ACSC

Date: December 8, 2017
To: Council members considering joining or launching Community Choice Aggregation (CCA)
CC: City Attorney
From: Paul Daniels, ACSC - FutureEarthUS@gmail.com
RE*: ACSC: LA CCE problems, pitfalls and concerns*

Dear Honorable Council Members:

Is your city considering joining LA CCE? If so, we wanted to make you aware of vital information for your consideration and review. It has been our experience that critical decisions are made, based on staff and consultant recommendations that glaze over potential problems of CCAs. Elected officials need to proceed with caution regarding this complex subject and ask difficult questions. To do that, they must be educated enough to ask an educated question. That is where ACSC's research can help.

The American Coalition for Sustainable Communities (ACSC) recently released their new publication, *Community Choice Aggregation: A False Choice*, (see attached flyer). It contains vital information for staff and elected officials considering CCAs. The publication includes reviews of three business plan feasibility studies, including LA CCE. We have included the LA CCE review, an excerpt from the Appendix, for your edification. Note, that this also includes warning bulletins that we distributed.

In response to the "Choice" argument:

- Choice must be weighed against the long-term financial liabilities that a municipality accepts when signing up for CCA, including untangling from Power Purchase Agreements. These costs are not fully disclosed or "guaranteed" when the municipality signs into the JPA and can run into the many tens of millions of dollars, making it impossible for the municipality to get out of the CCA;

- Municipality accepts that a large CCA JPA board such as LA CCE (with little, if any electricity experience) may vote in ways that do not represent the municipality's interests, such as pricing for various customer classes, eminent domain, location of solar farm(s) on its open space, etc. If the municipality objects to CCA operations and tries to depart the JPA… see the first bullet, above;

- Municipality accepts that (highly paid) consultants will largely be running the CCA and directing (neophyte) staff, and that board will be receiving agenda items that are largely assembled to reflect the consultants' desires. Reference MCE, whose prices are 6/100 of 1% less than PG&E while MCE's primary consultant (3 guys) receives annual payments from MCE in excess of $1.1 million, all while the consultants loaded inexpensive RECs into MCE's "clean" energy portfolio. EES Consulting, who authored LA CCE's Business Plan and LA CCE's Implementation Plan, plans to handle Power Procurement for LA CCE;

- Municipality accepts likelihood that consultants receive off-book monies from big contractors and energy suppliers, and that it may not be getting the 'deal' it thinks it's getting — why is it that the same few energy suppliers, from a pool of many, continue showing up at the CCAs where the same consultants are in place?

In our Executive Summary of LA CCE, we found 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.

Furthermore,

- Business Plan (6/30/16), page 6: "this Plan assumes the installation of 50 crystalline silicon, fixed mount solar systems with nameplate capacities of 1 MW each for a total capacity of 50 MW… will create $87 million in earnings… along with 1,636 jobs during construction and 14 full-time jobs on-going."

- Implementation Plan (8/14/17), page 6: "Initially, requisite renewable energy supply will be sourced through one or more power purchase agreements. Over time, however, the LACCE Authority will consider independent development of new local renewable generation resources." Will consider? …what happened to the local renewable commitment?

Are you aware that an independent review of LA CCE was done and that caustic observations were tendered to LA County Supervisors?

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.*

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 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 West Covina little if any money, and that Marin Clean Energy CCA (7-years old) – the blueprint for CCA "industry" – 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?

The questions that should have been asked of "Shawn" — Shawn Marshall head of LEAN U.S. — aka Local Energy Aggregation Network *and* EES Consulting:

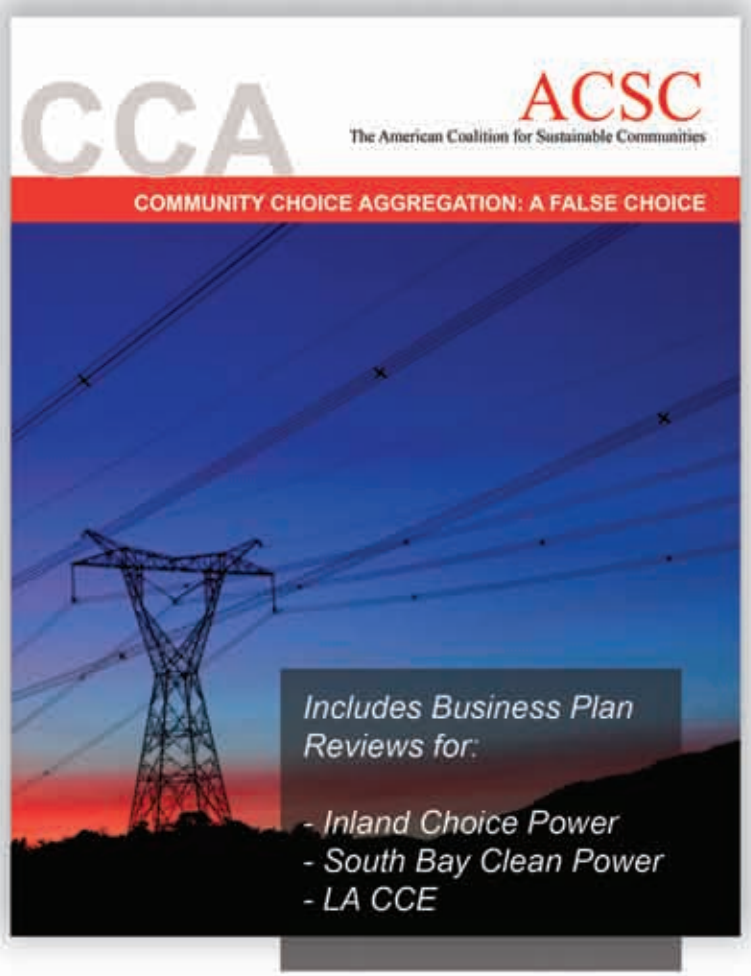
- How much money have you, and LEAN, made helping to launch LA CCE?
- How much money will you, and LEAN, make as a result of LA CCE going into business?
- What is the total value of the contracts you, and LEAN, have executed with LA CCE for its roll out?
- What is the total dollar value in earnings for you, and LEAN, with LA CCE when each municipality joins LA CCE?
- What is the total dollar value earnings for you, or LEAN, with LA CCE when each new municipality joins LA CCA after LA CCE's initial launch?

LA CCE is not the only Community Choice scheme being questioned.

Are you aware that in August 2017 a Central Coast Region CCA Technical Feasibility Study was conducted for the Counties of San Luis Obispo, Santa Barbara, and Ventura?

- “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



NEW!

Community Choice Aggregation: A False Choice

Report Unpacks the Mystery of Government Run Power Scheme

Learn About

- Dubious Ratepayer Savings
- Flawed Clean Energy Claims
- Questionable Opt Out Claims
- Disingenuous Reporting
- New Unelected Boards

This new full color report, by the American Coalition for Sustainable Communities (ACSC), is offered as a counterweight argument for those who want the inside track about Community Choice Aggregation (CCA).

The government wants people to use renewable energy and they have devised a new scheme to get them to use it by foisting ratepayers into a government run power utility — 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. Renewable energy costs more; therefore, power rates can escalate. In short, the government becomes a middleman skimming ratepayer income.

The introduction provides a brief genesis of the report. An overview is presented detailing the history of CCA; deregulation, industry business model, renewable energy certificates and green-washing are discussed. The report then moves into an overview of sustainable development and its impacts. Renewable energy is addressed and three CCA business plan proposals are objectively reviewed. Also, included are key summary arguments and findings. The report denotes charts, graphs and complete source citations.

Full Color Paperback: 80 pages
Publisher: Monolith Press
ISBN-13: 978-1582911410
Dimensions: 8.5 x 11.0 inches
Price: $39

ACSC
The American Coalition
for Sustainable Communities

Available @ iAgenda21.com

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

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.

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  → 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

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.

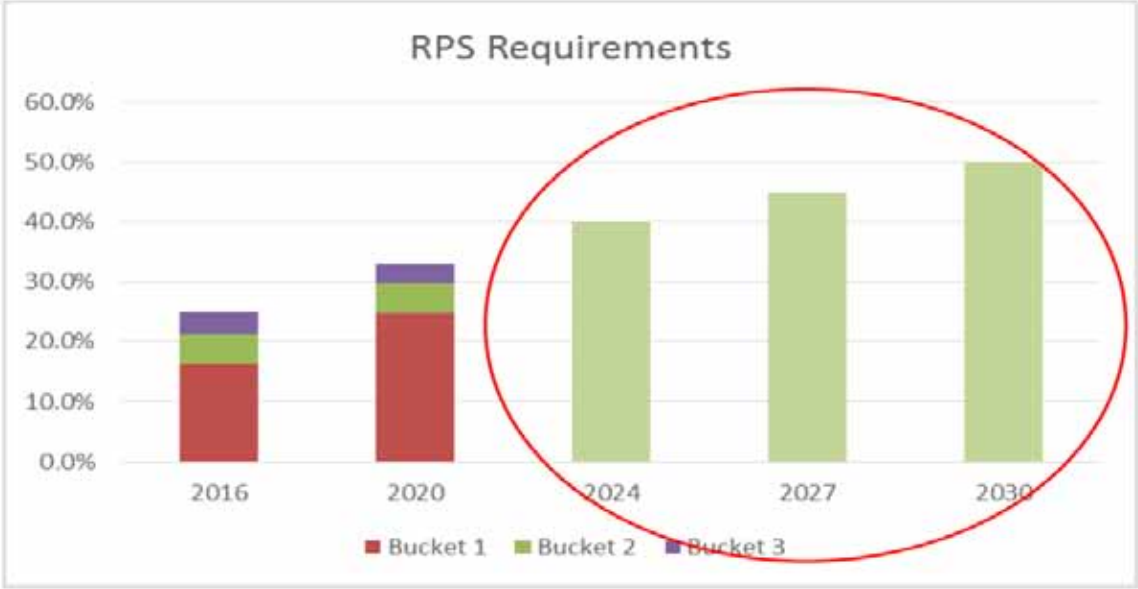
→ Alternately, if calendar year 2023 is cited as an alternate data point, the Business Plan's 5.3% shortfall for that year would then be applied to the Total Energy Sales of 3,040,110 MWh in the Financial proforma, or 161,125 MWh. This shortfall requires ninety-three (93) 1 MW solar farms. Installation 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.

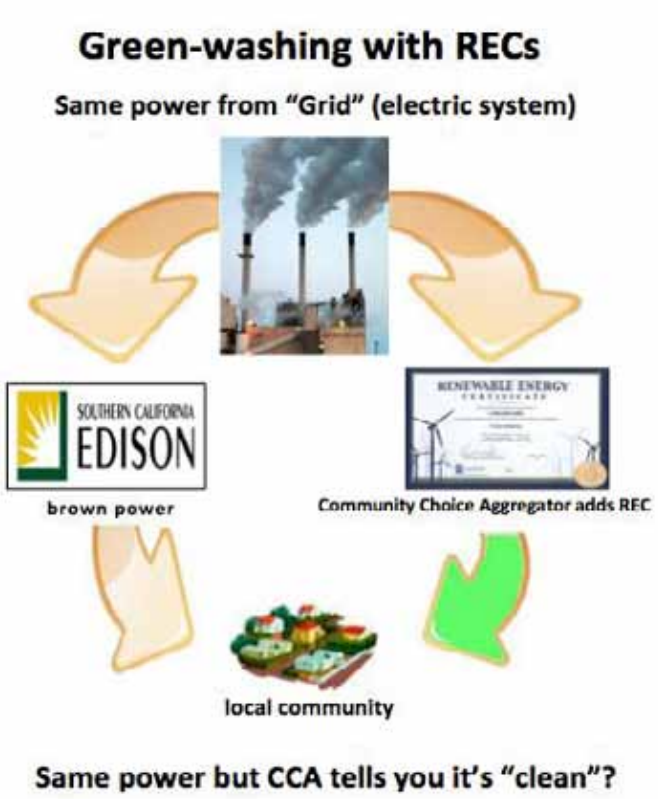
→ Unbundled RECs are not renewable energy, but are a paper-trading financial scheme that hide underlying coal and gas-fired energy that is actually delivered to customers. Overall, this is referred to as "green-washing."

→ (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.



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-GHGs (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 CO_2e (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-GHGs 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	Gardena	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¢

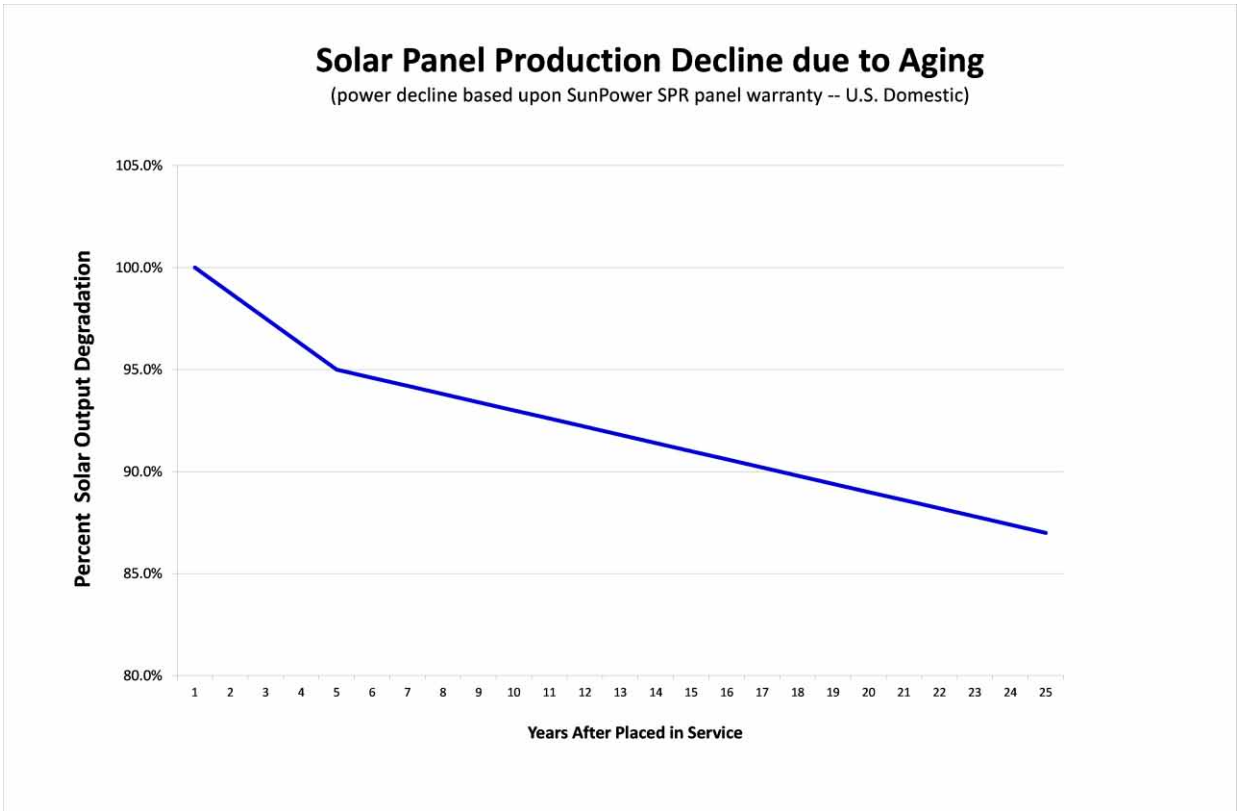
SCE General Service (Sch GS-2) (ave. Winter + Summer)

	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 x 24 hrs x 365 days x 19% capacity factor = 1,664 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 MWh
Empiric Annual Capacity factor for MCE's .972 KW solar farm = 1,677 / 24 /36 = **19%.**

1 MW/.972 MW = 1.029. Therefore, actual megawatt-hour production from 1 MW solar farm = 1.029 x 1,677 = 1,725 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 x 1,000,000 watts = $1.5 million

- Utility scale solar farm (200 KW) = $2.13 / watt
  Assume no positive economy of scale: $2.13 x 1,000,000 watts = $2.13 million

→ Assume actual economy of scale = $1.75 / watt
$1.75 x 1,000,000 (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/

ACSC

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 competiveness 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.

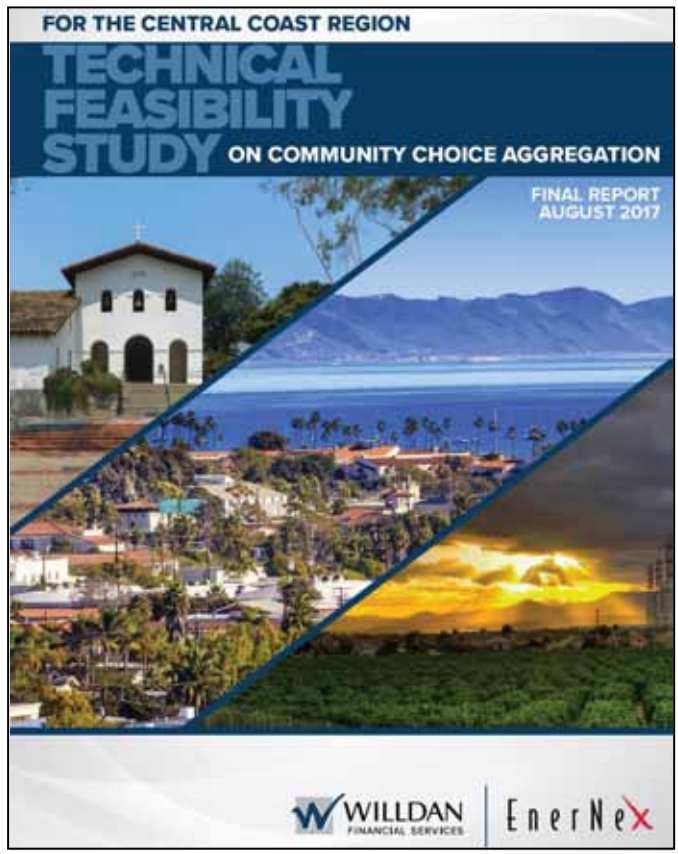
In the event that municipalities elect to join CCA in the interim, it should be noted that the JPA "financial firewall" does not protect individual municipalities from action against it by the JPA, nor insulate it from power contract resale liability, should the municipality attempt to subsequently opt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

CENTRAL COAST REGION CCA TECHNICAL FEASIBILITY STUDY
Counties of San Luis Obispo, Santa Barbara, and Ventura

Final Report, Dated August 2017

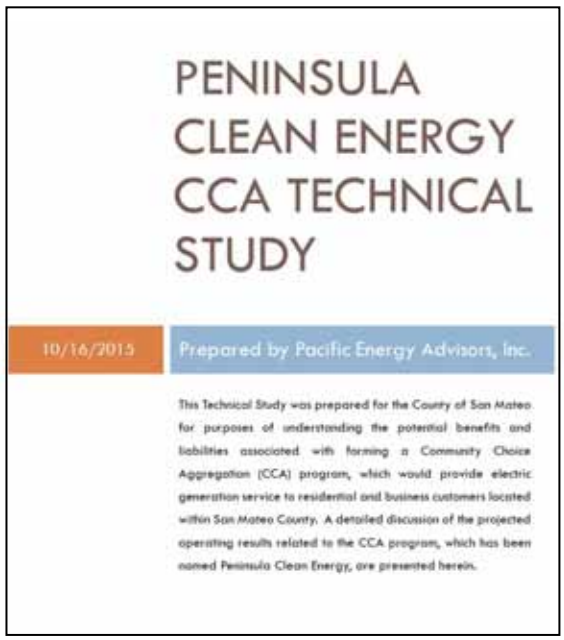


- "the CCA is deemed infeasible regarding rate competitiveness" (p. ES-23)
- "in order for the CCA to be feasible the Power Procurement costs would have to decrease 40% over the Study forecast" (p. ES-24)
- "the CCA is not expected to generate revenues in excess of operating costs" (p. II-116)
- "Given 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**.**