Furthermore, MCE has purchased RECs that are not even RECs. Rather; these certificates were produced by behemoth non-renewable hydroelectric plants in Montana. It is of note, MCE's Charles McGlashan referred to these giant facilities as "habitat killers" and voiced concern about their carbon life-cycle while garnering support before MCE's business launch, promising not use them after MCE's initial phase.

Nearly 75% of MCE's clean energy comes through the purchase of unbundled RECs. Once purchased, MCE advertises the "clean" energy.

Green-washing: Misrepresentation

Since REC trading is not regulated by an agency like the Securities and Exchange Commission (SEC) for stocks, AB1110 was passed by the California legislature in 2016 to combat the CCAs massive abuse of

RECs. Currently the implementation of AB1110 is under siege at the California Energy Commission. Consultants and CCA managers are capitalizing this.

On April 12, 2017, the board of Silicon Valley Clean Energy CCA received a recommendation from its CEO to load RECs into its portfolio because they were unwilling to pay for expensive actual clean energy that was promised to its customers. Silicon Valley CCA will deliver coal and gas-fired power to customers while advertising it as "wind." — *It's bait and switch*. Silicon Valley Clean Energy uses the same consultant as is used by several other CCAs.

Transparency

MCE was originally sold to the community as "local", whereby local jobs, local generation, and reinvestment of money from PG&E back into the local Marin community. With its contracts with Shell and French nuclear giant Electricite de France, MCE will export upwards of \$600 million from Marin's economy to Europe.

Shortly after Charles McGlashan's unexpected death in March 2011, less than a year after MCE launched, MCE began to morph, and fractured internally when it decided to leap from its "Marin" boundaries into Richmond, California. Today, MCE has gerrymandered into Napa, Solano, and Contra Costa counties. MCE operates as a junior version of PG&E, withholding or redacting key public documents. It's board members are basically energy neophytes.

CCA Contracts: Caveat Emptor

Regardless of whether municipalities elect to join a CCA, they need to be cautious about the joint powers authority agreement (JPA) they execute. In many cases, agreements make it impossible for a municipality to depart a CCA. Documents typically contain language that assigns a municipality's pro-rata share of their energy obligation. Consider these negatives:

- A typical municipality will never be able to depart from the tens of millions in power contract obligations.
- Claims of reselling that electricity are wrought with conflicts of interest within the CCA staff, where job security depends on holding the CCA together.

JPA agreements make it impossible for a municipality to depart a CCA... A typical municipality will never be able to depart from the tens of millions in power contract obligations.

CCAs: A Panacea?

CCAs offer no added value or concrete benefits for consumers.

- No marginal price benefit for consumers.
- No benefits to satisfy climate change requirements.

Price Savings & Clean Energy Commitments: Vaperware

The irony today is that CCA (renewable generators) cite high IOU prices. They claim the ability to bring lower prices for green energy than those offered by the IOUs. However, according to MCE's prices adopted by its board in February 2017, offered only six-hundreds of 1% in savings compared to PG&E's prices. Sonoma Clean Power residential customers save eight-tenths of 1% compared to PG&E. One could argue, they are basically price matching.

CCAs are also failing to deliver on their clean energy commitments. MCE's GHG emission rate for its most recent emission-year is advertised as 323 lbs of CO₂ / MWh. This contrasts with its actual GHG emission rate of 538 lbs of CO₂.

CCAs offer no added value or concrete benefits for consumers.



President Trump says “no” to Sustainable Development; the United States pulls out of the Paris Climate Accord

On Thursday June 1, 2017 President removed the U.S. from the Paris Accord that Secretary John Kerry signed on Earth Day 2016. The accord’s goal was to reduce CO2 to 25% below 2005 levels by 2025. Closely integrated with the Paris Accord are the 17 Sustainable Development Goals offered at the U.N. Sustainable Development Summit in September 2015 in a report titled, *Transforming Our World; The U.N. 2030 Agenda for Sustainable Development*. The report cited a 15 year action plan to remove poverty in the world. Couched around social justice, the goals seek to transfer wealth through reparations from industrial nations to poor nations.

Global warming legislation in California is tied to Sustainable Development. The exit from the Paris Accord puts downward pressure on the rational for this legislation as Sustainable Development continues to fall out of vogue and subsidies and tax credits dry up.

The Federal government and many nations around the world have begun distancing themselves from globalism and international Sustainable Development Goals (SDGs); however, here in California, cities and counties are throwing themselves in to expensive elongated General Plan (GP) updates in order to be “leaders” on Climate Change.

The reality is that the State subverts local control through SCAG and local COGs to entice GP updates. The motivator for counties and cities: development and grant funding in the form of “incentives”.

SD, or Sustainability, is government created resource inventories (water, land, energy) to create artificial scarcity under the guise of conservation. Once you do an inventory, you can claim inventories are finite “on hand”; the theory of abundance goes right out the window. SD, at its core, is a rationing system implemented through public-private-partnerships, which is a crony capitalism scheme where government picks winners and losers; profits are privatized and losses are socialized on the backs of tax payers. It is a collectivist behavior modification

scheme that increases the cost of living for all citizens and residents—hidden taxes—with SD goals, forcing the reduction of use of resources through conservation, aka rationing. It reduces the standard of living and lifestyle choices through centralized planning.

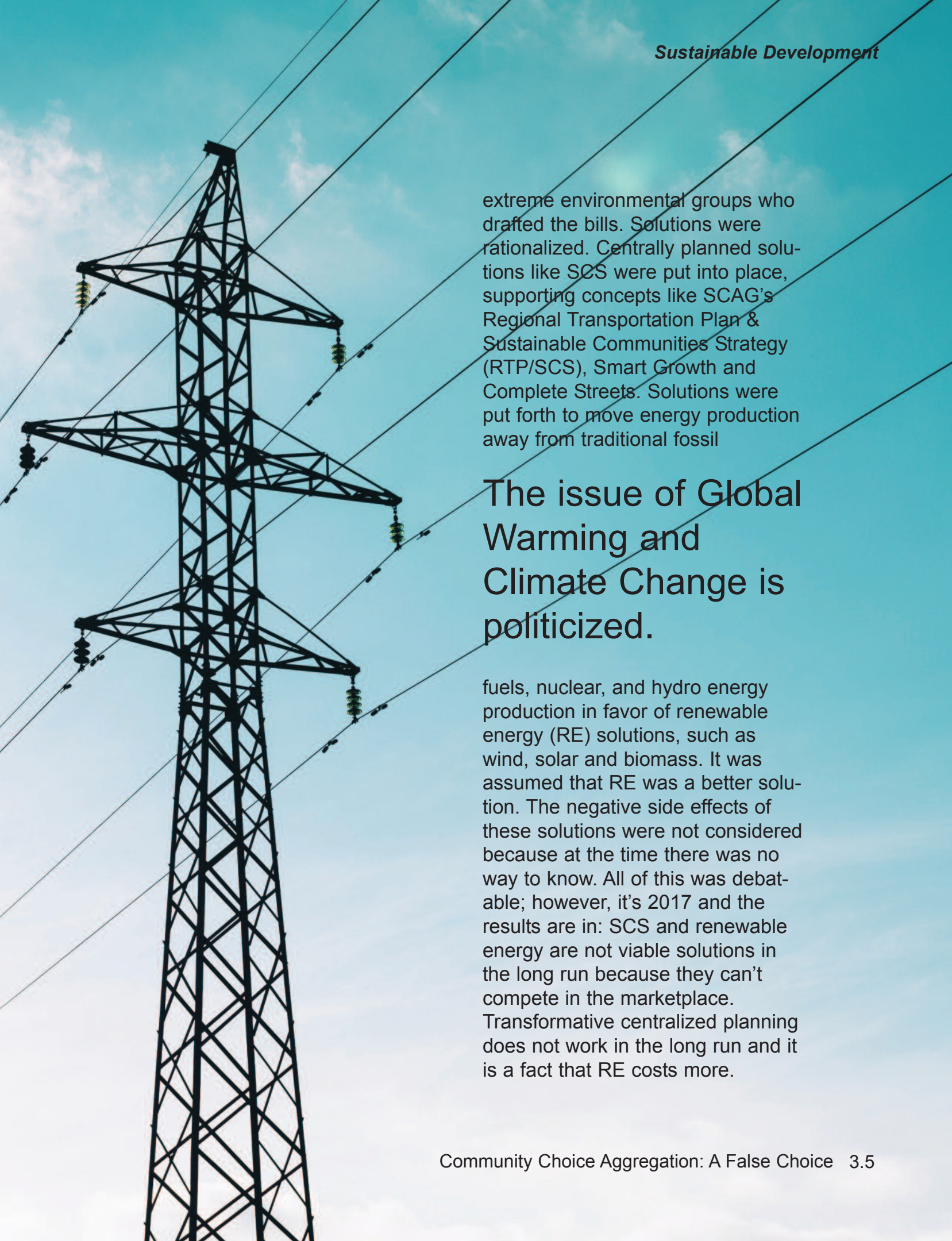
Cities and counties have learned that they can get a gold star on grant applications if they update their GPs implementing provisions of SD. There is a major problem with SD because it is fomented through a top-down planning paradigm called Sustainable Communities Strategy (SCS) or Wildlands Conservation. The goal of these strategies is to combat Climate Change, which is caused by CO₂; therefore, planning and policy are coordinated accordingly. For example, high-density housing centered around mass transit and Transit Oriented Development (TOD) are often cited as solutions. The idea is that people can work where they live and they can walk, travel on bikes, busses and trains, rather than drive cars, thereby reducing CO₂ emissions. This centralized planning scheme neglects market demand and dictates needs rather than customer wants.

Representatives for SCAG have stated that SCAG is basically a rubber stamp for the State

With Wildlands Conservation, land is inventoried and constrained under the purview of conservation, creating artificial scarcities, which, again, is rationing.

Officials are willing to destroy ambiance and character of a jurisdiction for the short-term gains provided by increased development fees associated with SD. It is a never ending cycle of top-down control because of the lure of grants. In order to get grant money, the city or county has to implement the terms and conditions of the grant. So in essence, the county surrenders local control to the grantor, which is usually the State or Federal Government. Many planning grants are distributed by Metropolitan Planning Organizations (MPOs). The Southern California Association of Governments (SCAG) is the centralized planning authority in Southern California.

The issue of Global Warming and Climate Change is politicized; therefore, the solutions have become politicized. The California legislature foisted solutions blaming the cause of warming to be CO₂. This culprit was identified by scientists and sanctioned through computer forecasts and consensus. Though well intentioned, legislators were influenced by




extreme environmental groups who drafted the bills. Solutions were rationalized. Centrally planned solutions like SCS were put into place, supporting concepts like SCAG's Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), Smart Growth and Complete Streets. Solutions were put forth to move energy production away from traditional fossil

The issue of Global Warming and Climate Change is politicized.

fuels, nuclear, and hydro energy production in favor of renewable energy (RE) solutions, such as wind, solar and biomass. It was assumed that RE was a better solution. The negative side effects of these solutions were not considered because at the time there was no way to know. All of this was debatable; however, it's 2017 and the results are in: SCS and renewable energy are not viable solutions in the long run because they can't compete in the marketplace. Transformative centralized planning does not work in the long run and it is a fact that RE costs more.

Power plants supply modern societies with economical reliable power.



- 
- Fossil fuels provide 80% of all the energy consumed in the USA – reliably and affordable, from relatively small land areas.
 - Biofuels provide 3% – mostly from corn grown on nearly 40 million acres.
 - 3% from wood and trash,
 - 9% from nuclear.





Hydro power supplies industrial societies with economical reliable power

About 3% comes from hydroelectric.
“Large” hydro power is *not* considered renewable energy.*

Solar is intermittent unreliable power



Renewable Energy

In 2017, governments are finding out that solar power generation when propped up by massive subsidies, just does not work. The solar industry's biggest problem is the very mechanism that led to its rise: lucrative subsidies. SolarWorld, the largest US solar panel maker filed for bankruptcy after receiving \$206 million in subsidies.³ Bankrupt SunEdison has no hope for payouts for shareholders.⁴ Tesla bought

SolarCity in late 2016, was supposed to create a vertically integrated renewable energy company.⁵ The bottom line, Tesla's new, "cool" and extremely expensive solar roof tiles are only viable due to yet another round of generous taxpayer subsidies in the form of tax credits, without which the entire concept falls apart as breathtakingly uneconomic.⁶

High electricity rates are plaguing California because of renewable energy. One of the first disruptive policies was the

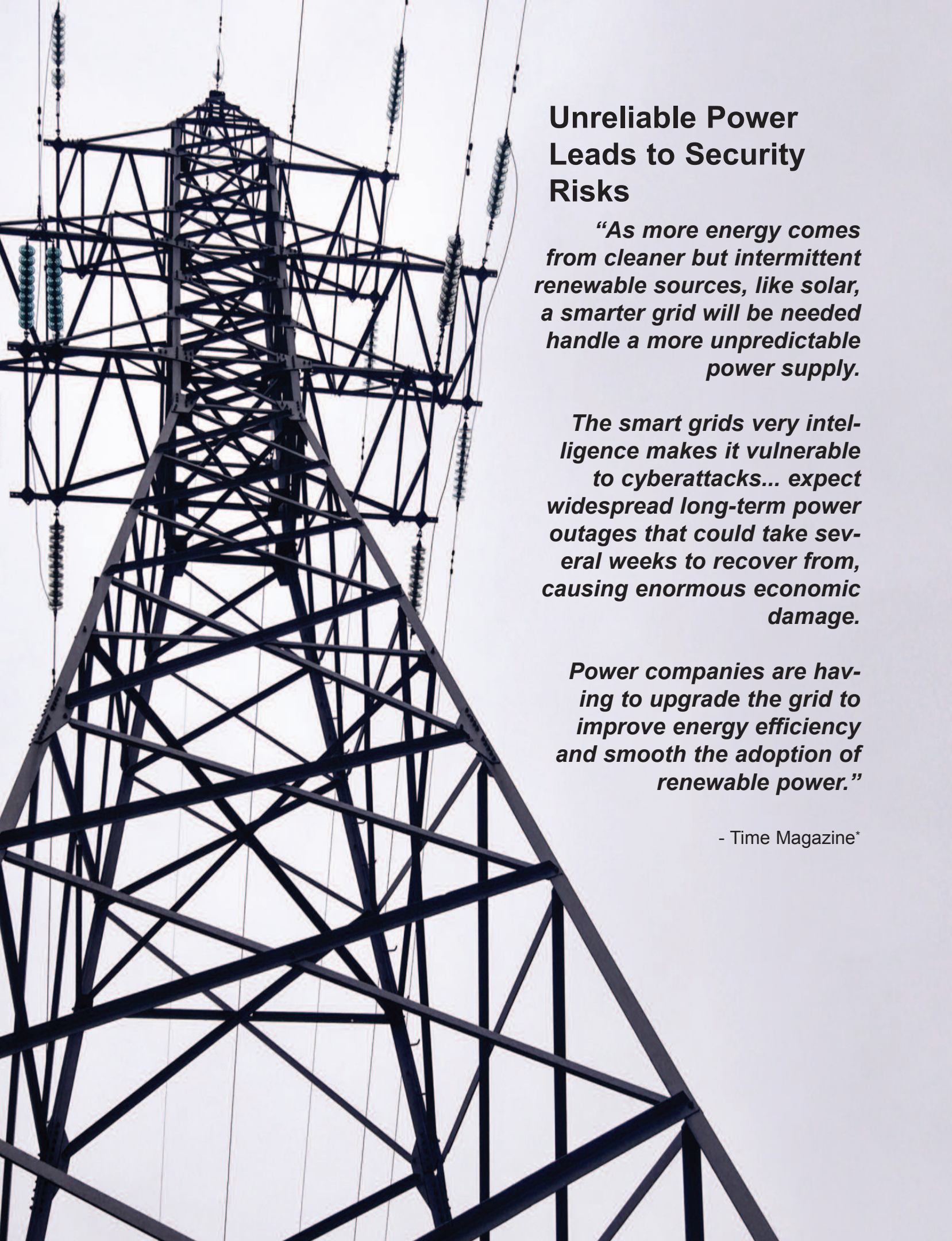


state's Renewable Portfolio Standard (RPS), signed into law in 2002. Add that to arcane subsidized Cap and Trade instituted under AB 32 and as President Obama has said: "Under my system of a cap and trade, electricity rates would necessarily skyrocket."⁷

A 2015 analysis of federal data by the Institute for Energy Research documents show that electricity from wind farms is roughly two to four times more expensive than power from traditional sources. Existing evidence points to solar as being even more

expensive. Wind and solar power often can't keep up with Californians' energy needs. On some days they produce excess power, which is hard to capture and reuse, but on other days they fall short. This explains why state regulators warn Southern Californians about rolling blackouts. In fact, California leads the nation in power outages, with 417 in 2015.⁸

Crony capitalism is on display as consumers are getting burned by a taxpayer-subsidized solar power plant in California's



Unreliable Power Leads to Security Risks

“As more energy comes from cleaner but intermittent renewable sources, like solar, a smarter grid will be needed handle a more unpredictable power supply.

The smart grids very intelligence makes it vulnerable to cyberattacks... expect widespread long-term power outages that could take several weeks to recover from, causing enormous economic damage.

Power companies are having to upgrade the grid to improve energy efficiency and smooth the adoption of renewable power.”

- Time Magazine*

Mojave Desert. Located on 4,000 acres of public land in the Mojave Desert, Ivanpah Power uses a lot of natural gas to generate “solar” electricity, and neither the California Energy Commission nor the U.S. Department of Energy seems to care enough to come clean about it. Regulators allow electricity to be sold at four to five times the going rate of conventional electricity because it is “green”. The owners of the Ivanpah solar power facility received a federal loan guarantee of \$1.6 billion, and a tax credit in excess of \$500 million. It is owned by NRG Energy, BrightSource Energy, and Google Inc. BrightSource itself is owned by a consortium including Google, General Electric Corp., Chevron Corp., BP Alternative Energy, and Morgan Stanley.⁹ Because solar power is inefficient, the plant has been unable to meet the output levels stipulated in its power purchase agreement.¹⁰ Crony tax payer subsidies are on the way out.

Regulators allow electricity to be sold at four to five times the going rate of conventional electricity because it is “green”.

Nevada has begun phasing out taxpayer subsidies for solar. Until now, Nevada homeowners subsidized roughly 17,000 customers with solar panels, to the tune of about \$16 million every year.¹¹ Furthermore,

countries around the world are rethinking expensive subsidies and are beginning to repeal them. The Indian government is shutting down solar power panels because they are unreliable and conventional energy from coal plants is almost always cheaper”.

Cronyism in Energy Production

In California, every economic energy source should be used. Instead, the largest hydroelectric dam removal project in U.S. history is taking place in Northern California of four hydroelectric dams on the 236-mile Klamath River.

Diablo Canyon provides power to 3 million Californians on a patch of land the size of three football fields.

And now, following the closure of San Onofre Nuclear power plant, PG&E has placed Diablo Canyon on the chopping block.

Diablo Canyon nuclear power produces twice as much power as all of California’s solar panels; 24 percent more than all of its wind, and 40 times more than its largest solar farm. Also, Diablo Canyon provides power to 3 million Californians on a patch of land the size of three football fields. Achieving the equivalent from a solar farm would require 145 times more land; from wind, 500 times more. The National Defense Council (NRDC) is negotiating the closure of

The image features three wind turbines in silhouette against a vibrant orange and yellow sunset sky. The turbines are positioned on a dark, flat horizon line. The text "Wind power is intermittent and unreliable" is written in white, sans-serif font in the upper right quadrant of the image.

Wind power is intermittent
and unreliable

Wind and solar account for 2% of
overall energy needs — expensively
and intermittently — from facilities
across millions of acres.

Diablo Canyon. Cronyism is on display.

These schemes promote input from stakeholders and promote public-private partnerships for those fomenting “solutions” of renewable energy over nonrenewable energy. It’s ironic that NRDC itself has significant, direct investments in natural gas and renewable energy companies. The two highest-ranking members of NRDC’s Board of Trustees, its Chair and Vice Chair, as well as one of NRDC’s single largest donors, are all major investors in natural gas. Furthermore, renewables companies, would benefit significantly from Diablo’s closure.¹²

Review of Inland Choice Power Community Choice Aggregation Business Plan; Final Draft, Dated December 8, 2016

Key Findings

The author of IPC CCA draft, EES Consulting, Inc. and Bevilacqua-Knight, Inc., espouse the benefits of new Joint Powers Authority (JPA), which is a new agency proposed in the plan and antithetical to our mission statement. In general, we do not see the formation of new agencies, that govern under “agency discretion”, as viable in California because these entities create a governance structure, which are essentially unelected regional bodies that insulate citizens and residents from Republican form of government stated in the U.S. Constitution.

The author further claims benefits: more efficient electricity, greater savings to consumers, and lower rates to commercial sector as an economic development benefit. The CCA is presented as a viable alterna-

tive to Southern California Edison (SCE) as an investor owned utility (IOU). In order to meet green renewable energy goals, the CCA will have to aggressively promote heavily subsidized renewable energy. Renewable energy can’t compete in the marketplace without subsidies. Once subsidies go away, electric rates will have to correspondingly go up.

The plan is very ambitious and glazes over pitfalls and risks. Here are a few examples:

- ICP CCA requires nearly \$200 million in start-up costs within a year after launching into business. Who guarantees the loan(s)? What is the risk to general funds and to taxpayers? It should be emphasized that municipal members who join the ICP CCA as a member of the JPA will not be insulated from loan liability via the touted JPA “financial firewall.”
- The author claims that ICP CCA will result in millions of dollars of benefit to the economy, but does not include any footnotes or empiric data to support his claim.
- The Business Plan author fails to note that SCE employs many residents and taxpayers whose economic activity also results in economic benefit to the community.

ICP CCA requires nearly \$200 million in start-up costs within a year of launch.

Problems

- **Inland Choice Power requires nearly \$200 million in start-up costs** within a year after launching into business.
- **Inland Choice Power assumes \$1.25 billion** in non-bypassable exit fee charges.
- **Inland Choice Power makes no warranty** that it will pay exit fee costs.
- **Inland Choice Powers' success is based upon inaccurate Opt Out claims.**

Review

The American Coalition for Sustainable Communities (ACSC) has conducted a review of the Inland Choice Power Community Choice Aggregation's (ICP CCA) Business Plan and has identified several issues of question about the document and ICP CCAs purported value. There is not enough information to make for an informed decision about implementing ICP CCA.

Our review may be categorized into four general areas:

1. Prices.
2. Greenhouse Gas Reduction.
3. Start-up Costs.
4. Insider Conflict of Interest.

Prices

If exit fees increase, it is likely that cost-conscious consumers will opt out of CCA.

- The Business Plan (document) notes that ICP CCA prices could be greater than SCE prices "if exit fees (The Power Charge Indifference Adjustment - PCIA) become much larger."¹ If exit fees increase, it is likely that cost-conscious consumers will opt out of ICP CCA, putting ICP CCA into a potential death spiral where total costs are now spread over a shrinking customer base; thereby, triggering more exits. The

document states that exit fees should be "fairly stable" because "the CCA community has become very vigilant in this area."

While the author's bias toward aligning himself with CCA is understandable, PCIA is not a "stable" issue and remains contentious among investor owned utilities at the California Public Utilities Commission (PUC) despite vigilance of the CCA community. Exit fee component costs are dynamic. Indeed, three years after PG&E's exit fees peaked in 2012 and subsequently declined, PG&E proposed doubling exit fees.²

There is no guarantee the exit fees will remain stable.

It is not unreasonable to expect SCE's exit fees will not be "fairly stable" as it experiences losses of energy consumers who are automatically switched into ICP CCA, much as PG&E did when Marin Clean Energy (MCE, aka MEA) began automatically switching large blocks of consumers into its program, beginning in May 2010.

- SCE's temporary price advantage: The document states that if wholesale energy prices drop, after ICP CCA executes power contract, SCE will experience a "temporary" price advantage.³ The author implies that ICP CCA will always have a price advantage over SCE unless wholesale energy prices drop. This gives rise to several questions. How can the author possibly define this? Does the author know SCE's yet-to-be-executed forward and

bilateral contract prices (that not even SCE knows today)? What about future tolling contracts?

To claim that ICP CCA is only subject to temporary price disadvantages is limited in perspective, truncated in scope, and under-sells financial risk to taxpayers, residents, and municipal decision-makers by placing ICP CCA in an optimistic and unrealistic light.

- **CCA Prices – An Actual Record:** Although not discussed in the ICP CCA Business Plan, it is worth noting that, after 7 years in business, MCE—compared to PG&E—is not able to bring energy price relief to consumers who were told the opposite by MCE proponents when that CCA launched. In its most recent price review, MCE prices (including exit fees) were merely six-hundredths of 1% lower than PG&E prices.⁴ It is worth noting that MCE’s actual GHG emission rate (not advertised by MCE) averages at nearly 80% higher than PG&E’s when unbundled RECs and associated green-washing are properly accounted – see discussion in GHG section, below.⁵

After 7 years in business, MCE has not been able to bring energy price savings for consumers.

- The Business Plan document relies upon

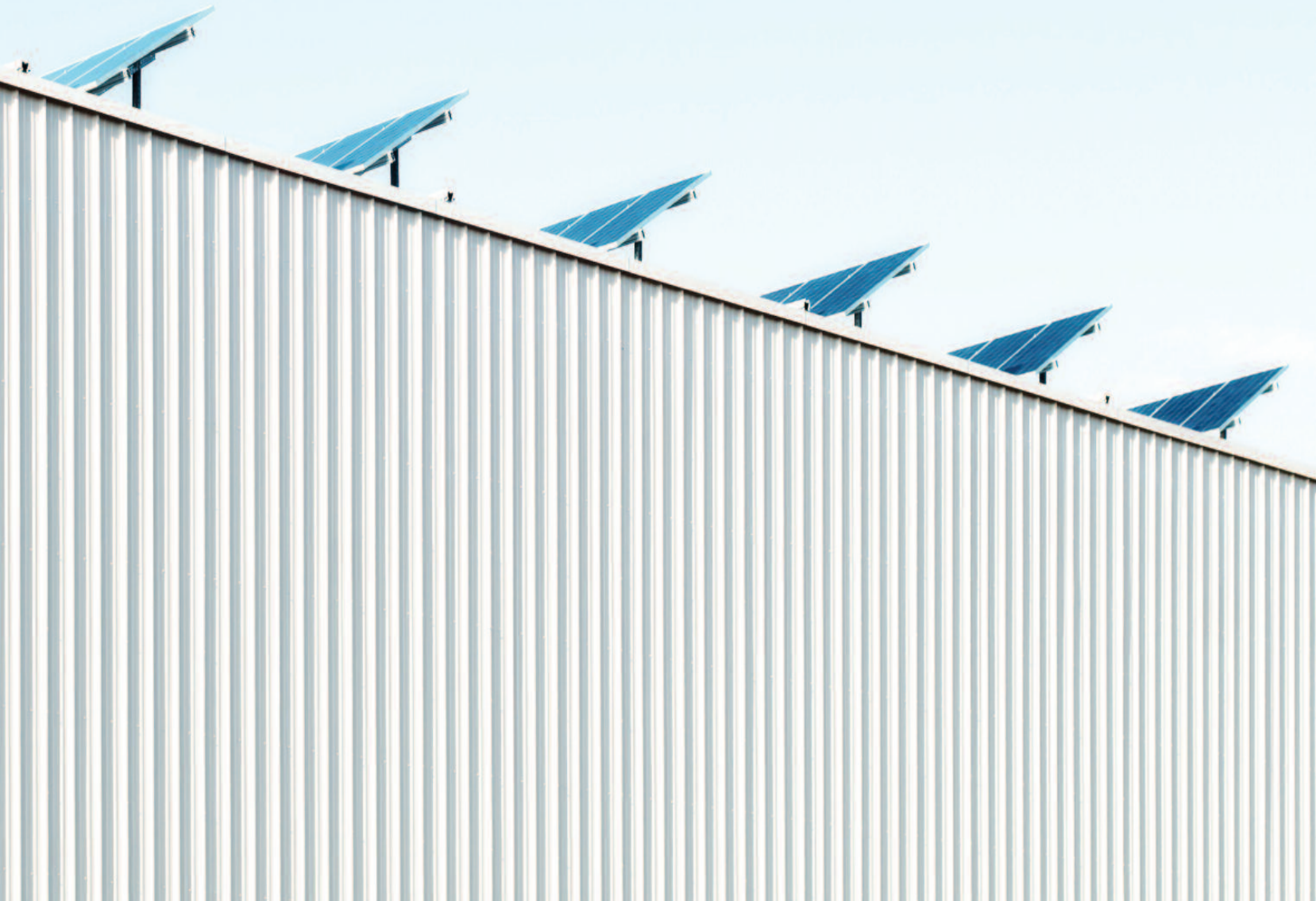


California is in a power glut - In 2017, the state's power plants are on track to produce at least 21% more electricity than it needs by 2020, based on official estimates. And that doesn't even count the soaring production of electricity by rooftop solar panels that has added to the surplus.

Because of conservation, California uses 2.6% less electricity annually now than in 2008. Even though there is less electricity usage, residential and business customers are paying \$6.8 billion more for power.¹⁷

California must get rid of power to keep the grid performing efficiently. Excess solar and wind power can be sent to Arizona, Nevada and other states. If those States need it, they buy it; if they don't, California pays them to take it, which is called "negative pricing". When Arizona is paid to take California's excess solar power, Arizona Public Service says it has cut its own solar generation rather than fossil fuel power. So California's excess solar isn't reducing greenhouse gases when that happens. Furthermore, because of the growing supply of solar power, negative pricing could have a much greater impact in the future.¹⁸

California frequently pays as much as \$25 dollars per megawatt-hour for other States to take excess solar power. In Arizona, utility buyers typically pay an average of \$14 to \$45 per megawatt-hour for electricity when there isn't a surplus from high solar power production.



the Jobs and Economic Development Impact (JEDI) tool models offered by the National Renewable Energy Laboratory (NREL), for determining economic merits of ICP CCA.⁶ The author claims that ICP CCA will result in millions of dollars of benefit to the economy, but does not include any footnotes or empiric data to support his claim. However, the author asserts that

and municipalities.

- With respect to local economic benefits, the Business Plan author fails to note that SCE employs many residents and taxpayers whose economic activity also results in economic benefit to the community.



It's a fact, renewable energy costs more...

JEDI has “default but modifiable” inputs that help the user attain desired results. This introduces unchecked bias that undermines the objectivity of purported benefits, inasmuch as the author is tasked with presenting ICP CCA in optimistic terms for public consumption, while downplaying financial risk to taxpayers, residents,

Greenhouse Gas Reduction

- Environmental claims in the document are unsubstantiated. The document says ICP CCA will reduce GHGs between 2.9 billion

and 5.2 billion pounds of CO₂ in multiple places throughout the text, yet includes no baseline data from SCE, nor does it specifically identify portfolio content category energy in its own resource mix.⁷

The document's GHG reduction numbers are inconsistent from year to year.⁸ This is disconcerting to the extent that errors such as this may also exist in financial projections, calling into question financial and economic benefits.

- (Unbundled) RECs: By mandate, energy service providers' portfolios must meet the Renewable Portfolio Standard's (RPS) 33% renewable energy content by 2020. ICP CCA claims it will not use unbundled Renewable Energy Certificates (RECs) in satisfying its RPS mandate.⁹ RECs are under scrutiny by environmentalists because they mislead consumers due to their green-washing characteristics; the Sierra Club refers to RECs as "deceptive marketing."¹⁰

While ICP CCAs commitment to not use RECs appears commendable, the commitment leaves open the implication that ICP CCA would indeed use RECs to not satisfy the RPS by using them after the RPS mandate is satisfied. In other words, ICP CCA would insert RECs into its portfolio beginning at the 34% "clean" energy volume. Similar action was employed by MCE when it loaded RECs into its invented clean energy category – "voluntary" (non-existent RPS category) – and in the process green-washed in excess of 1.1 billion pounds of GHG in brown power that MCE resold to consumers as "clean."¹¹ RECs constituted the bulk of MCE's advertised "clean" energy. This occurred after MCE's Business Plan

committed to limiting RECs to a "potential" use.¹² Because RECs are a financial instrument and are not actual energy, brown power is delivered to customers instead and advertised as "wind" or "solar" or whatever is on the REC.¹⁰

- Firm and shape RECs: ICP CCA plans to use this type of REC. While allowed under the RPS, firm and shape RECs also mislead consumers who believe they are paying for clean energy when they are actually receiving coal-fired and gas-fired energy imports into California that are used as substitute energy for what is advertised to consumers. If ICP CCA advertises itself as "reducing GHGs" and has an opportunity to truly clean the atmosphere, it is disingenuous to engage in the use of these financial instruments — firm and shape renewable energy certificates" — that mislead unknowing consumers who believe they are receiving clean energy when the CCA has actually engaged an elaborate arbitrage that conceals the actual delivered brown power.

The Sierra Club refers to RECs as "deceptive marketing".

- REAL GHG REDUCTIONS VERSUS DISPLACED: ICP CCAs greenhouse gas reductions are only an actual decrease when ICP CCAs energy is generated by new-net resources that it brings online into the energy market. Conversely, when ICP CCAs renewable energy is generated by a pre-existing resource, the associated

“reduction” in GHGs is false claim since ICP CCA will merely displace the consumer who previously relied upon that pre-existing resource for its clean energy in the first place. Since the displaced consumer must now purchase spot market or brown power (gas-fired and coal-fired energy), there is a commensurate increase in GHG emissions to the atmosphere due to ICP CCAs action. Thus, the GHG reduction that is advertised by ICP CCA is actually net-negative. The only way it would not be net-negative was if the displaced consumer placed into service a renewable generating resource that produced an energy volume equal to what it lost to ICP CCA during ICP CCAs procurement process.

RECs mislead consumers who believe they are paying for clean energy.

- ICP CCA claims it will achieve its GHG reductions approximately 1-year after business launch. At that time ICP CCA claims its net energy sales will be 14,200,000+ MWh.¹³ This volume is 8 times MCE’s ~1,700,000 MWh. Further, ICP CCA claims 100 MW of local (net-new?) renewable capability will also be available after one year in business.¹⁴ Considering the compounding difficulty of bringing relatively large ICP CCA into operation, it is difficult to believe that this upstart can also bring 100 MW of local renewable online when, after 7 years, more experienced MCE has

only brought 8.23 MW of local renewables into service. The bulk of MCE’s local renewables were placed into service more than 5 years after MCE’s business launch.¹⁵

Start-up Costs

Page 50 of the Business Plan shows that ICP CCA requires nearly \$200 million in start-up costs within a year after launching into business. Who guarantees the loan(s)? What is the risk to general funds and to taxpayers? It should be emphasized that municipal members who join the ICP CCA as a member of the Joint Powers Authority will not be insulated from loan liability via the touted JPA “financial firewall.”¹⁶



\$200 million in start-up costs.

Alternately to funding this debt service, what about funding long-standing unfunded pension liabilities and infrastructure maintenance that pre-exists the launching of a (fashionable) CCA?

Considering that ICP CCA will likely achieve little, if any, price savings for consumers (citing MCE as a mature-model CCA) and considering that actual reductions in GHGs are questionable (citing MCE as a mature-model CCA), wouldn’t \$200 million be better spent in the community on immediate needs, the benefits of which are easily quantified?

Insider Conflict of Interest

The Business Plan document does not identify who would be employed by ICP CCA, nor does it include language that addresses employment conflicts of interest. For instance, Marin Clean Energy's (MCE) CEO was originally a County of Marin Planner earning \$54,000 per year while acting concurrently as MCE's interim director; today she receives a MCE salary of \$248,000 per year.

Review of South Bay Clean Power Draft Business Plan, released 2/2017, And Joint Powers Authority Agreement

American Coalition for Sustainable Communities (ACSC) affiliate Jim Phelps offers a review of the Draft Business Plan for South Bay Clean Power (SBCP), released 2/2017, and Joint Powers Authority (JPA) Agreement written by Community Choice Partners. Mr. Phelps is a former power engineer and utility rate analyst.

Page 1 Letter of Introduction: South Bay Clean Power (SBCP) promises local jobs (net-new of the SBCP enterprise itself), local power generation; local economic investment. These are the same commitments made by Marin Clean Energy (MCE). However, after 7 years, MCE has failed on most promises:

- Only 2% of MCE's net-new renewable power is generated locally.
- 3 full-time local jobs (excludes the 35+ staff employees at MCE) rather than major employment of Marin's skilled workforce.

- More than a half-billion of Marin's "local" money is exported to: Shell (The Hague), Electricite de France (Paris), Exelon (Chicago), Calpine (Houston), G2 Energy (Atlanta).¹
- MCE alienated local labor – MCE made an enemy of IBEW 1245, the electrical workers largest branch in N. CA. and brought in out-of-area Cupertino Electric in order to advertise "partnership" with local labor unions.

SBCP's Vision

Distributed Energy Resources (DER — distributed generation such as rooftop solar, energy efficiency, energy storage, demand responses and electric vehicles).

What is scope of SBCP CCA?

Page 2 of Executive Summary: SBCP has no specified deliverables. The Business Plan states "Note that, unlike the Los Angeles Community Choice Energy CCA Business plan of July 28, 2016 this report does not forecast the results of implementing a CCA in any quantitative manner. For example, we do not forecast the renewable content of the program's energy portfolio, or what the rates charged to customers will be in comparison to Southern California Edison's rates.

"...this report does not forecast the results of implementing a CCA in any quantitative manner..."

- Without quantified deliverables, how can anyone make a decision about participating in SBCP?
- Page 7 of Cover Letter states that SBCP may include purchases of power from SCE. This is a peculiar redundancy for a program that desires to displace SCE with 100% local clean energy. Since SCE has difficulty attaining state mandated Renewable Portfolio Standard annual mandates, it is unlikely that SCE would sell to SBCP a portion of its renewable or large hydro energy since these two energy sources account for SCE's RPS and carbon-free energy. Accordingly, it is reasonable to conclude that the power for which SBCP would contract with SCE would be "system power." System power is predominantly coal and gas-fired energy. This puts SBCP at odds with its claim of "decarbonizing California's wholesale electricity generation."²

SBCP is *not* decarbonizing California. It's taking a renewable asset and claiming it for itself.

Alternately, if SBCP purchases renewable energy from SCE that is available because SCE's "Generation" customer base shrinks (due to CCA), and SBCP claims this power in its own accounting ledger and advertising, SBCP is not decarbonizing California. It is merely taking a renewable asset from SCE that would have decar-

bonized California on SCE's behalf and claiming it for itself. In other words, this "decarbonizing" occurs regardless of SBCP's existence, and therefore SBCP is not "lowering carbon emissions."³

Finally, SBCP should be cautioned that one of its core themes is "local" renewables.⁴ If any energy from SCE's renewables is from distant, out-of-community, locations, this contradicts SBCP's local commitment.

- The absence of clearly defined deliverables may explain why, before The City of Redondo Beach voted not to pursue SBCP in March, its Mayor asked staff why the city was looking into four versions of CCA.
- Renewable energy construction is expensive, excluding Bureau of Land Management delays. What are the JPA municipal members going to do if SBCP rates are 2x or 5x SCE rates? Opt Outs from SBCP + expensive steel-in-the-ground assets, revenues from which are limited by SCE market prices, are not a sustainable business model.⁵

Potentially, member municipalities in the SBCP JPA will be unable to leave, per JPA section 6.6, discussed under "Municipal Financial Exposure from the JPA," in sources section of this document.

Page 2 of Executive Summary

SBCP says it will "exercise local control, with manageable governing boards, over their energy choices, program design, program elements, electric rates and financial reserves, while simultaneously enjoying the economy of scale that a large-scale joint-approach."

- Economy of scale of what deliverables?
How does anyone quantify what this SBCP will cost, or if it is economically attainable in this era of unfunded pension liabilities?

To put this last question into perspective a 1 MW solar farm (domestic manufactured panels that do not violate U.S. Department of Commerce (Chinese) anti-dumping law) costs approximately \$4 million (U.S. Domestic panels), plus land cost (requires 5 – 8 acres, depending upon location) and powers ~200 medium-size homes (still requires base load gas-fired power generation at night).

Local municipal pension liabilities range from \$14 million for Hermosa Beach (2011 data), to \$49 million for Manhattan Beach (2017 data), to Torrance's \$392 million (2014 data).

Local municipal pension liabilities range from \$14 million for Hermosa Beach; \$49 million for Manhattan Beach and \$392 million for Torrance.

- SBCP "large-scale joint-approach" is reminiscent Washington Public Power Supply System (WPPS) (aka "Whoops") fiasco of the 1980s when twenty-three publicly owned utilities and municipal power agencies teamed-up to construct five nuclear

power plants in the Pacific-Northwest. The work scope continued to creep under unequal management. (see "Governance," below). WPPS suffered from "delays and huge cost overruns." WPPS lost more than \$8 billion and was a failure.⁶

Page 2 of Executive Summary

As summarized in the proceeding two sections, distinct advantages pioneered by the newly-formed CCAs Silicon Valley Clean Energy and the Redwood Coast Energy Authority offer powerful best practices that we have incorporated for South Bay Clean Power.⁷

- Misleading consumers is "best practices"?

SBCP Governance Problems

Page 9 of Business Plan

"The number of elected officials on the board would have to be less than the total number of governments involved. This necessitates a representative form of governance, in which multiple local governments are represented by one board member."

- Introduces possibility that SBCP, will be subject to lawsuits under One Person One Vote.

The number of elected officials on the board would have to be less than the total number of governments involved.

Introduces conflict-of-interest and likelihood that a municipality's interests will not be achieved.¹³

Potential conflict-of-interest introduced and likelihood that a municipality's interests will not be achieved.

- “Additionally, such a large territory will include governments with divergent goals for the CCA — objectives such as lower rates, financial stability, increased renewables, lower greenhouse gas emissions and support for distributed energy and workforce development all involve trade-offs in governance decisions.

Lawsuits

- “Trade-offs” may trigger discord and, may trigger lawsuits beginning with a municipality(s) that claims to be under-represented when “trade-offs” are not in its favor.
- A second lawsuit may occur if a municipality (attempts) leaves SBCP, causing withdrawal by any, or all, of the municipality's commercial & industrial, government agencies, and residential customers. With respect to Joint Powers Agreement (JPA) 6.6, the lawsuit would be brought by the JPA against a departing municipality that claims the JPA caused it damage when that departing municipality declines to pay the JPA's levies.

- The JPA Agreement section 2.5.4 identifies that the JPA includes eminent domain in its tools, but would not “exercise the power of eminent domain within the jurisdiction of a member municipality over its objection without first meeting and conferring in good faith.” This may trigger a lawsuit from the municipal member that receives an unfavorable outcome after such “good faith.”
- A third lawsuit is class action against the JPA for misrepresenting SBCE's energy content or greenhouse gas reductions (GHG).

Class action could potentially result in a death spiral where SBCP fixed costs are spread over a shrinking customer base, driving up consumer prices. Is customer base captive, per respective SBCP customer agreement/conditions of service? Does the agreement document contain specific language that releases customers from all JPA liabilities under all circumstances?

Municipal Financial Exposure

Page 7 of Business Plan states: In adopting the at-risk, performance based contracting approach pioneered by the Redwood Coast Energy Authority to implement the CCA, South Bay Clean Power will limit local government financial liabilities and expenses to:

- Direct staff and legal costs *could* be funded by the member governments of South Bay Clean Power directly.
- *Could* be funded? What happens when some member municipality elects to pay down its unfunded pension liabilities,

rather than pay this optional CCA charge?

Power supply financing *should* require little, if any, guarantee from local governments and will be negotiated by the CCAs chosen power management contractor later during the implementation process.

- Should?

JPA Agreement

Section 2.5.7 of JPA Agreement establishes each municipality's "financial firewall" in which the municipality is not liable for payment to energy suppliers if the JPA decides to invoke the clause.

- The "financial firewall" is only functional if the respective energy supplier(s) acknowledges existence of the firewall and accepts a JPA statements that individual JPA members are not liable for payments should the JPA invoke the firewall.
- It remains unclear how remaining contract costs might be spread across SBCP's captive customer base, including municipal members, should the JPA fold.
- Section 6.6 creates a continuing financial problem for the municipalities, especially if SBCP management enters into unwise contracts. 6.6 states that a withdrawing municipality shall be liable for: "Claims, demands, damages, or other financial obligations for which the Party may remain liable include, *but are not limited to*, losses from the resale of power contracted for by the Authority to serve the Party's load in the CCA Program... As a condition precedent to a Party's withdrawal from the Authority or in the event of an affirmative

vote to involuntarily terminate a Party, the Authority may withhold funds otherwise owing to the Party or may require the Party to deposit sufficient funds with the Authority, as reasonably determined by the Authority and approved by a vote of the Board, to cover the Party's financial obligations for the costs described above." This represents tens of millions of dollars in financial liability and exposure for each municipality.



It may be impossible for any member municipality to withdraw from SBCP. There may be tens of millions of dollars in financial liability and exposure for each municipality.

- Section 6.6 makes it all but impossible for any member municipality to withdraw from SBCP. Is that wise considering other municipal obligations, including fire, police, and unfunded pension liability?
- Although SBCP, or a respective municipality, will claim that taxpayers are not liable for JPA debts, these claims are false. Scenario: Municipality "Y" demands to be released from the JPA due to mismanagement, discord over eminent domain, or unexpected high electricity costs. The JPA invokes Section 6.6. Y is forced to pay "sufficient funds" to the JPA, by settlement

or lawsuit. Those “sufficient funds” come from Y’s General Fund(s). Y now runs a budgetary deficit and, in order to avoid city layoffs, Y either raises taxes or, more likely, issues bonds or passes a temporary tax measure in order “to avoid closing a fire house.”

SCE and SBCP

Another scenario for a death spiral occurs when SBCP asserts political power that is contrary to the wellbeing of Edison International (EIX) shareholders. EIX is the corporate holding entity for SCE. Legal costs would be added to SBCP’s rate base. It is unreasonable to believe that SCE will quietly fade into the sunset just because SBCP believes it can outperform SCE’s performance of California’s Renewable Portfolio Standard (RPS), to which SCE adheres.

If legislative or regulatory action forces the closure or termination of SCE assets, SBCP will trigger higher exit fees and competitive transition charges required from SCE. These fees will likely make SBCP uncompetitive, causing increased Opt Out departures from the CCA.

Page 6 of SBCP’s Letter of Introduction states: “We believe there is ample opportunity for a cooperative and mutually beneficial relationship between South Bay Clean Power and SCE. Our direct experiences *to date* have given no indication of any *hostility* towards CCA whether it be with the existing Lancaster Choice Energy, the County of Los Angeles’ efforts or our own South Bay Clean Power interactions with SCE’s CCA team — quite the opposite, in fact. For example, Southern California Edison — uniquely among California’s investor-owned Utilities.”

Working with an IOU utility in the early phases of CCA is a very different then working with them if they feel threatened.

California’s three utilities, PG&E, Sempra, and SCE are Investor Owned Utilities (IOUs). They are under regulatory *mandate* to work with CCA. Working with an IOU utility in the early phases of CCA is a very different then working with them if they feel threatened. They will defend themselves and protect their very existence. In response to the advent of CCA-type entities, IOUs revised their enterprise models so that profits no longer flows from Generation.⁸ Today, IOU electricity profits are derived largely from the IOU’s Transmission & Distribution.

However, SBCP states its desire to offer *demand response*, which is part of SCE’s “territory” — Distribution management, construction, and services are what the IOUs are left with as CCA takes over the “generation” portion of IOUs business. Demand Response is part of the IOUs electric distribution system, and is remains as part of their core business model.⁹

SBCP states that it has worked, “collaboratively”, with SCE in regulatory workshops exploring the modernization of a Distribution system that integrates with SBCP’s vision. Page 10 of the Business Plan then states:

“To be clear, this is our understanding of the discussions, and not a formal statement or commitment from Southern California Edison.”¹⁰

If CCA (SBCP) lobbies to dismantle the current IOU business model, the resulting fees and charges that will be added to SBCP’s rates, will make SBCP uncompetitive.

Demand Response is part of the IOUs core business model. SBCP has a desire to offer this; IOUs will be forced to defend themselves.

JPA Agreement: Exhibit A “Definitions” includes language that opens the door to SBCP’s occupying the IOUs space (the utility’s side of electric meters):

“‘Distributed Energy Resources’ (core component of SBCP) can refer to utility-side distributed energy resources (such as battery storage or community solar interconnected to the distribution grid) *or* customer-side distributed energy resources, (installed *behind*-the-meter in buildings and facilities)...”

Conflicts & Contradictions

The Business Plan claims SBCP will be an integrated model that provides municipal members with “a full suite of energy services — from day-to-day power market opera-

tions through long-term planning — to serve its municipal utility members.”¹¹ The Draft Business Plan says that the lack of this has been a downfall for Marin Clean Energy for seven years.¹²

- Downfall? This is a false citation by SBCP. MCE was based upon an integrated full-services contract model with Shell Energy North America, in which SENA acted as both an energy supplier and as MCE’s Integrated Scheduling Coordinator (ISC). SBCP claims that it needs an ISC to be a successful. While MCE has failed to deliver on many of its commitments to the Marin County community (see page 1 of this report), an ISC is not to blame for MCE’s failed policy and management decisions. Thus, citing MCE’s “lack” of an ISC is not sufficient cause for SBCP to attempt to distance itself from the possibility that SBCP may duplicate MCE’s poor 7-year track record.¹³

However, Business Plan stated *objective is to move away from gas-fired (gas supplied) generation*. Page 18 states that SBCP’s risk management (as carried out by its Scheduling Coordinator) may entail calling on various assets of SBCP, including peaker plant tolling agreement (this is gas-fired generation).

SBCP citing MCE’s “lack” of an ISC is not sufficient cause for SBCP to attempt to distance itself from the pos-

sibility that SBCP may duplicate MCE's poor 7-year track record

- Cover letter page 3 Business Plan pages 21 calls for elimination of burning natural gas.

JPA Agreement, Pages 1 of 15: "Establish an energy portfolio that minimizes the use of (Category 3) unbundled renewable energy credits." – third item listed.

- Minimizes from what level?
- How many RECs?

Business Plan Letter of Introduction, Page 2: "*No use of Category 3 unbundled Renewable Energy Certificates (RECs) to achieve our 100% renewables goal...*"

- Which path does SBCP claim to follow?

"No use" was committed by Silicon Valley Clean Power, until its staff determined it could not meet its renewable energy commitment. During its April 12 board meeting, staff consultants suggested SVCP revise its portfolio so that 50% of the "clean" energy was unbundled RECs (Category 3 energy).¹⁴

Business Plan, Page 38: SBCP includes list of target municipal members. The two largest, Carson and Torrance, comprise *45% of SBCP's gross revenues*. The largest loads in Carson and Torrance include oil refineries. SBCP's last page of its Cover

Letter (above the signature block) identifies refineries as sources of air pollution. SBCP desires to replace automobiles with electric vehicles as part of its Distributed Energy Resources. Do Carson's and Torrance's tax revenues from refineries put SBCP at odds with its two largest target members? This will be an issue as SBCP attempts to build financial accounts for construction of renewables.

SBCP desires to replace automobiles with electric vehicles as part of its Distributed Energy Resources.

SBCP's GHG Goals and Inconvenient Truths

Page 21: The Business Plan cites California's total greenhouse gas (GHG) emissions, and states that decarbonizing depends upon 100% renewable energy. SBCP fails to reconcile that two popular renewables reportedly *increase* GHG emissions or undermine clean air:

1. Landfill Gas to Energy (LFGTE), which the Sierra Club unanimously concludes emits *more* GHG than it removes.¹⁵ Where are these landfills and what is their untapped capacity to produce net-new generation?
2. Biomass, which the Clean Air Council reports that biomass emissions add harm-

ful particulates to the air (asthma).¹⁶ Further, a medium size biomass plant consumes more than 20 million gallons of water for evaporative coolers.¹⁷

- Where does that water come from during drought?

Based upon SBCP's Business Plan, metropolitan smog issues around LA are not relevant in the ardent pursuit of "renewable" energy.

SBCP advocates patterning its implementation off of Redwood Coast Energy Authority (RCEA).¹⁸ SBCP's Business Plan identifies status of RCEA's implementation and includes on page 99 the following text: "Process Guidelines for Development of a Request for Offers for Local Biomass Power."

SBCP's Control Over Citizens

Page 40: The Business Plan states that SBCP's Regional JPA governance structure is designed to support and enhance acceleration of SBCP's vision about how the region should be managed, supporting broad, sectoral carbon reductions — not only for electricity generation, but also transportation electrification and fuel-switching of appliances (from natural gas to clean electricity). The SBCP Business Plan states, "CCAs are the only load-serving entity that can also leverage local government authorities to accomplish this goal."

- SBCP appears to believe it has an overarching authority to dictate residents' lifestyles through social engineering schemes.

Money Management & Municipal Financial Obligations

Page 54: "Waterfall Mechanism (Lockbox)" is cited by some elected officials as a safeguard that protects JPA members from financial liability. This is a false belief. The "Lockbox" is merely a workflow mechanism. It helps power suppliers and power management contractors better believe that the CCA's financial obligations will be managed strictly per contract terms. A municipality is still subject to financial liability from numerous sources for myriad reasons.

- Who guarantees initial contract?
- Who pays the power suppliers in event of large Opt Outs?

SBCP assumes initial loans are subject to General Fund guarantees.

Page 55: "After commencing operations, expanding (SBCP) staff and building up a reserve fund, CCAs to date have been able to negotiate *further* loans and credit support (lines and letters of credit) *without requiring General Fund guarantees* and based solely on future revenue forecasts."

- SBCP assumes initial loans are subject to General Fund guarantees.

Page 56: "In other words, once the Sonoma CCA program was prepared to launch, commercial lenders then considered the CCA's

forecasted revenue to be a sufficient guarantee for the loan required to purchase the necessary power for the program. But getting to that stage incurred General Fund Where are these landfills and what is their untapped capacity to produce net-new generation?

2. Biomass, which the Clean Air Council reports that biomass emissions add harmful particulates to the air (asthma).¹⁶ Further, a medium size biomass plant consumes more than 20 million gallons of water for evaporative coolers.¹⁷

- Where does that water come from during drought?

Based upon SBCP's Business Plan, metropolitan smog issues around LA are not relevant in the ardent pursuit of "renewable" energy.

SBCP advocates patterning its implementation off of Redwood Coast Energy Authority (RCEA). SBCP's Business Plan identifies status of RCEA's implementation and includes on page 99 the following text:

Process Guidelines for Development of a Request for Offers for Local Biomass Power. "In other words, once the Sonoma CCA program was prepared to launch, commercial lenders then considered the CCAs forecasted revenue to be a sufficient guarantee for the loan required to purchase the necessary power for the program. But getting to that stage incurred General Fund exposure in the low millions of dollars."

Page 58: "For Los Angeles County (CCA), total *General Fund liabilities or expenses*

prior to launch were assumed between \$31,000,000 to \$52,000,000."¹⁹

Based upon on the table on the opposite page, which denotes the viability of RE, SBCP's only "local" path to 100% renewable power is massive deployment of solar ten years after launching, as stated in the first bullet of the Letter of Introduction.

Note, after 7 years, only 2.3% of MCE's total portfolio is "local."²⁰ What is basis of South Bay Clean Power's belief that it can out-perform California's longest running CCA (CCE) by 43x?

SBCP's only "local" path to 100% renewable power is massive deployment of solar ten years after launching, as stated in the first bullet of the Letter of Introduction.

Viability of Renewable Energy (RE) Resources for SBCP Model

Net-new RE generation resources are required, otherwise no actual GHG reduction

Contracting with existing RE resources does not result in decrease of GHG emissions

RSP Energy Types

Viability

Solar (PV)

Net new. OK.

Solar (thermal)

Economically unfeasible at \$5.8MM/MW (Ivanpah). Environmental issues.

Wind

BLM issues, EIR issues*. Otherwise, not net-new local resource. Not "local."

Biomass

clean air (PM2.5 and PM10) & water use issues. "Spare the Air" days?

Biogas (LFGTE)

Sierra Club = LFGTE results in net GHG emission increase.

Small hydro (≤30 MW)

Not happening -- EIR. Also, not local.

Geothermal

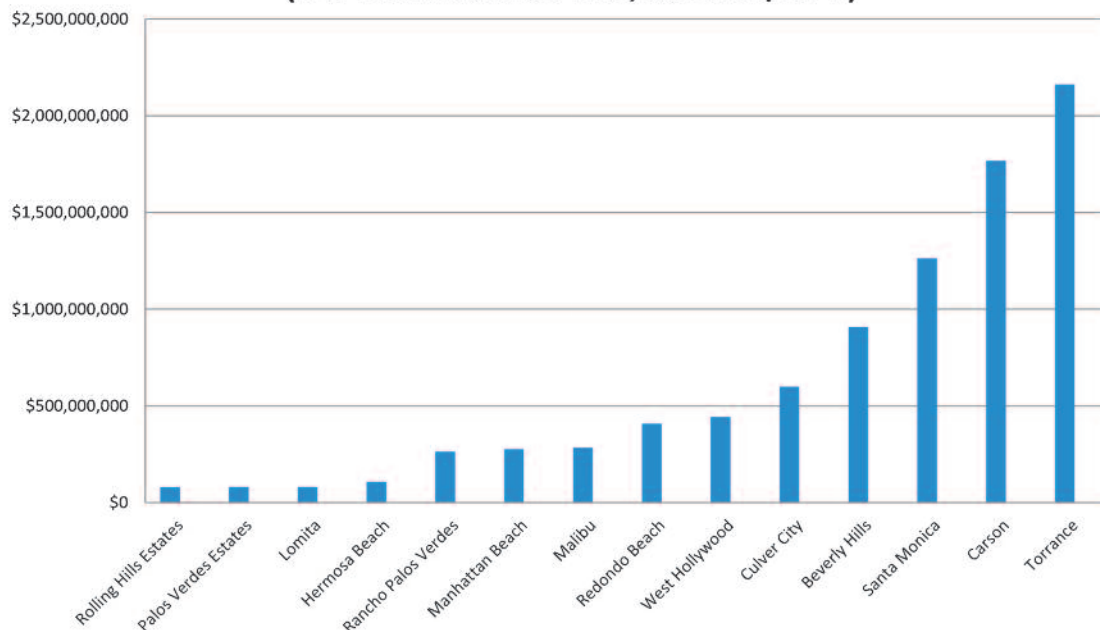
Not net-new. Not local.

Tidal

Not commercially or technically viable.

* Birds, visual and noise

South Bay Clean Power
Solar Panel Cost per JPA Member for "Local" Solar
(P. 21 Draft Business Plan, dated 02/2017)



The Cost of Local Solar

This solar panel cost graph on the opposite page, illustrates the total pro-rata share that each municipality would incur year 1 through year 10, per Draft Business Plan's Letter of Introduction, bullet #1 and #4. Even if a reviewer discounts the costs by 90%, the remaining financial obligations are staggering; Redondo Beach's obligation would be \$41 million.

Net-New GHG Reductions

SBCP has a 100% local renewables commitment. SBCP must construct its own net-new renewable resources or else it merely takes credit for clean energy (no GHG emissions) that, for instance, was previously purchased by a city in the San Fernando Valley. SBCP then pencils that "GHG reduction" into its own ledger while there is no actual GHG emission "reduction" to the atmosphere.

SBCP has a 100% local renewables commitment. SBCP must construct its own net-new renewable resources or else it merely takes credit for clean energy (no GHG emissions).

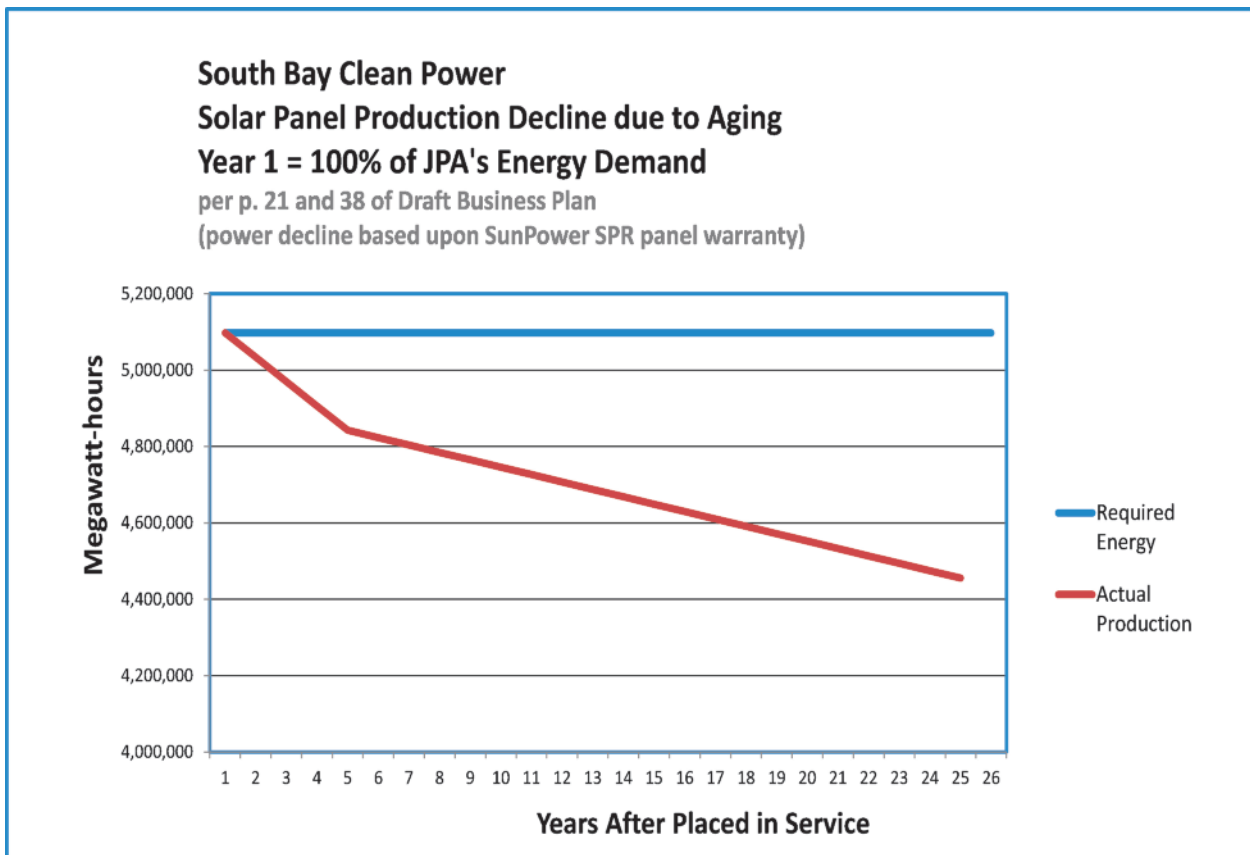
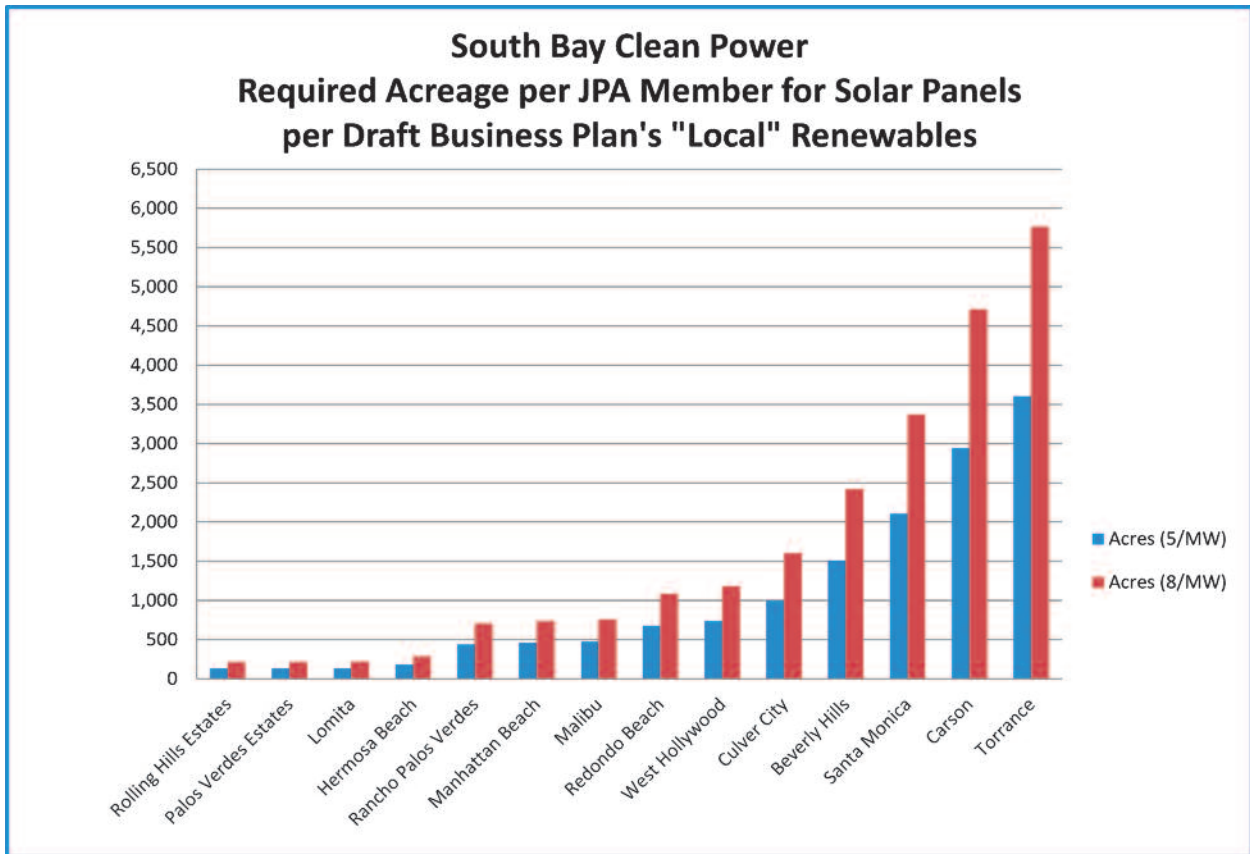
To clarify this point by example: What happens to a San Fernando Valley city after it loses pre-existing clean power that SBCP now buys? The San Fernando Valley city buys dirty power, known as "System Power." And if that city behaves like CCAs such as MCE, Silicon Valley Clean Power, and Lancaster Choice Energy, who discovered they were unable to deliver on their clean energy promises, it green-washes the dirty power with unbundled RECs and deceives consumers who do not understand what is happening.

The acreage chart on the opposite page, identifies the pro-rata real estate obligation for each prospective JPA member in SBCP based upon solar deployment to meet SBCP's 100% "local" renewable energy commitment.²¹ This required real estate would be used for solar panel farms.

As noted on the "Solar Panel Cost" chart, even if SBCP discounted its solar commitment by 90%, the resulting real estate requirements would still be huge. For instance, at 100% solar, Beverly Hills requires approximately 2,000 acres. If SBCP defaults on its 100% local commitment and only deploys 10% solar, Beverly Hills still requires approximately 200 acres for its share of solar farms.²²

The required acreage chart on the opposite page, shows how SBCP's solar output declines with time.²³

The top red line shows SBCP's megawatt-hour (MWh) energy demand as relatively flat (includes added load for electric vehicles and saving from efficiencies) each year. This represents the electricity that SBCP needs to deliver to its customers each year.



Business Plan Reviews

The bottom blue line shows how production from SBCP's solar panels declines from U.V. and heat. For instance, in year 7, SBCP's solar output is 300,000 MWhs short. If the JPA determines it only wants 10% of its generating resources from solar (what "local" resources supply the remaining 90%?), SBCP is 30,000 MWhs short. This represents an added required JPA expenditure to replace this "lost" solar energy of \$68.5 million, assuming U.S. manufactured solar panels that do not violate U.S. Department anti-dumping laws (Chinese solar panels).²⁴



Appendix

EXECUTIVE SUMMARY

This detailed review of LA CCE's Business Plan (footnote 1) examined all aspects of the document. The net result of the review is included in the attached pages. It can be stated with certainty that:

- The Business Plan includes basic mistakes about the renewable Portfolio Standard (RPS) that reveal the Business Plan author(s) do not understand the renewable energy market, which undermines LA CCE, from concept to roll out;
- The Business Plan fails to address all GHG emissions for which LA CCE is responsible, which eliminates most, or all, of the "GHG reductions" that LA CCE claims;
- Recent litigation of exit fees (PCIA) at the CPUC puts LA CCE's economic gains on uncertain ground. A changing PCIA can have a significant effect on the competitive position of LA CCE compared to SCE prices. Furthermore, this (stealth) **cost** is not transparently borne out by the Business Plan (p. 57), which states: *Customers will pay the power supply charges set by LACCE and no longer pay the higher costs of SCE power supply.* LA CCE is responsible for triggering the PCIA, yet LA CCE does not pay this cost on behalf of consumers;
- Price savings for consumers are not defined. The Business Plan states "it is likely" that some of the program's rate savings (savings compared to SCE prices) will be placed into a financial reserve account (rather than passed along to consumers). How much is "some"? This eliminates, or minimizes the core deliverable of the LA CCE program as written on page 57 of the Business Plan – RATE IMPACTS AND COMPARISONS -- "*The first impact associated with forming LACCE will be lower electricity bills for LACCE customers.*" As a comparison, MCE's rates are less than 1% lower than Pacific Gas & Electric's prices after seven years of operation.
- The Business Plan fails to specifically address the growth of local solar farms, the energy from which was available in early 2016 to individuals and communities in the form of SCE's "Green Rate" (aka "Community Renewables"). Alternately, LA CCE's plan to construct fifty 1 MW solar farms will cost approximately \$100 million, plus land-use costs.
- This review concludes that the Business Plan's omissions and flaws may be termed 'fatal'. Accordingly, the primary result of implementing LA CCE will

be the creation of a new government agency of unsubstantiated economic or environmental value.

3RD PARTY REVIEW OF LA CCE BUSINESS PLAN BY ARC ALTERNATIVES (footnote 2)

Independent Review submitted to Douglas Baron, LAC Office of the Chief Executive, as contracted by ARC Alternatives, dated September 16, 2016, notes **omissions / oversights** in the Business Plan:

- Page 2 of 3 of ARC review says *high level nature and accelerated schedule for performing (independent review)* would have afforded a *more robust* (accurate) analysis.
→ ARC Alternatives was engaged by LAC to perform a brief review of Business Plan, and to then rubber stamp it after LA County Internal Service Department's July 28, 2016 recommendation of the Business Plan to LAC Board of Supervisors.
- ARC questions *renewable energy source costs and rates* as unclear or incomplete.
→ This contrasts with page 5 of the July 28, 2016 LA County's internal letter to Supervisors from LA County Internal Service Department that says *these risk are manageable... based on conservative estimates of the factors identified which impact LACCE and SCE rates (Business Plan p. 3-4, 60)*. It is unclear how LAC ISD claims that the PCIA (and Portfolio Allocation Methodology) are "manageable" when California Investor Owned Utilities are currently litigating overhauls to the PCIA and PAM at the CPUC.
- ARC indicates there was no way to *verify estimates of GHG reductions (the methodology was not explicit in the plan)*.
→ This contrasts with (i) page 3 of the July 28, 2016 letter to LAC Supervisors from LA County Internal Service Department, which says "*(LA CCE) would significantly reduce GHGs in the region* and (ii) page 4 reads *the 50% renewables rate would reduce GHG emissions by an estimated 500,000 tons of carbon annually*.

Note: The Business Plan (Exhibit ES-4) shows tons as *metric ton tons*, however the LAC ISD letter of recommendation shows "500,000 tons." The difference is 51,000 tons.

RENEWABLE ENERGY

The Business Plan includes key mistakes that indicate **the author does not understand California's Renewable Portfolio Standard (RPS)**. The Business Plan's energy portfolios are also loaded with unbundled RECs and firm-and-shape RECs that conceal actual underlying dirty energy that is delivered to California, while represented as "clean."

California RPS – a \$175+ million mistakes in the Business Plan table

Each year a certain percentage of energy service providers' overall portfolio must comply with specified amounts of eligible renewable power. Each of three energy portfolios in the Business

Review of LA CCE Business Plan, dated June 30, 2016,
authored by EES, co-authored by Bevilacqua-Knight, Inc.

Plan are based upon the RPS. The table below shows California's RPS mandate compared to the Business Plan's representation of the RPS on page 30.

Year	California RPS Mandate (%)	Business Plan RPS Mandate (%)	Business Plan RPS Shortfall (%)
2017	27	25	2
2018	29	25	4
2019	31	25	6
2020	33	33	OK
2021	34.8	33	1.8
2022	36.5	33	3.5
2023	38.3	33	5.3
2024	40	40	OK
2025	41.7	40	1.7
2026	43.3	40	3.3
2027	45	45	OK
2028	46.7	45	1.7
2029	48.3	45	3.3
2030	50	50	OK

This error represents a sizable liability volume and cost of required renewable energy that is not included in the Business Plan. For example, the Financial Proforma for the RPS Portfolio, (CY2019) shows LA CCE's total energy load is 2,894,927 MWh. The 6% shortfall translates to 173,695 MWh, enough to power 20,000 average sized homes per year, based upon estimated 725 KWh per house per month.

- One hundred (100) 1 MW solar farms are required to cover the Business Plan's shortfall for 2019. Using conventional construction costs for a 1 MW solar farm as included in Local renewables (solar), at full rollout (discussed at end of this section), would cost LA CCE approximately \$175 million.
- Alternately, if calendar year 2023 is cited as an alternate data point, the Business Plan's 5.3% shortfall for that year would then be applied to the Total Energy Sales of 3,040,110 MWh in the Financial proforma, or 161,125 MWh. This shortfall requires ninety-three (93) 1 MW solar farms. Installation cost is \$163 million.

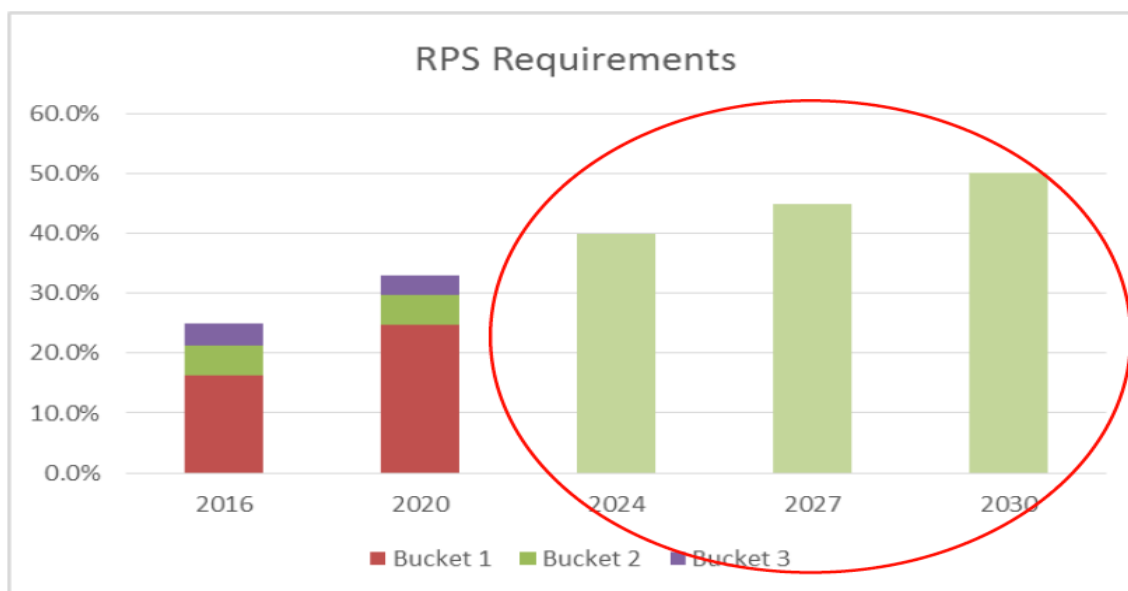
Firm-and Shape RECs ("Bucket 2") – fatal flaw in the "RPS Requirement" chart

The Business Plan authors do not appear to understand California's Renewable Portfolio Standard (RPS) portfolio content categories.

P. 20 states that Exhibit 15 (below) *provides an overview of the RPS requirements until 2030.*

Exhibit 15 shows in 2024 (or earlier) that 40% to 50% of “RPS Requirements” is Bucket 2 energy, aka firm-and-shape RECs. This 40% - 50% Bucket 2 energy is incorrect. The RPS allows no more than 25% for Bucket 2 for any year, beginning 2021.

Exhibit 15
California RPS Requirements as a Percent of Total Power Supply



- How can LA CCE’s Business Plan show 40% - 50% Bucket 2, when the RPS caps it at 25%?
- Accordingly, LA CCE’s RPS energy is predominantly based upon non-local renewable energy sources that are high GHG emitting. Bucket 2 is largely “substitute energy” (typically gas-fired, coal, and nuclear imports into California). This is not to disregard the likelihood that LA CCE would load *unbundled* RECs in the 50% and 100% clean energy offerings for energy volumes on top of the RPS volumes.
- (Relatively inexpensive and over-used) firm-and-shape energy skews the Business Plan’s pricing models downward, giving better-than-actual financial appearance to LA CCE.

Unbundled RECs – dirtiest energy sold to LA CCE customers as “clean”

By omission, the Business Plan implies that LA CCE intends to maximize its use of (inexpensive) unbundled RECs. Page 25 states *The Plan assumes that LACCE will not rely on REC purchases to meet RPS requirements*. However, the Business Plan neglects to state that REC purchases would not be used for energy volumes *above* the RPS. This applies to the 50% and 100% renewable energy offering.

It is worth noting that Marin Clean Energy also downplayed the use of RECs in its 2008 Business Plan (p. 34). However, through 2015 (MCE's last public reporting) the majority of its "clean" energy was RECs. MCE's record shows it green-washed 100 MWhs of dirty power with RECs (see chart, next page) for every 156 MWhs of true renewable power it actually purchased.

- Unbundled RECs are not renewable energy, but are a paper-trading financial scheme that hide underlying coal and gas-fired energy that is actually delivered to customers. Overall, this is referred to as "green-washing."
- (Inexpensive) unbundled RECs skew downward the pricing models in the Business Plan. This flaw gives a more favorable economic appearance, than actual, to LA CCE.

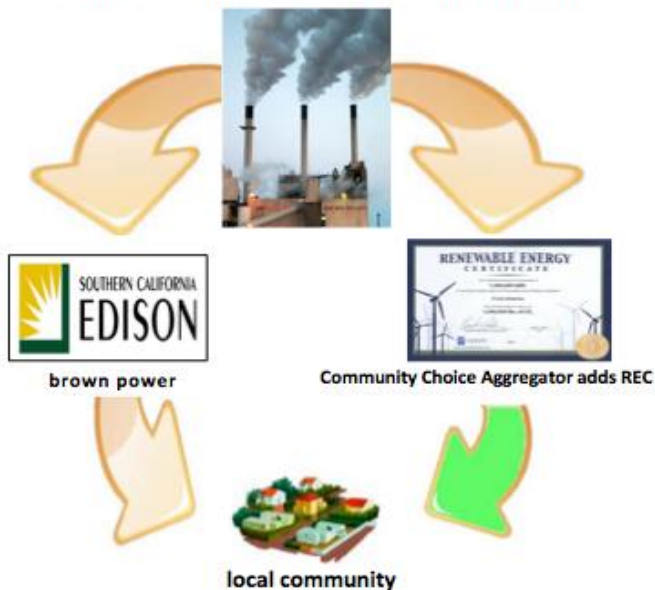
Green-washing – it's what's behind those RECs

While the use of RECs is permissible for satisfying part of the annual RPS mandate, CCAs conflate that regulatory allowance with advertising that the underlying electrons (electricity) from coal and gas-fired generation are actual clean energy.

P. 20 of the Business Plan cites unbundled RECs as a part of the energy portfolio. Because RECs are a fundamental abuse of "clean" energy advertising by CCAs, it is worth restating that RECs are not actual clean energy – RECs are merely a paper-trading scheme employed by CCAs (and some municipal electric providers), resulting in the delivery of dirty power to consumers while the Community Choice Aggregator (LA CCE) advertises that energy as "clean." This is known as green-washing.

Green-washing with RECs

Same power from "Grid" (electric system)



Same power but CCA tells you it's "clean"?

LA CCE will likely employ Marin Clean Energy's strategy of "voluntary" unbundled RECs (combined with firm-and-shape RECs) to fill the "clean" energy gap between the RPS and LA CCE's 50% or 100% products, per the following tables:

UNBUNDLED RECs IN THE 50% "CLEAN" ENERGY PORTFOLIO (w/o AB 1110)

Year	RPS Clean Energy Mandate (% of total portfolio)	RPS RECs	Gap between RPS and LA's represented 50%	Total % RECs (dirty power)	RECs (dirty power) as % of total "clean" energy
2017	27%	3%	23%	3% + 23%	23% / 50% = 46%
2018	29%	3%	21%	3% + 21%	21% / 50% = 42%
2019	31%	3%	19%	3% + 19%	19% / 50% = 38%
2020	33%	3%	17%	3% + 17%	17% / 50% = 34%

UNBUNDLED RECs IN THE 100% "CLEAN" ENERGY PORTFOLIO (w/o AB 1110)

Year	RPS Clean Energy Mandate (% of total portfolio)	RPS RECs	Gap between RPS and LA's represented 100%	Total % RECs (dirty power)	RECs (dirty power) as % of total "clean" energy
2017	27%	3%	73%	3% + 73%	73% / 100% = 73%
2018	29%	3%	71%	3% + 71%	71% / 100% = 71%
2019	31%	3%	69%	3% + 69%	69% / 100% = 69%
2020	33%	3%	67%	3% + 67%	67% / 100% = 67%

It should be noted that clean energy programs' economics that rely upon use of inexpensive RECs (and associated green-washing) will likely be curtailed by AB 1110, the anti-green-washing law that is currently being implemented in Sacramento.

The effect of AB 1110 will be that "clean" energy companies such as LA CCE will no longer be able to advertise RECs as zero-GHG energy, forcing them to procure expensive bundled energy, significantly changing the economics of LA CCE. See "Plan Uncertainty" discussion, below.

Displacement from the Renewable Energy Feeding Trough – most of LA CCE energy isn't clean
Page 4 of the Business Plan states that LA CCE will procure renewables to meet 50%, or more, of electric needs at start-up. Page 22 reads that power purchases will supply the remaining majority of the resource mix.

Thus, LA CCE realizes no net-reduction in GHGs to the extent it merely purchases output from *pre-existing* renewable facilities. This "feeding at the trough" analogy has the effect of displacing a prior purchaser of renewable power from the same facilities, resulting in no net GHG reduction since that displaced (prior) consumer must now purchase system power or gas-fired energy, or attempt to green-wash with RECs.

→ The GHG "reduction" is merely transferred from one large consumer (SCE) or municipality's GHG reduction ledger to the new entity' that is now "feeing in the trough," resulting in zero net GHG emission reduction to the atmosphere when purchasing energy from a pre-existing resource.

Local renewables (solar), at full rollout. ~\$90 Million for 2-1/2%

Business Plan, page 6, says LA CCE plans to construct fifty (50) 1 MW solar farms as part of the local DER (distributed energy resources). The cost for each 1 MW farm is currently between \$2 million and \$4 million, plus land use cost. Each solar farm requires between 5 acres and 8 acres, depending upon exposure; San Bernardino data shows more than 8 acres per 1 MW were required for each solar farm in that county.

Thus, LA CCE will require approximately 400 acres, plus additional acreage as it adds new solar generation to replace declining output from the earlier solar farms as they degrade.

Based upon MCE's empiric reporting, each 1 MW of solar produces approx. 1,725 MWh/year. 86,250 MWh/yr requires fifty (50) 1 MW solar farms, plus replacement solar due to degradation.

→ LACCE's fifty solar farms will cost slightly less than \$90 million and produce only 2-1/2% of LACCE's total electric load (see footnote 3 at end of review).

GHG REDUCTIONS

LA CCE Business Plan contains numerous generalities and omissions that give an erroneous impression of LA CCE's GHG reductions. This occurs in:

- 1) omission of zero-carbon energy in SCE's portfolio;
- 2) omission of line loss energy volumes in LA CCE's portfolio;
- 3) RECs in LA CCE's portfolio;
- 4) claiming zero-GHG (from *pre-existing* renewable energy sources).

1) Omission of Zero-Carbon Energy in SCE's Baseline GHGs

To the extent that LA CCE's renewable energy is purchased from pre-existing renewable energy facilities, the *reduction* claim for that energy volume is false. See "Displacement from the Renewable Energy Feeding Trough," above.

SCE's total emissions must be quantified in order to establish a baseline volume of GHGs against which LA CCE "reductions" are compared. However, the Business Plan fails to provide data that substantively identifies SCE's GHGs, other than reference in a footnote on page 6 and page 47 to SCE's RPS quantity. This implies that this is the only carbon-free energy in SCE's portfolio.

By citing the RPS only, the Business Plan fails to identify that large hydro or nuclear power constitute part of SCE's zero-carbon energy portfolio.

The latest power source disclosure for SCE (2015) shows large hydro and nuclear account for 5,151,071 MWh. It is reasonable to assume similar volumes for SCE's future years.

→ When SCE's large hydro and nuclear power are counted as zero-GHGs, SCE's GHG baseline emissions are reduced by 2.2 million tons (Metric) or 2.4 million tons (US), which represents for LA CCE the *addition* of the same amount, +2.2 million tons (Metric) or +2.4 million tons (U.S.) – to its stated GHG "reduction," which the Business Plan estimates between 289,080 to 505,890 tons CO₂e (GHG) per year by 2019."

Note: Page 47 shows "tons." Page 48, Exhibit 36 shows "Metric Tons." For purposes of this discussion, "Metric Tons" are used in this review.

2) Omission of GHG Emissions by Disregarding "Line Loss" Energy Volumes

Page 33 of the Business Plan states: *The renewable energy requirements in the State's RPS are based on retail energy sales. To be consistent, it was assumed that the 100 percent renewable energy target would **only apply to retail energy sales** (emphasis added). The same concept applies to Portfolios 1 and 2.*

→ This means LA CCE disregards the energy that is lost in the transmission & distribution of energy in all portfolios. Thus, LA CCE understates and underreports the GHG emissions associated with line loss power that is required to make its retail energy deliveries. Conservatively, application of a 6% line loss factor (SCE applies 8% on its recent power source disclosure statement) may be applied to LA CCE's annual power requirement of 3,000,000 MWh, or 180,000 MWh of System Power. (MCE applies 6%). This means **LA CCE is responsible for 170 million pounds, or 77,000 Metric Tons of unreported GHG emissions each year that are not addressed in its Business Plan.**

AB 1110 is currently addressing line loss emissions. This will have a material effect on the "GHG reductions" claimed by LA CCE.

Comparatively, SCE addresses and includes (i) line loss in Schedule 1 of its annual Power Source Disclosure to the California Energy Commission, and (ii) associated GHG emissions in the annual reporting requirements that apply to California's three investor-owned utilities.

3) RECs in LA CCE's Portfolio

Each REC is the same as 1 megawatt-hour. Each REC, as used by CCAs, is tantamount to one megawatt-hour of dirty power. CCAs use RECs to rationalize advertising cleaner-than-actual energy, and to keep prices low. For more on RECs and green-washing see page 5, "green-washing."

4) Claiming zero-GHG from *pre-existing* renewable energy sources

While this energy may be zero-carbon, it does not represent a "reduction" to the atmosphere for the entity purchasing that energy. See page 7, "Displacement from the Renewable Energy Feeding Trough."

FINANCE – POWER SUPPLY COST PROBLEM

Financial Proforma tables in LA CCE's Business Plan reveals a key problem that does not reconcile with another Business Plan published by the same author 5 months after LA CCE's Plan.

The Business Plans for LA and Inland Choice Power (ICP) include energy prices that are contrary to economic laws. **ICP CCA is approximately 5x larger than LA, however, LA's Business Plan shows LA's power supply costs are about 3% less than ICP.** This disregards ICP's aggregated purchasing power and the ensuing volume discounts.

Alternately, LA CCE's Business Plan is flawed in that it includes overly optimistic pricing that is available only to an aggregated load that is 5x larger than its projected energy load.

Associated power supply costs and resultant lower prices for LA's smaller energy volume(s) is illustrated in the following table:

Default RPS Product (2020)	LA CCE	ICP CCA	% LA is lower price than ICP
Total Energy Sales (MWh)	2,921,864	14,530,277	
Power Supply Cost (\$)	\$149,887,088	\$765,582,666	
Price per MWh	\$51.30	\$52.69	2.7%

Default RPS Product (2025)	LA CCE	ICP CCA	% LA is lower price than ICP
Total Energy Sales (MWh)	3,134,997	15,370,003	
Power Supply Cost (\$)	\$179,005,281	\$903,459,966	
Price per MWh	\$57.10	\$58.78	2.9%

Default RPS Product (2030)	LA CCE	ICP CCA	% LA is lower price than ICP
Total Energy Sales (MWh)	3,333,375	16,258,257	
Power Supply Cost (\$)	\$208,779,585	\$1,046,331,881	
Price per MWh	\$62.63	\$64.36	2.7%

Default RPS Product (2036 – last year)	LA CCE	ICP CCA	% LA is lower price than ICP
Total Energy Sales (MWh)	3,581,583	17,392,180	
Power Supply Cost (\$)	\$252,847,304	\$1,267,265,121	
Price per MWh	\$70.60	\$72.86	3.2%

PLAN UNCERTAINTY AND PRICES

LA CCE Business Plan fails to address two variables that represent potential fatal flaws to the program.

PCIA

This is the monthly exit fee that SCE levies against departing loads that are switched into Community Choice Aggregation, such as LA CCE. The Business Plan represents that Power Charge Indifference Adjustment (PCIA) is under control due to the vigilance of the clean energy community.

California utilities recently filed suit in the CPUC to revise the PCIA upward. This monthly fee must be added to consumers' electric bills, reflecting the total price for LA CCE's energy.

→ This puts LA CCE prices at a potential competitive disadvantage with SCE.

AB 1110

The legislation was passed into law in 2016 with the express intent of halting CCA-style abuse of misrepresenting Renewable Energy Certificates (RECs) as clean or renewable energy. The net of it is that CCAs will no longer be allowed to advertise artificially low GHG emission reduction numbers unless they procure real (bundled) renewable energy that is generated in, or delivered to, California.

Since LA CCE shows that a disproportionate (and non-allowed) amount of its energy will be Bucket 2 (*firm-and-shape* RECs) and, separately, since LA CCE will not be allowed to load *unbundled* RECs into its portfolio, LA CCE will have to purchase more expensive *bundled* energy in order to satisfy its 50% and 100% Green energy programs.

- LA CCE's price structure and the economics of its overall program do not include the costs for the total required (net-new) bundled renewable energy for meeting its obligations.
- LA CCE's Business contains one passing reference to "AB 1110" in one sentence. The reference contains no comment or insight. The reference may be located on page 55 of the Business Plan.

Lower Prices? How much lower are they?

LA County writes LA CCE will deliver lower prices to consumers. After 7 years, MCE's prices are less than 1% below PG&E's. This contradicts the spirit of what CCA promises consumers.

LA County Internal Services Department 7/28/16 letter (page 4):

"LACCE rate...**would be 5% lower than SCE's base rate**. The Business Plan also forecasts than an LACCE rate with 50% renewables **would be 4% lower than SCE's base rate** (emphasis added) and an LACCE rate with 100% renewables content would be only 6% higher than SCE's base rate."

LA CCE Business Plan (page 4):

"Finally, **it should be noted that these rate comparisons assume all savings will go towards rate reductions. It is likely that the LACCE governing body may opt to place some of these savings into a financial reserve account** (emphasis added) for use at other times when needed and/or to accelerate the payoff of start-up and initial operations financing.

IMPLEMENTATION / COMPETITION

Prudency

Page 2 of Business Plan says: “Because it is not yet clear which Cities are interested in joining LACCE, this Plan explores the **prudency** of the first two phases being undertaken over a 20-year forecast period. It is anticipated that the results of this Plan are scalable as additional Cities join LACCE. Adding more customers than assumed in the Plan will increase revenues and further reduce LACCE rates. “

Exhibit ES-1 on page 2 identifies Phase 1 and Phase 2 customers are LA County facilities and residents of unincorporated LA County. The table below puts “prudency” into perspective:

Phase	Customer Accounts	Ave. MWh Load	Percent of Total MWh
Phase 1, 2, 3 (total program)	1,806,405	7,940	100%
Phase 1 & 2 (“prudency”)	308,658	940	12%
Phase 3	1,497,747	7,000	88%

Claims of *Prudency* are not consistent with page 2 of the Business Plan, which notes that Phase 3 is all “Cities located in the County” and that “Depending on the interest from Cities located in the County, Phase 1 and Phase 2 may also include customers from individual Cities. **It is not clear how many individual Cities this includes.**

With respect to the above, below is a list of all cities located within LA County borders:

Agora Hills	Alhambra	Arcadia	Artesia	Avalon
Azusa	Baldwin Park	Bell	Bell Gardens	Bellflower
Beverly Hills	Bradbury	Burbank	Calabasas	Carson
Cerritos	Claremont	Commerce	Compton	Covina
Cudahy	Culver City	Diamond Bar	Downey	Duarte
El Monte	El Segundo	Gardenia	Glendale	Glendora
Hawaiian Gardens	Hawthorne	Hermosa Beach	Hidden Hills	Huntington Park
Industry	Inglewood	Irwindale	La Cañada Flin.	La Habra Heights
La Mirada	La Puente	La Verne	Lakewood	Lancaster
Lawndale	Lomita	Long Beach	Los Angeles	Lynwood
Malibu	Manhattan Beach	Maywood	Monrovia	Montebello
Monterey Park	Norwalk	Palmdale	PV Estates	Paramount
Pasadena	Pico Rivera	Pomona	Rancho PV	Redondo Beach
Rolling Hills	Rolling Hills Estates	Rosemead	San Dimas	San Fernando
San Gabriel	San Marino	Santa Clarita	SF Springs	Santa Monica
Sierra Madre	Signal Hill	South El Monte	South Gate	South Pasadena
Temple City	Torrance	Vernon	Walnut	West Covina
West Hollywood	West Lake Village	Whittier		

The cities highlighted in **red** are also identified as target municipalities by South Bay Clean Power (p. 38 of SBCP Business Plan, February 2017). South Bay Clean Power shows that these municipalities (in red) represent 6,372,095 MWh.

If LA CCE waits too long, it will find majorities of its economics have moved to SBCP, captive, with particular note that Carson and Torrance represent a combined 45% of SBCP's load.

"Captive" refers to the liability a municipality incurs if attempting to disengage from CCA Joint Powers Authority (JPA) Agreement docs that contain language assigning pro-rata costs of Purchase Agreement energy volumes, and pro-rata costs for construction/bonds. This language makes it all but impossible for a municipal member of any CCA JPA to depart from any CCA

SCE Solar

With respect to LA CCE's desired deployment of fifty 1 MW solar farms, it is worth noting that SCE currently offers a 100% solar program (located in-state). There is zero-cost to municipalities aside from the cost / KWh. When SCE opened its program there were approximately 270 MWs of solar available.

SCE's solar is available to individual cities that may desire to join LA CCE in order to benefit from the promise of local solar deployment.

100% Solar Program: Alternate & Comparisons

"Generation" price of monthly electric bill

SCE Residential Rate (Sch D)

	Program	\$ / KWh
LA CCE	?	?
SCE	Green Rate	10.9¢
Marin Clean Energy	Local Sol	14.2¢

SCE General Service (Sch GS-1) (ave. Winter + Summer)

	Program	\$ / KWh
LA CCE	?	?
SCE	Green Rate	11.5¢
Marin Clean Energy	Local Sol	14.2¢

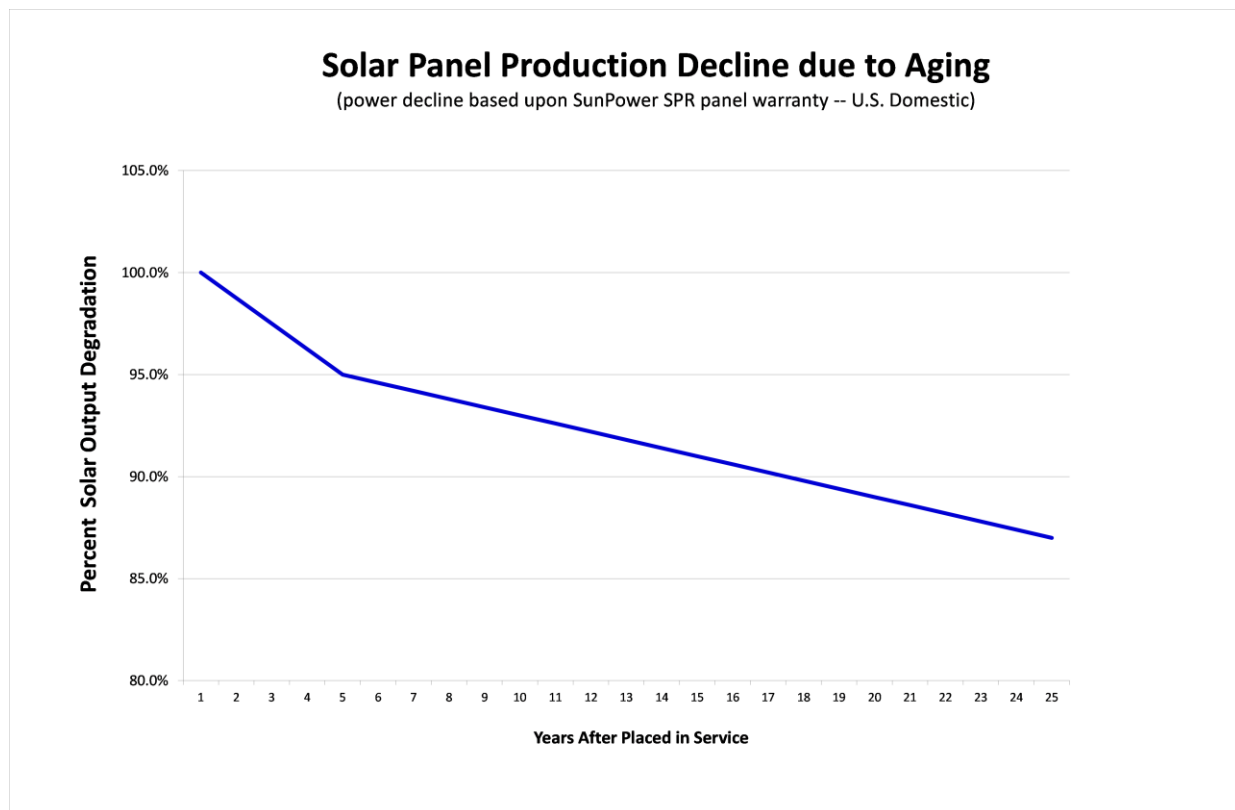
SCE General Service (Sch GS-2) (ave. Winter + Summer)

	Program	\$ / KWh
LA CCE	?	?
SCE	Green Rate	8.4¢
Marin Clean Energy	Local Sol	14.2¢

SCE's program is offered at a premium of 3.5¢ per KWh above the basic cost of SCE's conventional energy mix. Thus, when SCE's conventional energy mix cost increases, so would the "Green Rate" (aka "Community Renewables"). There is no liability or cost for adding replacement solar power that is lost as panels wear out, nor is there back-end disposal costs for discarding solar panels.

LA CCE's solar farms may be offered to consumers with rates that are fixed for extended periods, similar to what MCE offers for its "Local Sol" program. However, MCE's program contains no provision for how replacement power is added to the program due to solar farm output degradation and declines. Nor are there back-end disposal costs for the solar panels.

The table below shows the coincident percentage loss of energy output from SunPower photovoltaics, which are considered the gold-standard of solar panels.



JPA AGREEMENT

April 4, 2017 Q&A

- Page 7 of the Q&A – unbundled RECs are “discourage[d]” but not prohibited.
- Page 11 of the Q&A: **Eminent domain** remains in the doc.
- Page 12 of the Q&A: Each city to retain 1-seat membership on JPA Board of 50-80 members. Unwieldy. ... better hope JPA doesn't vote to locate a wood-burning biomass plant in your municipality (pollution Particulate Matter issues on east coast)

and water consumption (14 million gallons/yr through 18 degree(F) condenser range)). What municipality hosts the cooling tower plume?

JPA Agreement doc (Los Angeles Community Choice Energy Authority)

Recital 2 contradicts CARB (copied from MCE JPA doc). CARB states it is not promulgating regulations that require municipalities to reduce GHGs. Per ARB Chair Mary Nichols' 11-18-2012 email to Jim Phelps.

We are not preparing any regulations that would require local governments to reduce emissions of global warming gases. The only possible factual basis for such a claim could be that a city- owned power plant is required to reduce it's emissions just like an investor.owned utility (so LA DWP and Southern. California Edison are under the same cap.)

WITHDRAWAL AND TERMINATION

- Strife... Can't happen? See MCE and Sausalito (Leone) when MCE decided to expand outside of Marin's borders. Leone a no-show for many months, then dropped out.
 - What happens to a municipality that disagrees with the majority over the issuance of revenue bonds for a renewable energy [biomass plant] that the JPA wants to locate within the (disagreeing) municipality's boundaries? Cooling tower plume? Noise? Truck traffic? Particulate pollution?
 - Sec 8.1.3 – if muni withdraws it must pay its continuing liabilities such as share of PPAs. PPA liability can easily be tens of millions of dollars per muni. It is assumed this liability would be pro-rata share of a PPA, but that is not specified.
- Sec 4.10.3 shows voting share formula as the pro-rata share of energy use, however, the JPA agreement does not explicitly identify each municipality's financial obligation of PPAs, which could be changed to reflect transmission & distribution line loss.
- Because of the staggered arrangement in executing and amending PPAs, it is virtually impossible to depart from the JPA w/o incurring "continuing liabilities."
 - Sec 8.4 (withdrawal or *involuntary* termination... (you got voted out when you didn't show up at several 80-member JPA meetings, while the JPA votes to construct a biomass plan in your muni)... muni responsible for any claims, demands, damages, or liabilities arising from the [muni's] membership in the Authority.

FOOTNOTES

Footnote 1:

LA CCE Business Plan:

http://file.lacounty.gov/SDSInter/green/247381_BoardMotionofSept152016ItemNo6-FinalReport.pdf

Footnote 2:

3rd Party Review ("Memorandum") of LA CCE Business Plan:

http://file.lacounty.gov/SDSInter/green/1004282_ARCLACCEBizPlanReviewMemo-Final.pdf

Footnote 3:

1 MW Solar farm production: $1 \times 24 \text{ hrs} \times 365 \text{ days} \times 19\% \text{ capacity factor} = 1,664 \text{ MWh/yr.}$

MCE's San Rafael solar airport is .972 MW. MCE reported to the California Energy Commission the following annual energy volumes:

2013: 1,807 MWh

2014: 1,527 MWh

2015: 1,698 MWh
5,032 MWh

$5,032 / 3 = 1,677 \text{ MWh}$

Empiric Annual Capacity factor for MCE's .972 KW solar farm = $1,677 / 24 / 36 = 19\%$.

$1 \text{ MW} / .972 \text{ MW} = 1.029$. Therefore, actual megawatt-hour production from 1 MW solar farm = $1.029 \times 1,677 = 1,725 \text{ MWh per year}$.

50 solar farms x 1,725 = 86,250 MWh

LA CCE Financial proforma shows 3,581,583 MWh at full rollout.

$86,250 / 3,581,583 = 2.4\%$ of LA CCE total energy load produced by 50 1 MW solar farms.

- Utility scale solar farm (100 MW) = \$1.49 / watt.
Assume no negative economy of scale: $\$1.49 \times 1,000,000 \text{ watts} = \1.5 million
- Utility scale solar farm (200 KW) = \$2.13 / watt
Assume no positive economy of scale: $\$2.13 \times 1,000,000 \text{ watts} = \2.13 million

→ Assume actual economy of scale = \$1.75 / watt

$\$1.75 \times 1,000,000 \text{ (x 50 solar farms)} = \87.5 million

<https://pv-magazine-usa.com/2016/09/29/nrel-u-s-utility-scale-solar-costs-fell-below-1-50-per-watt-in-q1-2016-with-charts/>



Date: July 12, 2017

To: Council members considering joining or launching Community Choice Aggregation (CCA)

From: Paul Daniels, ACSC - FutureEarthUS@gmail.com

RE: *ACSC Bulletin: CCA Fatal Flaw Developments*

Dear Honorable Council Members:

Recent regulatory developments now render the economics contained in Community Choice Aggregation (CCA (CCE)) Business Plans and Feasibility Studies obsolete and potentially fatal, and may put your municipality in financial jeopardy. The two developments occurred mid-June 2017:

1) Exit fees levied by investor-owned utilities (IOUs) on all departing loads are now being litigated at the California Public Utilities Commission (CPUC). IOUs propose that these fees, known as PCIA (Power Charge Indifference Adjustment), be changed or that a new rate structure known as “PAM” (Portfolio Allocation Method) be implemented. LA CCE and ICP Business Plans’ Sensitivity Analysis state: *The level of the PCIA (and the amount of franchise surcharges) will impact the cost competitiveness of (CCA). In order to be cost-effective, (CCA) power supply costs plus PCIA and other surcharges must be lower than (IOU’s) generation rates.* The outcome of PCIA and PAM will likely not be known until mid-2018.

2) AB 1110 anti-REC legislation. CCAs use renewable energy certificates (RECs) as a low-cost method for keeping prices low and advertising low greenhouse gas (GHG) emissions. The recently released draft implementation for AB 1110, prepared by California Energy Commission, identifies that RECs can no longer be used for (misrepresented) GHG reductions and GHG emission rates. This puts CCAs on a level field with IOUs and means CCAs must procure more expensive “bundled” (true) renewable energy for their standard default product. Additionally, RECs will not be allowed in CCA’s 50% and 100% green energy products; the inherent cost issue of bundled energy is compounded by a lack of cost-effective renewable energy as CCAs enter the market en masse, as well as transmission constraints for that energy. The net is that renewable energy prices will increase significantly, changing the associated economics of CAA from what Business Plan authors could not know.

In the event that municipalities elect to join CCA in the interim, it should be noted that the JPA “financial firewall” does not protect individual municipalities from action against it by the JPA, nor insulate it from power contract resale liability, should the municipality attempt to subsequently opt out of CCA.

With respect to the above, the prudent course of action would be to delay further action on CCA until regulatory unknowns may be better quantified.

Sincerely,
Paul Daniels



Date: September 18, 2017

To: Council members considering joining or launching Community Choice Aggregation (CCA)

From: Paul Daniels, ACSC - FutureEarthUS@gmail.com

RE: *ACSC Bulletin: CCA – The Questions You Should be Asking*

Dear Honorable Council Members:

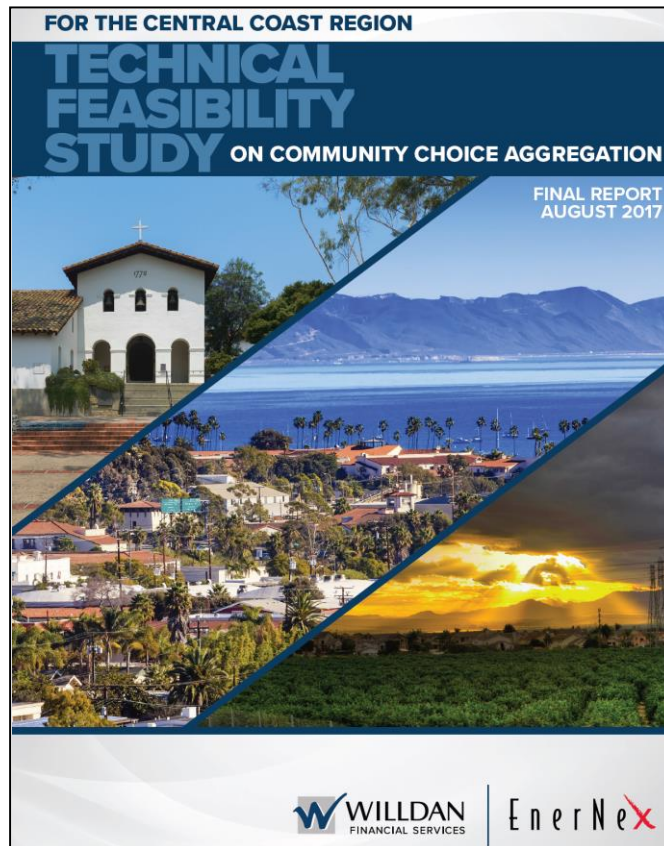
Are you aware of all liabilities contained in the CCA Joint Powers Authority Agreement?

- What is your response to the public when you favor CCA, and yet CCA exposes the City's general funds to tens of millions of dollars in liability (outside of the so called "financial firewall")?
- Do you favor joining a CCA that has the right to terminate our city from the CCA JPA while subsequently holding the city responsible for paying off multi-million-dollar power purchase contracts?
- Are you aware that our city remains responsible for paying off power purchase agreements if it finds lower cost energy elsewhere?
- Are you aware that the city is not indemnified if a secondary purchaser of the city's power (following city's departure or involuntary termination from CCA) decides it no longer wants the power?
- Are you aware that CCA will save the average resident of Hermosa Beach little if any money, and that Marin Clean Energy CCA (7-years old) saves its customers six-hundreds of 1% (this coming year)?
- Are you aware that CCA delivers energy that is no cleaner than what SCE delivers because CCA engages in green-washing with RECs, and that much of CCA's "clean" energy is rebranded coal and gas-fired power?

CENTRAL COAST REGION CCA TECHNICAL FEASIBILITY STUDY

Counties of San Luis Obispo, Santa Barbara, and Ventura

Final Report, Dated August 2017



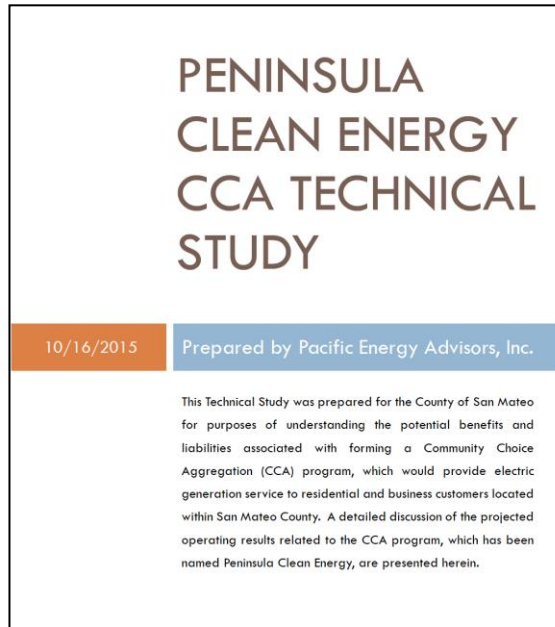
- “the CCA is deemed infeasible regarding rate competitiveness” (p. ES-23)
- “in order for the CCA to be feasible the Power Procurement costs would have to decrease 40% over the Study forecast” (p. ES-24)
- “the CCA is not expected to generate revenues in excess of operating costs” (p. II-116)
- “Given that the results of the Study indicate the CCA does not meet feasibility criteria, it is not recommended that Central Coast Power pursue a new CCA at this time.” (IV. Conclusions & Recommendations)

Source:

<http://www.centralcoastpower.org/resources.nrg#fasibility>

Peninsula Clean Energy (PCE)

How closely did stakeholders read the feasibility study?



#1: Page 75 shows that consumers save only 1.1¢ per kilowatt-hour for PCE's base product, Scenario 1, into which all consumers are swept.

#2: Page 4 says that PCE's greenhouse gas emissions **(GHGs) increase, per year**, 136,000 metric tons -- 488,000 metric tons for the base product:

- That's the equivalent of 317,810 megawatt-hours to 1,140,000 megawatt-hours of "system power" per year – the dirty and plentiful generic electricity mix that PCE claims to reject.
- Those 317,810 to 1,140,000 megawatt-hours are

equivalent to 20% to 74% of the **entire** residential electricity use in the county of San Mateo **each year**. (Source: Megawatt-hour data from California Energy Commission, Electricity Consumption by County (2015))

According to PCE's consultant's pro forma, after first year start-up, annual operating costs (power purchases, bond costs, etc.) will approximate \$250 million **each** year.

- **Each municipal member** of the PCE Joint Powers Authority is responsible for its pro-rata share of those **on-going** liabilities.

SUMMARY

After all of the above, the consultant concluded that PCE *could provide significant benefits – both economic and environmental* (source: p. 75 of Peninsula Clean Energy CCA Technical Analysis Study.).

- After PCE launched, the consultant circled back to PCE for a lavish, on-going consulting contract.

Sources

Section 1: Introduction

4 Marin Clean Energy, the first Community Choice Aggregator to launch in California exercised a 7-year contract with Shell worth approximately \$400 million over a seven-year period. The contract calls for Shell, known as Shell Energy North America, or SENA, to act as MCE's "full-services energy provider."

5

http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/Shell%20Audio%20Greatest%20Hits%20Transcripts.pdf

6 Power company exit fees include Power Charge Indifference Adjustment (PCIA), Franchise Fee Surcharge (FFS), and Competitive Transition Charge (CTC). PCIA, FFS, CTC fees are included on billing statements. CTC -- covers above market costs of utility generation. This charge was rooted in California's original deregulation efforts. PCIA (Power Charge Indifference Adjustment) -- this charge covers IOU costs incurred on behalf of customers that depart for CCA or Direct Access. The idea is that energy and planning costs incurred by an IOU on behalf of a customer who now departs must be paid by that departing customer, otherwise those IOU costs are spread over a shrinking ratepayer base, penalizing those ratepayers that remain with the IOU. FFS -- franchise fee surcharge is a percentage of the transportation and energy costs to customers choosing to buy their energy from third parties. The IOU collects the surcharges and passes them to cities and counties

7 South Bay Clean Power Draft Business Plan, (February 2017), page 2.

8 Marin Energy Authority (dba "Marin Clean Energy) Public Workshop, Mill Valley, California, December 1, 2009. Today, large hydro constitutes a majority of MCE's, and other CCAs, "carbon-free" energy.

Section 2: Overview

1 Power to the People <https://www.bates.edu/news/2010/04/21/power-by-the-people/>

2 Paul Fenn: Origins of Community Choice Aggregation - Sane Society
<https://www.youtube.com/watch?v=HvDQs2qHlaQ>

3 Paul Fenn, Biography
<http://localpower.com/FounderBio.html>

Reviewed Business Plan Sources

A. Inlance Empire Choice Power CCA Draft

http://www.gosbcta.com/about-sbcta/agendas/2017/0317_gpc-item10.pdf

B. South Bay Clean Power Draft Business Plan

<http://iagenda21.com/wp-content/uploads/2017/04/SBCP-CCA-2.2017Business-Plan.pdf>

C. LA CCE Business Plan

http://file.lacounty.gov/SDSInter/green/247381_BoardMotionofSept152016ItemNo6-FinalReport.pdf

Section 3: Sustainable Development, Renewable Energy and Buiness Plan Reviews

1 <http://cms.sbcounty.gov/lus/Planning/RenewableEnergy.aspx>
RECElementFinalPublicHearingDraftApril2017WEB2.pdf

2 <http://iagenda21.com/opt-out-of-the-countywide-vision-plan-common-core/>

3 <http://dailysignal.com/2017/05/11/largest-us-solar-panel-maker-files-bankruptcy-receiving-206-million-subsidies/>

4 <http://www.reuters.com/article/bankruptcy-sunedison-idUSL1N1F30HT>

5 <https://www.fool.com/investing/2017/04/20/why-investors-should-have-known-teslas-solarcity-a.aspx>

6 <http://www.zerohedge.com/news/2017-05-11/why-teslas-solar-roof-just-another-giant-taxpayer-gift-elon-musk>

7 <https://youtu.be/z9-4aJvUHkY>

8 <http://www.governing.com/gov-institute/voices/california-misguided-energy-policies.html>

9 http://dailysignal.com/2016/08/12/consumers-pay-because-regulators-allow-natural-gas-use-at-this-solar-plant/?utm_source=facebook&utm_medium=social&utm_campaign=thf-fb

10 <http://gizmodo.com/the-world-s-largest-solar-plant-just-torched-itself-1777767880>

11 <http://www.foxnews.com/politics/2016/08/11/nevada-starts-to-pull-plug-on-solar-subsidies.html>

12 <http://www.flashreport.org/blog/2016/06/28/diablo-canyon-closure-has-a-crony-problem/>

Sources

* Page 3.9 - Large hydro is considered anything that is larger than 30 MW nameplate on the turbine. Only hydro that is smaller than 30 MW generator qualifies as renewable under California's Renewable Portfolio Standard.

* Page 3.12 - Time Magazine, April 10, 2017.

13 Page 3.26 <http://www.ocregister.com/2017/05/26/why-does-city-of-industry-want-thousands-of-acres-of-ranchland-in-chino-hills-and-diamond-bar-heres-their-plan-2-2/>

Inland Choice Power Business Plan Review, Page 3.15

1 ICP CCA Business Plan – Final Draft (December 8, 2016), page 5, fifth bullet.

2 <http://www.marinij.com/article/NO/20151217/NEWS/151219833>

3 "This sensitivity analysis shows that the ICP rates could be greater than SCE rates if: Wholesale market prices drop much lower than current rates after ICP enters power contracts, allowing SCE a temporary advantage on generation rates."

4 MCE February 16, 2017 Board packet, agenda item #07, page 5, Table 3.

5 Jim Phelps, Marin County resident, and former power engineer and power plant emission consultant.

6 ICP CCA Business Plan – Final Draft (December 8, 2016), page 62.

7 ICP CCA Business Plan – Final Draft (December 8, 2016), page 11, 60, 72,

8 Page 10 – "Assuming ICP achieves a base case 50 percent RPS target at start-up, GHG emissions reductions attributable to ICP operations in 2019 will range from 1.33 to 2.34 million metric tons CO2 equivalent.

9 "The Plan assumes that ICP will not rely on REC purchases to meet RPS requirements." Page 32.

10 Sierra Club protest of PG&E's proposed use of RECs in PG&E's proposed (and now abandoned) Green Option. <http://docs.cpuc.ca.gov/PublishedDocs/EFIELD/P/167460.PDF> Page 7: The Green Option program would represent to customers that 100% of "the customer's electricity content" is from renewable energy resources (not RECs). This is deceptive marketing. PG&E would not buy any additional renewable power to meet customer demand for the Green Option. PG&E would only be purchasing unbundled renewable energy credits (RECs) certified by Green in "those incremental quantities necessary to green up" a customer's electricity content."

11 Interview with Jim Phelps, Marin County resident: former power engineer and power plant

S.3 Community Choice Aggregation: A False Choice

emission consultant.

12 Final Report – Marin-California Community Choice Aggregation Business Plan, April 2008, Chapter 3 – Load Forecast and Resource Plan, p. 34.

13 Financial Proforma: 50% Renewable portfolio and 100% Renewable portfolio = 14,207,376 MWh in 2018.

14 ICP CCA Business Plan – Final Draft (December 8, 2016), page 39.

15 MCE claims its local renewables are comprised of Cooley Quarry solar 1.66 MW + San Rafael Airport solar 0.972 MW + Cottonwood solar 1.0 MW + Freethy solar 1 & 2 1.996 MW + Cost Plus solar 0.261 MW + Redwood LFGTE 4.0 MW + Solar One 10.5 MW. MCE local renewable advertised as online = 20.4 MW. Cooley Quarry is more than two years behind schedule, and Solar One are not online. MCE actual local renewable online = 8.23 MW

16 Davis Wright Tremaine LLP risk analysis letter dated May 10, 2010 to City of Mill Valley and October 22, 2014 to City of Benicia. Financial firewall insulates JPA members from energy creditors who agree to waive debts if needed.

17 2-5-2017, LA TIMES - Californians are paying billions for power they don't need
<http://www.latimes.com/projects/la-fi-electricity-capacity/>

18 California invested heavily in solar power. Now there's so much that other states are sometimes paid to take it. <http://www.latimes.com/projects/la-fi-electricity-solar/>

South Bay Clean Energy Business Plan Review, Page 3.23

1 Page 1 of the SBCP Joint Powers Authority (JPA) agreement makes the same claim that MCE once made regarding “capital retention” for the community. MCE claimed it would “redirect” money from PG&E shareholders back into Marin. Its leadership made the same claim to Sonoma County. <http://www.marinij.com/article/ZZ/20100506/NEWS/100509713>

2 SBCP Draft Business Plan, p. 20.

3 Ibid

4 Draft Business Plan’s Letter of introduction, page 1, 4th bullet.

5 Clean energy is price sensitive. Marin Clean Energy has been able to entice only 1.89% (one point eight-nine percent) of its customers to “step up” and pay 1 penny per KWh premium to move from Light Green product (advertised as 53% renewable) to Deep Green product (advertised 100% renewable). Source: MCE February 2017 Integrated Resource Plan, page 16 of 33. Deep Green costs approximately \$4.45 extra per month. https://www.mcecleanenergy.org/wp-content/uploads/2017/03/MCE_Residential_Rates_Apr2017.pdf

Sources

6 Time Magazine: Whoops! A \$2 Billion Blunder: Washington Public Power Supply System, By Charles P. Alexander, Adam Zagorin, and Deborah Peterson, dated Aug. 08, 1983

7 Silicon Valley Clean Energy committed 50% of its portfolio would be “eligible” (in accordance with RPS limits). SVCE now wants half of the “50%” commitment to be unbundled Renewable Energy Certificates (PCC3) for the next 14 years. SVCE’s consultant claims SVCP will save \$1.6 million/year for next five years. SVCE’s consultant claims these unbundled RECs are “eligible” renewables – conforms with state Renewable Portfolio Standard. This is false. Only 3% of “eligible” energy may be comprised of unbundled RECs. SVCE engages in misrepresentation wherein fossil-fired energy (“unspecified sources”) is loaded into its portfolio under the guise of whatever is printed on the REC (“wind”). That re-labeled “wind” energy is then advertised to consumers who believe they receive clean power that reduces GHG emissions.

8 “Generation” is the unbundled component of the SCE electric bill that CCAs occupy. SCE will bill consumers on behalf of SBCP, and the “Generation” funds will then be paid by SCE to SBCP each month.

9 IOU demand response programs include SCE’s Automated Demand Response, Permanent Load Shifting, Scheduled Load Reduction, to name just a few. PG&E demand response programs include Peak Day Pricing, Base Interruptible Pricing, Scheduled Load Reduction Program, Optional Binding Mandatory Curtailment Plan, Automated Demand Response Incentive, and Permanent Load Shift. Sempra includes many demand response programs, including its Base Interruptible Program, Capacity Bidding Program, Critical Peak Pricing, and Summer Saver program.

10 South Bay Clean Power Draft Business Plan, Executive Summary, p. 10

11 IBID, page 7.

12 IBID, p 17.

13 MCE’s record includes (1) exporting nearly \$7 billion of the “local” communities money to Europe, (2) poor oversight of the cancelled 100 acre (15 MW) Rio Solar farm, (3) green-washing with RECs to extent that MCE overstates its actual GHG reductions by an average 80%.

14 Silicon Valley Clean Power, April 12, 2017 Board of Directors meeting, Item 4. “Alternative to Type 2 Renewable Energy” Recommendation: Approve new approach to hedge the cost of power supply, allowing an alternate to the use of PCC2 renewable resources.

15 <https://www.sierraclub.org/sites/www.sierraclub.org/files/landfill-gas-report.pdf>

16 <http://www.ecowatch.com/is-biomass-energy-renewable-1891131459.html>

17 Assume 20 MW generator circulating 20,000 GPM through 20 (F) range (20,000 x .001 x 2 x 60 x 24 x 365), plus blow-down at 5 cycles circulating water.

18 “While the financial product chosen by the Redwood Coast Energy Authority may not prove to be appropriate or ideal for South Bay Clean Power, we recommend that South Bay Clean Power take advantage of the approach pioneered by the Redwood Coast Energy Authority to work with best-in-class power industry contractors.” SBCP Business Plan dated February 2017, page 63.

19 Draft South Bay Clean Power Business Plan, p. 58.

20 MCE’s 2/2017 Integrated Resource Plan.

21 Sonoma Feasibility Study, Oct. 10, 2011, Part 2, p. 4 footnote identifies that each megawatt of solar requires between 5 and 8 acres, depending on exposure. (date at bottom of page shows Sept. 29, 2011).

22 Sonoma Clean Power Feasibility Study, October 10, 2011, Part II, p. 4, footnote 3 (date at bottom of page shows “September 29, 2011.” This complements County of San Bernardino empiric data contained in <http://www.sbcounty.gov/uploads/lus/renewable/SolarProjectList.pdf> that calculates to 8 acres per MW of solar.

23 SunPower SPG solar panel warranty is 95% output at year 5, and 0.004 decline/yr thereafter.

24 $30,000/1,752$ (1,752 MWh from 1 MW solar farm) x \$4,000,000 / megawatt = \$68,493,000 + land.

Contributors

Prior to starting a business consulting company in 1992 specializing in business planning and startups, Dan Titus was involved in high-tech electronics manufacturing in Orange County, California. He worked as a production and project manager in producing high-power amplification systems and computer components. Dan has authored several business planning publications and is a graduate of California State University, Long Beach.

Jim Phelps is a graduate of UC Berkeley and served the power, petrochemical, and geothermal industries for 37 years before his retirement. His background is in evaporative cooling tower technology and in California electric power rate structures. He provides advice to California retail energy consumers, and to California energy policymakers and regulators about California’s Community Choice Energy (CCE and CCA) programs, including energy costs and viability of represented “clean” energy supplies. Mr. Phelps is an expert in evaluating CCE energy portfolios, including reconciliation with California RPS requirements, WREGIS retirement, and CEC energy reporting. His investigations into Marin Clean Energy (MCE) were responsible for exposing the volumes of rebranded dirty power that is resold to consumers as “clean” energy. This rebranded energy permeates CCE programs.