



**CITY OF SANTA BARBARA**  
**COUNCIL AGENDA REPORT**

**AGENDA DATE:** July 17, 2018

**TO:** Mayor and Councilmembers

**FROM:** City Administrator's Office

**SUBJECT:** Results And Findings Of The Santa Barbara County Study On Community Choice Energy By Pacific Energy Advisors

**RECOMMENDATION:** That Council:

- A. Receive a report from staff on the results and findings of the Feasibility Study on Community Choice Energy by Pacific Energy Advisors; and
- B. Direct staff to work with the County of Santa Barbara and other interested cities to pursue the formation of a new Community Choice Energy Program throughout Santa Barbara County.

**EXECUTIVE SUMMARY:**

Community Choice Energy (CCE), enables local governments to directly purchase energy or to generate power and to set the rates charged to customers. On October 31, 2017, City Council directed staff to conduct additional due diligence on the largest drivers of infeasibility identified in the Community Choice Energy Technical Feasibility Study (Tri-County Study) authored by Willdan-Enernex (Willdan) and subsequently peer reviewed by MRW Consultants (MRW). The City, in concert with the County of Santa Barbara and the Cities of Goleta and Carpinteria, commissioned Pacific Energy Advisors (PEA) for this purpose. PEA evaluated the feasibility of CCE for three geographic participation scenarios: All Santa Barbara County (unincorporated + incorporated cities), Unincorporated County Only, and Santa Barbara City Only. For each geographic scenario, PEA evaluated total program costs, rate competitiveness, and financial position for three electricity supply scenarios over the eleven-year study period (2020-2030).

PEA identified several electric supply options that could provide customer rates that were competitive with Pacific Gas and Electric (PG&E) and Southern California Edison (SCE). The All-County scenario (Scenario 1) was most feasible, benefitting from the largest customer base and higher PG&E rates compared to those of SCE.

The City-specific scenario (Scenario 3) was least feasible, relying on less orthodox assumptions and not achieving financial solvency until Year Four of the study period.

Despite the favorable results of the Santa Barbara County Study, the formation and operation of CCE is not without risk. Managing these risks is made more difficult by the ever-changing energy landscape, including energy markets, the continued expansion of CCE in California and a regulatory environment working to adapt to these changes. CCE programs must carefully manage four specific risks – the cost of energy, regulatory and statutory risk, customer opt-out, and maintaining rate competitiveness with the existing utilities in order to be successful.

In June of 2018, the CCE Council Subcommittee voted unanimously to pursue the formation of a new CCE entity throughout Santa Barbara County. Should Council concur with this recommendation, staff would work with other interested jurisdictions to develop a CCE implementation plan and to form a new joint powers authority to administer the new CCE entity.

In the near-term, participating jurisdictions would incur costs for specialized professional services to form the new CCE entity and governing JPA. In the long-term, a substantial bank loan, estimated at \$9.3M, would be needed to cover other startup costs, including initial power procurement costs, which PEA assumed would be retired at the end of the first full operational year.

## **DISCUSSION:**

### **Background**

Community Choice Aggregation, also known as Community Choice Energy, enables local governments to directly purchase energy or to generate power and to set the rates charged to customers. While a CCE would procure energy, the existing investor-owned utilities (IOU) in our region, SCE and Pacific Gas and Electric, would continue to deliver the electricity purchased by the CCE over the IOU's power lines. The IOUs would also provide metering, billing, and other related services.

In 2016, ten jurisdictions throughout Ventura, San Luis Obispo and Santa Barbara Counties, including the County and City of Santa Barbara, as well as the Community Environmental Council, commissioned Willdan to study the feasibility of establishing a new community choice energy entity in the tri-county region (Tri County Study). Willdan concluded that CCE would not be feasible, meaning the CCE rates would neither be competitive with PG&E and/or SCE rates, nor would the CCE entity remain solvent in most study years (2020-2030).

The participating jurisdictions then commissioned MRW to perform a peer review of the Tri County Study. MRW made several adjustments to the original study that improved the financial pro forma. However, notwithstanding its revisions, and including the remaining

Willdan assumptions (e.g. bond financing, etc.), MRW ultimately concluded that the establishment of a new CCE Program, operating in SCE territory, would not be rate competitive or financially solvent. A comprehensive discussion on the Tri County Study and the MRW peer review is available at: <https://tinyurl.com/y7xnayfr> (See Agenda Item 13).

### **Pacific Energy Advisors - Santa Barbara County Study**

On October 31, 2017, City Council directed staff to conduct additional due diligence on the largest drivers of infeasibility as noted by Willdan and MRW, specifically the cost of renewable energy and alternative financing schemes to provide for start-up working capital. To this end, the County of Santa Barbara, along with the Cities of Santa Barbara, Goleta, and Carpinteria, commissioned Pacific Energy Advisors (PEA) to perform this work. PEA evaluated the feasibility of CCE for three geographic participation scenarios: All Santa Barbara County (unincorporated + incorporated cities), Unincorporated County Only, and Santa Barbara City Only. For each geographic scenario, PEA evaluated total program costs, rate competitiveness, and financial position for three electricity supply scenarios over the eleven-year study period (2020-2030):

1. **Renewable Portfolio Standard (RPS) Equivalent:** This scenario assumes that the CCE program would follow the California RPS<sup>1</sup>. Specifically, the CCE would offer its base electricity product to all customers starting at 33% renewable energy content in 2020, ramping up to 50% renewable energy content by 2030.
2. **50 Percent Renewable:** This scenario assumes that the CCE program would offer its base electricity product to all customers using 50% renewable energy content for the entire study period.
3. **75% Renewable:** This scenario assumes that the CCE program would offer its base electricity product to all customers using 75% renewable energy content for the entire study period.

### **PEA Methodology**

To evaluate the feasibility of CCE, PEA employed the following methodology:

1. Determine the amount of energy that customers would use, accounting for seasonal variations;
2. Determine the amount of revenue required to procure the requisite energy and to operate the CCE entity;
3. Build CCE customer rates by distributing the revenue requirement across customer classes; and,
4. Compare the resulting CCE rates to the projected SCE and PG&E rates.

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<sup>1</sup> [http://www.cpuc.ca.gov/RPS\\_Homepage/](http://www.cpuc.ca.gov/RPS_Homepage/)

## Primary Differences Between the PEA Approach and Those of Previous Consultants

In its analysis, PEA assumed substantially lower costs for renewable energy, working capital, contingency reserve contributions, and overhead than those reflected in the Tri County Study. Differences in the main cost drivers, including the cost of energy (Cost/MWH – Energy) and the total cost to operate the CCE, which includes the addition of debt service, reserve contribution, and overhead, etc. (Cost/MWH – Pro Forma), reflected by various feasibility studies conducted in recent years is provided in Table 1 below.

**Table 1 – Key Metrics Among Various CCE Feasibility Studies**

| Cost Category        | PEA  | Willdan | MRW  | LA County |
|----------------------|------|---------|------|-----------|
| Cost/MWH (Energy)    | \$62 | \$72    | \$60 | \$46-\$47 |
| Cost/MWH (Pro Forma) | \$70 | \$117   | \$90 | Unknown   |

As a result, the PEA financial pro formas were more favorable. Projected rate savings varied with the amount of renewable energy included in the CCE's supply portfolio, with the lower range of renewables (RPS-tracking supply scenario) offering greater savings over the supply scenarios with higher renewable content (50% and 75% renewable supply scenarios).





## PEA Conclusions

CCE program feasibility is typically assessed based on 1) the competitiveness of CCE rates against the existing IOU rates; and 2) the long-term financial viability of the enterprise. PEA identified several electric supply options that could provide yield rates competitive with SCE and PG&E. The All-County scenario (Scenario 1) was deemed most feasible, due to the economies of scale derived from the largest customer base and benefitting from the higher PG&E rates when compared to SCE. This additional “rate headroom” provided by PG&E contributed to the success of first CCE programs in Northern California.



Conversely, the City-Only scenario (Scenario 3) was the least viable. The City-specific scenario is predicated on a \$4M interest-free loan from the General Fund and relies on a higher rate of escalation of SCE rates (5%) than that assumed for the All County Scenario, which covers both SCE and PG&E service territory (3%). In short, developing CCE rates

that could compete with SCE’s rate structure over the long term, coupled with the smallest customer base, made the City-specific scenario challenging and risky.

**Table 2 - Summary of All County Scenario – 50% Renewable**

| Start Up Capital | Break Even Year | Net Surplus/Deficit             |                                   | Residential Customer Bill (\$/Year) |  |  |
|------------------|-----------------|---------------------------------|-----------------------------------|-------------------------------------|--|--|
|                  |                 | Year 1                          | Year 11                           |                                     | Year 1   | Year 11  |
| \$9.3 M          | Year 1          | \$4.3M<br>(2.8% of total costs) | \$24.6M<br>(12.8% of total costs) | PG&E                                |  \$11 |  \$51 |
|                  |                 |                                 |                                   | SCE                                 |  \$8  |  \$55 |

**Table 3 - Summary of City of Santa Barbara Scenario – 50% Renewable**

| Start Up Capital    | Break Even Year | Net Surplus/Deficit |                                    | Residential Customer Bill (\$/Year) |  |  |
|---------------------|-----------------|---------------------|------------------------------------|-------------------------------------|--|--|
|                     |                 | Year 1              | Year 11                            |                                     | Year 1   | Year 11  |
| \$4M<br>0% interest | Year 4          | (\$890k)            | \$6.3M<br>(22% of operating costs) | SCE                                 |  \$11 |  \$72 |

The PEA Study (Santa Barbara County Study) as well as the previous Tri County Study and peer review are available at: <http://www.centralcoastpower.org/resources.nrg>. A copy of the Santa Barbara Study is also available in the Council Reading File.

**CCE Subcommittee Recommendation and Next Steps**

Staff presented the findings of the PEA Santa Barbara County Study to the CCE Council Subcommittee on June 11, 2018. The Subcommittee voted unanimously to recommend that Council to pursue the creation of a new CCA throughout Santa Barbara County.

**Risk Profile**

It is important to note that the PEA findings, while more favorable than previous analyses, do not forecast and evaluate all risks related to the establishment of CCE. The California

energy system is at a critical inflection point with increasing price volatility driven by increased integration of distributed renewable energy resources on the grid, a changing electricity provider landscape as more CCE programs form, and great policy uncertainty with ongoing action by the California Public Utilities Commission (CPUC) and State Legislature seeking to enact changes that could affect CCE program viability. Four specific risks – the cost of energy, regulatory and statutory risk, customer opt-out, and maintaining rate competitiveness with SCE and PG&E, warrant serious consideration.

1. Cost of Energy: Energy costs represent approximately 90 percent of a CCE's annual operating costs. Therefore, small variances in price can have substantial financial impacts. PEA modeled volatility in the spot market and found reserves to be sufficient to cover this specific risk. However, taken as a whole, annual reserve contribution would cover an increase in total energy costs of approximately 5 percent in a typical year.
2. Regulatory and Statutory Risk: While the risk of new regulatory requirements would be present at any time for a CCE program, the regulatory landscape is particularly volatile presently as the CPUC and the State legislature grapple with how to manage the growth of CCE and level the playing field for all types of electricity providers. Significant regulatory and potential legislative changes are expected in the near future, especially in regard to departing load charges that CCAs must pay to IOUs upon formation to cover stranded energy costs. A major decision on departing load charges is expected by the CPUC in late summer or fall, which could alter the Santa Barbara County Study financial models.
3. Customer Opt Out: Upon formation, customers of the previous IOU are automatically transferred to the newly formed CCA. However, customers have the ability to "opt out" of the CCE and return to the IOU. This risk is present during the initial transition to the CCE and would reemerge if the CCE were unable to maintain customer rates competitive with the former IOU.
4. Rate Competitiveness with the Existing IOUs: Two IOUs currently serve Santa Barbara County: PG&E in North County and SCE in South County. As stated above, maintaining customer rates that are competitive with the existing IOUs is critical to prevent customer opt. This has become more challenging in SCE territory in recent years as noted by Willdan, as SCE has aggressively shifted generation-related costs to the fixed delivery charges paid by CCE and IOU customers alike. Migration of customers back to the IOU and the resulting loss of rate revenue would impact the CCE's ability to fulfill its financial obligations to power providers.

Willdan, MRW and PEA all made assumptions regarding the rate at which SCE and PG&E rates would escalate over the study period. PEA projected that CCE rates would remain comparable or below both PG&E and SCE throughout the study period.

### Analysis of Policy Goals

The formation of a new CCE in Santa Barbara County does have the potential to help the City achieve some of its policy goals as reflected in Table 4 below:

**Table 4 – Analysis of Policy Goals**

| Goal   | CCE   |
|--|---|
| Provide greater local control of energy decisions  | Yes, but subject to change with pending legislation   |
| 100% Renewable Energy (City Facilities)  | CCE appears to open doors to favorable account configuration  |
| 100% Renewable Energy (Community-wide)   | <ul style="list-style-type: none"> <li>• Higher Renewable Energy – not exactly – CCE may achieve 50% <u>sooner</u> than SCE*</li> <li>• Greenhouse Gas Reductions</li> <li>• Special Tariffs for Solar, Electric Vehicle Charging</li> </ul> *If financials prove favorable, could opt up to >50% |
| Lower Customer Rates   | Possible but not Recommended– rates <i>equivalent</i> with IOUs more likely   |
| Large Scale Resource Development <ul style="list-style-type: none"> <li>• Solar</li> <li>• Hydroelectric</li> <li>• Microgrids</li> <li>• Battery Storage</li> </ul> | <ul style="list-style-type: none"> <li>• Depends upon long term revenue surpluses</li> <li>• But, could potentially use other capital sources (Water Fund, etc.) and sell power back to CCE</li> </ul>  |
| Greenhouse Gas Reductions  | No – 50% Renewable Energy portfolio does not materially improve over IOUs*<br><br>*If financials prove favorable, could opt up to >50% further reducing GHG emissions   |
| Job Creation   | Maybe – specialized tariffs or CCE programs may spur solar installation, energy efficiency work   |

## **Next Steps**

On July 17, 2018, the County Board of Supervisors and the Goleta City Council are also receiving presentations on the Santa Barbara County Study and evaluating several options related to CCE, including the formation of a new countywide program. Should Council concur with the CCE Council Subcommittee recommendation, City staff would work with interested jurisdictions to form a new joint powers authority (JPA) that would administer the CCE program. As an initial step in the near future, staff would likely bring to Council, a resolution of intent to pursue the formation of a new CCE program, including the formation of a JPA.

The resolution would identify the initial lead agency, along with the roles and responsibilities of the lead agency and participating jurisdictions, and expectations for sharing CCE formation costs.

Due to a recent change in CPUC regulations, CCE formation now runs on a January to January timeline. For example, a new CCE program planning to serve electricity beginning January 2021 must file an implementation plan with the CPUC by January 2020.

## **BUDGET/FINANCIAL INFORMATION:**

In the short-term, specialized energy, legal and financial services would be needed to develop and obtain CPUC approval of the CCE Implementation Plan and to develop the joint powers agreement to guide its governance. The cost of these services could be substantial, but would be shared among the participating jurisdictions. The Fiscal Year 2019 Adopted Budget did not contemplate the City's share of these costs. If a CCE program successfully launches, formation costs are reimbursable through future CCE revenues.

In the long-term, PEA estimated start-up costs of \$9.3M, of which approximately 80 percent is directly related to initial power procurement costs. Most existing CCEs have relied on bank loans to cover working capital needs. PEA assumed that start-up debt would be retired by the end of the first full operational year.

Since newly-formed CCE programs lack credit worthiness, banks have often required the CCE, or the member jurisdictions, to provide some type of security to underpin the loan. Our understanding of the finance-related requirements will become more clear during the development of the implementation plan.

## **SUSTAINABILITY IMPACT:**

Pacific Energy Advisors concluded that a new CCA program could offer slightly cleaner electricity than that currently delivered by PG&E and SCE. Surplus revenues generated by the CCE could be used to purchase higher renewable content energy, or to incentivize



energy efficiency and development of distributed energy resources, yielding further GHG reductions, in direct support of the City's Climate Action goals.

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