Community Choice Aggregation (CCA)

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I. Introduction

Community Choice Aggregation (CCA) allows local governments to purchase and/or develop clean power on behalf of their residents, businesses, and municipal accounts. CCA is an energy supply model that works in partnership with Pacific Gas & Electric (PG&E) to deliver renewable energy, maintain the energy grid, and provide customer service and billing. As part of the Council approved CAP Coordinator Work Plan 14-15, the CAP Coordinator researched CCA programs and potential funding sources to complete a Marin Clean Energy (MCE)[1] required technical study that assesses the City's electrical load and determines whether MCE can provide cost-effective service to the City. Below is an overview of that research and recommendations for future action.

II. CCA Overview

CCA programs generate and procure their own clean energy and rely on PG&E to deliver electricity through its transmission and distribution system. PG&E would continue to provide meter reading, billing, maintenance, and outage response services. Within PG&E's territory there are two active CCAs: Marin Clean Energy (MCE) and Sonoma Clean Power. CCAs procure renewable power either by contracting with a third party to procure that power or by generating it themselves. According to California law, customers are automatically enrolled in a CCA once their jurisdiction creates a CCA or opts in to an existing CCA. Residents are provided opportunities to "opt out" of the program and continue to receive power generated by PG&E.

III. Marin Clean Energy (MCE)

Currently, MCE is the only California CCA that Benicia may be able to join. The MCE Board of Directors determines the source and price of generation. MCE began serving the generation needs of customers within Marin County in 2010. In 2013, MCE expanded to the City of Richmond and is now seeking additional jurisdictions to join the CCA.

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[1] MCE is a Community Choice Aggregator (CCA) located in Marin County offering services to Marin County and City of Richmond residents. Its purpose is "to address climate change by reducing energy related greenhouse gas emissions and securing energy supply, price stability, energy efficiencies and local economic and workforce benefits." More information about MCE can be found at http://marincleanenergy.org/.

A. Rates

MCEcharges customers for generation, but PG&E bills for all the above services (see Section II.),a "Power Charge Indifference Adjustment" (PCIA) fee and a franchise fee.

- PCIA is the portion of the bill intended to ensure that customers who receive their electric supply from third-party providers, such as a CCA, pay their share of costs for energy that was acquired by PG&E, to serve them prior to their departure.

Customers who receive their electric supply from a third-party provider are also billed a franchise fee surcharge (FFS). PG&E normally collects the FFS directly from customers in the "Total Bundled Rate."[2] The money collected through the FFS is paid to municipalities for the purpose of supporting vital local services such as police and fire protection, education, public health and environmental services. MCE does not bill customers for the FFS. Instead, PG&E collects the FFS to ensure that local governments continue to receive these important revenues.

As of May 2014, the average residential PG&E bill for power generation is $46.74 per month. The MCE Light Green product, which is 50 percent renewable, is $40.13 per month. The Deep Green 100 percent renewable MCE product is $45.21 per month.[3] Both PG&E and MCE charge $32.26 per month for transmission services and MCE customers must pay an additional charge (required by PG&E) to compensate it for generation contracts PG&E has already entered assuming its customers would not join MCE. This is $5.89/month; even with that extra charge MCE Light Green customers pay approximately $0.75 less than PG&E and Deep Green customers pay roughly $5.00 more per month. MCE is attempting to phase out this charge over the next three years.

B. Procurement of Renewable Energy

MCE contracted with Shell Energy North America to procure generation contracts in WA, OR, and CA and is able to offer customers between 50-100%

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[2] Total bundled rates include charges for the following: generation, transmission, distribution, and other taxes/fees. See http://www.pge.com/tariffs/tm2/pdf/ELEC_SCHEDS_E-1.pdf for more information.

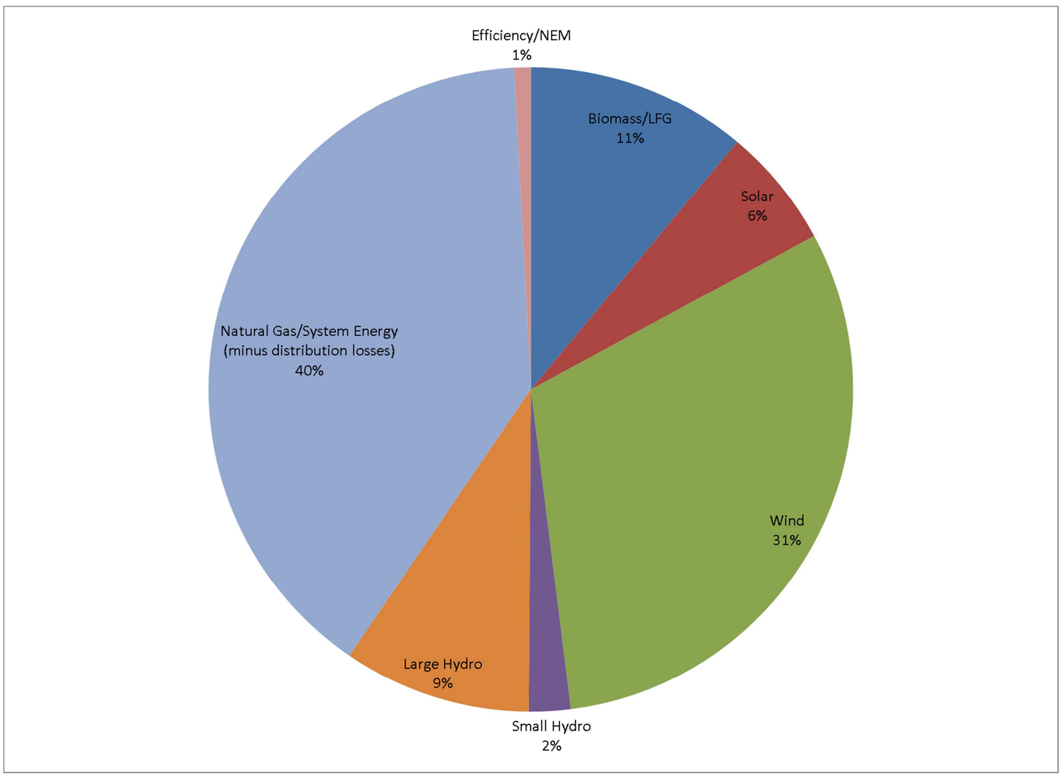
[3] These numbers are constantly changing based on fluctuations in MCE and PG&E rates.

renewable energy. MCE also supports development of local energy generation projects to help meet its load requirements.

- Pending a CPUC decision expected in mid-2014, PG&E will soon offer customers a Green Option (100% renewable power) in the first half of 2015. MCE is an "opt out" program where PG&E's program is an "opt in" program and requires customer to pay a surcharge for program administration and other costs related to solar energy generation.[4]

The pie charts below show the *estimated* power resource mix for MCE and PG&E; actual power resources can only be measured after they are used since available base load (biogas) and intermittent (wind and solar) resources may decrease or increase, i.e. more wind energy is generated than originally estimated.

Figure 1. MCE Estimated 2012 Resource Mix[5]



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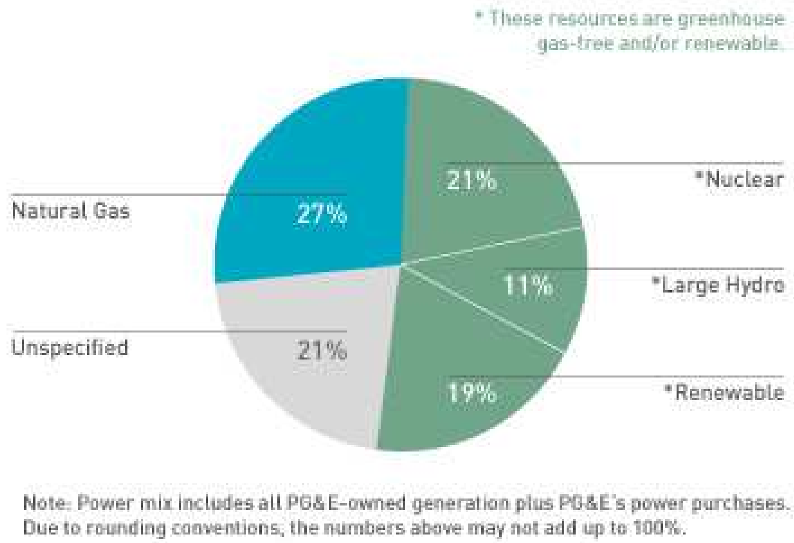
[4] For more information visit: http://www.pge.com/greenoption/.

[5] Provided by MCE on 5/1/2014. The section labeled "Natural Gas/System Energy (minus distribution losses) represents MCE's "unspecified" sources for 2012. If you add up PG&E's Natural Gas and Unspecified sources you get 48% compared to MCE's 40%.

Figure 2. PG&E 2012 Electric Power Mix Delivered to Retail Customers[6]



PG&E and MCE agreed to use 2012 data to report resource mixes so that customers could compare the following:

	Percent of Total Retail Sales (kWh)		
Specific Sources	PG&E	MCE Light Green	MCE Deep Green
Renewable	19%	53%	100%
• Biomass & Biowaste	4%	12%	0%
• Geothermal	5%	0%	0%
• Hydroelectric	2%	2%	0%
• Solar electric	2%	1%	0%
• Wind	6%	38%	100%
Coal	0%	0%	0%
Large Hydroelectric	11%	7%	0%
Natural gas	27%	0%	0%
Nuclear	21%	0%	0%
Other	0%	0%	0%
Unspecified Power	21%	40%	0%

[6] Taken from: http://www.pge.com/myhome/edusafety/systemworks/electric/energymix/.

TOTAL	100%	100%	0%

C. Enrollment

All customers in a jurisdiction are automatically enrolled in the CCA per California law and have four months to opt out.

- Customers who opt out of MCE before or within the first 60 days after the start of service with MCE can return to MCE at any time. Customers who opt out after the first 60 days of service with MCE will be prohibited by PG&E from returning to MCE for one year. If a customer opts out after 60 days, there is a small fee to rejoin: $5 for residential customers and $25 for commercial customers.
- Customers are automatically enrolled in Light Green (50% renewable energy), but can choose Deep Green (100%) at any time.

D. Support for Local Projects

MCE designates half (50%) of all Deep Green revenues for local renewable energy projects. For example, a portion of these funds are being used to install a 1 MW solar installation at the Port of Richmond. The Deep Green Fund is designed to help pay for the pre-development costs of local renewable projects (i.e., within MCE service area) that are separately developed from MCE's Feed-in Tariff (see Section F).

In 2012, the MCE Deep Green program generated revenues of $103,073. MCE Staff allocated approximately 50% of the 2012 Deep Green program revenues, totaling $52,000, to provide for the estimated budget needed to cover pre-development costs for a local renewable development by MCE.

Pre-development costs associated with local renewable energy project development would include, but are not limited to:

Pre-development Task	**Estimated Cost**
Environmental review	$5,000 - $ 15,000
Securing site control	TBD
Permitting	$5,000 - $ 15,000
Design & Engineering	$5,000 - $ 15,000

Interconnection application	$500

MCE commented that the Deep Green Program revenue will be available on a 'first come, first served' basis.

E. Net Energy Metering (NEM) for Renewable Energy Projects

NEM is a program that PG&E and MCE offer to customers who have solar or other small renewable energy generation systems. A special meter tracks the net difference between the amount of electricity produced and the amount of electricity you use during each billing period. When you generate more electricity than you use, you get credited for that excess electricity.

Customers who switch to MCE and are currently enrolled in PG&E's net energy metering program will automatically be enrolled in MCE's net energy metering program. PG&E and MCE will perform a settlement of your account's net charges and credits (known as a "true-up") when your energy provider changes either to MCE or back to PG&E. This settlement will result in a balance due for any usage charges owed to-date, or alternatively will result in a forfeiture of any excess credits on your account at that time.

MCE offers the following NEM rates:

- Premium rates for excess electricity, crediting customers at an extra $0.01/kWh compared to PG&E;
- Excess credits roll over month after month and never zero out;
- Excess credits over $100 can be cashed out annually for their full retail value, rather than PG&E's wholesale[7] compensation rate; and
- MCE bills NEM customers monthly so you do not end up with a year's worth of charges at your true-up.

F. Feed in Tariff (FIT) Program for Renewable Energy Projects

As part of its efforts to promote local renewable energy projects, MCE has a standard-offer contract, called a Feed-In Tariff, available to anyone in the MCE service area (Marin County and Richmond) wishing to sell the power

[7] PG&E purchases large amounts of power on the wholesale market at cheaper rates than what the retail customer is ultimately charged; MCE credits customers at the higher retail rate.

output from small-scale renewable energy projects. The Feed-In Tariff limits individual project size to 1 MW. However, there is capacity under the program for a total of 10 MW (can be spread among many different projects). The program offers a long-term 20-year contract, ensuring a stable power supply for MCE customers, with pricing varying by energy type. MCE's FIT program is designed to support renewable energy projects that have been developed with the primary purpose of exporting (and selling) the significant majority of all power production to MCE. By contrast, MCE's NEM program has been designed to support customer-sited renewable generating projects that have been developed for the primary purpose of offsetting some or all of the customer-generator's typical energy use on their electric bill.[8]

G. SolShares

MCE is now offering a new power choice so that anyone in MCE territory can purchase 100% solar energy from a local solar farm located in its service area. The initial launch is limited to approximately 200 participants, depending on electricity usage. Planning is already underway for solar projects in Novato and Richmond. The cost is about 25% more than MCE's Light Green rate.

This is similar to a program developed by and submitted to the CPUC by PG&E. Under SB 43, utility companies were directed to develop shared solar programs that allow utility customers to buy a "share" of solar energy, even if the solar system is located elsewhere and in turn would receive a credit on their bill for using renewable energy. The rule-making process is on-going; the CPUC is set to release a final decision in July 2014.

IV. Process for Benicia to Join MCE

Joining MCE would be a multi-step process for the City. To become an affiliate member, a jurisdiction must take the following steps:

Step 1) Letter requesting consideration

To begin the process, a community's governing body (council or board) sends a letter requesting consideration for membership. Without this, MCE cannot prepare the necessary study.

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[8] Information taken from: https://mcecleanenergy.com/fit (April 23, 2014).

Step 2) Contract with MCE for the economic feasibility study

The second step is to draft a contract with MCE for the feasibility study. This would cost an amount not to exceed $18,000.

- A load analysis and associated economic analysis ($10,000) is needed to verify MCE's ability to provide cost-effective service to the community considering membership, while continuing to do so for our existing communities/customers.
- Another $8,000 (approximately) covers MCE staff time and PG&E load data fees. This includes community outreach, communications, and additional and/or follow-up analysis, if needed.

Step 3: Request submitted to MCE Board to consider adherence to criteria D, E, F and G below, and to authorize initiation of membership analysis.

Step 4: Following MCE Board approval, staff executes contract with governing body of new jurisdiction to fund costs of membership analysis (MCE's cost).

Staff undertakes and completes analysis, with primary focus on quantitative criteria A, B, and C below.

Step 5: Results of membership analysis presented to governing body of new community and to MCE Board.

- If quantitative affiliate membership criteria are met, community is automatically authorized to complete affiliate membership process.
- If qualitative criteria are not met but other compelling criteria are present, Board may consider approval of an affiliate membership for Benicia.

Step 6: Governing body of new jurisdiction approves resolution requesting membership, ordinance authorizing community choice aggregation service through MCE and signs Joint Power Authority Agreement as an Affiliate Party.

Step 7: MCE Board adopts resolution authorizing membership of the additional incorporated municipality and submits an updated Implementation Plan to CPUC.

Affiliate Membership Criteria:

A. Allowing for MCE service in new community will result in a projected net rate reduction for existing customer base.

B. Offering service in new community will enhance the strength of local programs, including an increase in distributed generation, and will accelerate greenhouse gas reductions on a larger scale.

C. Including new community in MCE service will increase the amount of renewable energy being used in California's energy market.

D. There will be an increase in opportunities to launch and operate MCE energy efficiency programs to reduce energy consumption and reliance on fossil fuels.

E. New opportunities are available to deploy local solar and other distributed renewable generation through the MCE Net Energy Metering Tariff and Feed in Tariff Program.

F. Greater demand for jobs and economic activity is likely to result from service in new community.

H. The addition of the new community is likely to create a stronger voice for MCE at the State and regulatory level.

V. Opposition to CCA

On February 20, 2014, Assembly Member Bradford introduced AB 2145 – Monopoly Protection Bill, which would change the way CCAs are established. Under existing law, a CCA must provide each customer an opportunity to opt out of its CCA program; positive written declaration for participation is not needed, but each customer shall be informed of his or her right to opt out of the program. If no negative declaration is made by the customer regarding participation, the customer shall be served by the community choice aggregation program.

AB 2145 would require a positive declaration from a customer for participation in the community choice aggregation program and that each customer is informed of his or her right to opt in to the program (as of January 1, 2015). The bill would provide that a customer shall be served by the CCA program if an affirmative declaration is made. This could hamper the ability of an aggregator to make an impact in the City, i.e. enroll enough residences to make its model cost effective and beneficial for the environment (GHG reduction potential).

On April 28, the Committee on Utilities and Commerce passed a motion re-referring the bill to the Committee on Appropriations. On April 29, City Council authorized the City Manager to submit a letter opposing AB 2145. As discussed below, quick action to initiate joining MCE would help the City avoid any issues with AB2145 since if passed, it would not go into effect until January 1, 2015.

VI. Recommendations

Identify funding and request Council approval to enter into contract with MCE to conduct technical study.

CCA gives Benicia residents a choice to purchase renewable energy and reduce greenhouse gas (GHG) emissions. Entering into a contract with MCE and conducting a technical study will allow the City to consider the economic and environmental benefits of joining MCE. It will also allow MCE to officially consider the study results and determine whether Benicia meets the membership criteria discussed above. If the City Council approves submission of a letter requesting consideration and the contract for the membership analysis by June, Benicia can most likely be included in the procurement process for Napa County (begins in June). If the contract is not completed in June, procurement for Benicia may have to wait until the 2015 procurement cycle (after April 2015).

However, before Council can approve and authorize submission of the letter, the City needs to identify $18,000 to cover the costs of the study. The CAP Coordinator recognizes that the CSC submitted a grant application to cover the costs described above. If awarded that grant on June 17, the CAP Coordinator could initiate the process described in Section IV.

Finally, if MCE determines that it can accept Benicia as an affiliate member, the City will need to:

- Pass an ordinance authorizing CCA service through MCE and
- Sign the JPA Agreement as an affiliate party.

Both of these actions will require Council approval.

VII. Conclusion

CCA offers customers options – they can continue to purchase energy generated by PG&E (19% renewables) or they can instead opt to purchase 50% or 100% renewable energy from MCE. By offering a cleaner energy option, residents and business owners can choose to reduce additional GHG emissions and help the City meets its 2020 GHG reduction goals.