CITY OF ALBANY
SUSTAINABILITY COMMITTEE AGENDA
STAFF REPORT

Agenda Date: March 20, 2013

SUBJECT: Marin Clean Energy

REPORT BY: Claire Griffing, Sustainability & Transportation Coordinator

---

BACKGROUND

The Sustainability Committee has been asked to explore various options for increased use of renewable energy, including Community Choice Aggregation (CCA). Unlike a municipal utility, a CCA does not own the transmission and delivery systems, but is responsible for purchasing electricity used by residents and businesses. Joining the CCA would allow the City to reduce electricity-related GHG emissions by selecting an electricity-supply portfolio that utilizes more GHG-free energy sources than the current PG&E portfolio.

Pacific Gas and Electric (PG&E) is Albany's energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. Electricity used in Albany is produced at a wide variety of power generation facilities. According to PG&E, their power in 2011 was generated by non-emitting nuclear generation (22 percent), large hydroelectric facilities (18 percent) and renewable resources (19 percent), such as wind, geothermal, biomass and small hydroelectric facilities. The remaining portion (41 percent) came from natural gas, fossil fuels and other sources that generate GHGs.

Electric utility companies such as PG&E are mandated by the State to provide 20% renewable energy currently, and 33% by 2020. CCAs are bound to these same requirements. The current PG&E electricity portfolio is comprised of about 55% GHG-free sources. PG&E also offers existing energy efficiency programs and works with local governments to reduce energy usage and develop stronger GHG-reduction programs.

DISCUSSION

Marin County launched the first CCA in California in May 2010. It is operated by a Joint Powers Authority (Marin Energy Authority) comprised of all cities in Marin County and the City of Richmond. It currently has 93,000 customers and expects to acquire another 30,000 in July as it expands its services to Richmond.

The purpose of the Marin Energy Authority 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. It is the intent of MEA to promote the development and use of a wide

range of renewable energy sources and energy efficiency programs, including but not limited to solar and wind energy production at competitive rates for customers.

Strengths

1. Customer Choice, Low-Income Options, and Competitive Rates

MCE offers two products: Light Green and Deep Green power. The Light Green product provides electric service that has a greater penetration of California Certified renewable resources (50%) than PG&E (< 20%). MCE contends that this energy supply option is cost-competitive with PG&E's retail rates (see chart below). The Deep Green product, which provides 100% California Certified renewable resources for a $0.01 per kWh surcharge on top of the charges for the Light Green product. For the average Marin residential electric customer, the additional cost for Deep Green is $5.40 per month.

In Marin's model, PG&E's special programs, such as tiered pricing, senior, low-income (CARE Program), and disabled programs are still available and customers can "opt-out". MCE has seen a 20% opt-out rate in all of it jurisdictions. This is evenly split with commercial and residential customers.

Light Green power customers are currently paying less than PG&E rates for a cleaner product. As of January 1, 2013, based on average customer usage, residential customers who choose MCE's Light Green 50% renewable electricity will save approximately $1.60 per month.

As of January 1, 2013, based on average customer usage, commercial customers will save $6.95 per winter month and will save $15.42 per summer month for MCE's Light Green 50% renewable electricity.

2. Renewable Incentive Programs

MCE incentivizes renewable energy generation through feed-in tariffs and one of the best net energy metering programs in the state. The Feed-In Tariff Program allows owners/developers of eligible small-scale renewable energy projects up to 1 MW in size, located in MEA service territory, to become wholesale generation suppliers to MCE at $137.66 per MWh. Any Marin Clean Energy customer with an electric generation system of less than 1,000 kilowatts is eligible for MCE's Net Energy Metering Program. A meter tracks the net difference between the amount of electricity a customer produces and the amount of electricity consumed during each billing period. A credit is generated for excess energy produced at premium rates. MCE is also currently investing in 14 renewable power projects.

3. Energy Efficiency Programs

In November 2012, the CPUC approved MCE's expanded energy efficiency program to include website tools for single family demand reduction, incentives for comprehensive energy retrofits for small businesses and multi-family residences and an On-Bill Repayment financing option. MCE is receiving funding from the public goods charge that PG&E collects on customers' bills to implement these energy efficiency programs.

4. Strong Portfolio

MCE offers a deep green portfolio that includes 31% solar and 69% wind power. The light green option also includes clean hydro from San Joaquin, biomass, and biogas. In 2011, MCE's power supply was more than 66% carbon-free.

5. Established Program

MCE is the only fully-operating CCA in California and has been running a successful program since 2010. It has slowly acquired all cities in Marin as well as the City of Richmond. The cost to join an existing CCA is significantly less than starting our own. The process would be much quicker as well.

In Richmond, MCE has provided all the outreach to customers, including the 5 letters it sends out before automatically enrolling customers in the light green program.

Concerns

1. Use of Renewable Energy Certificates (RECs)

RECs are tradable, non-tangible energy certificates that represent proof that 1 MWh of electricity was generated from an eligible renewable energy resource. MCE uses RECs in place of purchasing actual renewable power. In 2011, the Light Green Option was 23% RECs and the Deep Green Option was 80% RECs. RECs allow MCE to support renewable energy development and protect the environment when green power products are not locally available. The goal is to reduce the use of RECs over time as they establish more renewable projects.

2. Contracts

MCE has been criticized for its main contract with Shell Energy North America because of its association with the petroleum industry giant and its history of human right violations. The initial decision to contract with Shell was done thoughtfully, and MCE had been satisfied with the contract. Shell acts as a broker for clean energy, and the contract is set to expire in 2017. MCE also committed to a long-term natural gas contract before the price dropped, which affects their customer rates.

Although they do have contracts to create more renewable energy, MCE has been criticized for not having an aggressive program to develop their own renewable energy assets.

3. Governance

It is important to determine how the City will be represented on the Marin Energy Authority's Board and whether it will be able to represent the interests and values of our citizens among 13 other jurisdictions in Marin and Richmond.

FINANCIAL IMPACT

The Marin Energy Authority protects individual cities and the County from financial liability. MCE is financed by the revenues received from customers based on the electricity they consume. MCE is self-funded and does not use any tax dollars or public funds. The cost of the economic analysis for Albany to

join would likely be $25,000 - $35,000. Another $1,000 would be required to obtain load data from PG&E.

NEXT STEPS

City staff recommends that the Sustainability Committee receive a presentation from Marin Clean Energy at the March 20, 2013 meeting. Next steps for the Committee after the presentation include determining how to fund the feasibility study, and ultimately making recommendations to Council on how to proceed.

Next steps for City staff include securing funding, obtaining load data, researching MCE's current energy contracts and portfolio, any plans for future renewable projects, and determining how their energy efficiency programs would extend to Albany. MCE must obtain board approval to conduct the feasibility study and ultimately to expand to Albany.