

APPENDIX 3

CCE (aka CCA) Frequently Asked Questions

Renewable Energy Questions

Q: What are fossil fuels?

A: Energy sources formed by the decay of plants, dinosaurs, and other animals over millions of years; coal, oil, and natural gas are fossil fuels. These energy reserves form so slowly in comparison to our rate of energy use that they are regarded as a finite resource.

Q: Can municipal solid waste generate energy?

A: Yes. Trash or garbage is used to produce heat or electricity by burning it or by capturing the gases it gives off and using them as fuel.

Q: What is nonrenewable energy?

A: Fuels that are not naturally replaced as we use them. This includes fossil fuels, nuclear fuels, and municipal solid waste.

Q: What is renewable energy?

A: Sources of energy that are either continuously resupplied by the sun or tap inexhaustible resources. In California, qualified renewable energy sources include wind, solar, biomass, small hydropower, and geothermal energy.

Q: What types of renewable energy can a CCA purchase?

A: CCA's purchase or develop renewable energy sources that are compliant with the State's renewable portfolio standard (RPS) including solar, wind, small hydro, geothermal, biomass and biogas.

Q: How does solar energy produce electricity?

A: Solar panels contain photovoltaics – a technology that uses semiconductors to directly convert light into electricity.

Q: How is energy generated from wind?

A: Wind is used to turn a turbine to generate electricity which is connected to the grid. A wind farm is another name for a wind power plant where multiple turbines are usually spread out over a relatively large area of land.

Q: What is geothermal energy?

A: Heat energy stored in the Earth's crust, which can be harnessed to produce electricity or heat water and living spaces.

Q: What is hydropower energy?

A: The energy of flowing water, which can be harnessed to make electricity or to do mechanical work. Note that hydropower is considered a greenhouse gas free resource, but only “small hydro” generated from power plants smaller than 30MW qualifies as a CA renewable resource.

Q. What about nuclear -- is that considered a clean power resource?

A. Nuclear energy is considered a greenhouse gas free resource but it does not qualify as a renewable resource. Operational CCAs in California have not used nuclear in their power portfolios and have instead relied on hydropower to boost their GHG free energy content.

Q: What is renewable energy from biomass?

A: In the renewable energy industry, biomass usually refers to the wood, wood-processing residues, agricultural residues, and energy crops that are used to create electricity, generate heat, or produce liquid transportation fuels.

Q: Doesn't biogas contain methane and pollute more than natural gas or coal?

A: Natural gas produces half the CO₂ as coal. Biomass digestion systems do create methane (biogas), but the systems are closed-loop so the methane can be recovered as a fuel. Biogas systems require much less energy input to create methane than natural gas or coal production. Biogas systems use more efficient natural processes. Natural gas and coal use energy intensive methods to; extract, transport, and convert these raw products even before they can be processed into usable fuel. The primary difference between the greenhouse gas effects from biogas versus natural gas is in the extraction, production and transportation of natural gas which adds more CO₂ than just the utilization of the fuel.

Q: What are energy crops?

A: Crops grown specifically for their fuel value, including food crops such as corn and sugarcane, and nonfood crops such as willow trees and switch grass.

Q: What is renewable energy from biogas?

A: *Biogas* is a fuel gas, composed of a mixture consisting of 65% methane (CH₄) and of 35% CO₂. It is a *renewable source of energy* resulting from biomass. *Biogas* is produced by the breakdown of organic matter in the absence of oxygen (anaerobic digestion). *Biogas* can come from animal manure or from organic solid waste that is processed at a local resource recovery center in a bio-digester.

Q: Could biomass be generated in the Monterey Bay Region?

A: Yes. The Salinas Valley Solid Waste Authority and the Monterey Regional Waste Management District have both expressed interest in selling renewable energy generated from the production of biogas. Other local resource recovery centers could also be potential candidates for producing biogas. CCAs are a potential buyer of biogas electricity that would be generated and consumed close to the source of production.

Q: Why is more renewable energy beneficial?

A: The investment in renewable energy provides economic, environmental and national security benefits.

- More jobs are created from the development of renewable energy than fossil fuel energy.
- Buildings consume 42% of America's energy (and 72% of its electricity). Transportation consumes 71% of U.S. oil – (13 million barrels/day). Eliminating waste in the built environment and transportation sectors will make America stronger and safer by keeping that \$1 billion/day oil-import cost at home. The U.S. would be less buffeted by volatile oil prices and less anxious to defend access to oil.
- The reduction of harmful greenhouse gas emissions is critical to combat the devastating and costly challenges of global warming and pollution.

Q: Why doesn't PG&E buy more renewable energy?

A: Renewable energy is currently more expensive than fossil based resources, PG&E has many long-standing power contracts, and their business model requires shareholder profits. The extra cost of renewable energy, combined with PG&E's profit margin, makes it more difficult for PG&E to rapidly shift to clean energy and keep their electricity rates from rising.

Q: How much renewable energy does PG&E provide?

A: As of 2015, PG&E reported 27% renewable energy sources in their electricity portfolio. As per the State's renewable portfolio standard (RPS), PG&E and all utilities are required to provide a minimum 33% renewable energy in their electricity portfolio by 2020. PG&E is now offering a voluntary 100% clean energy option at a rate premium price to boost their renewable energy performance.

Q: How much renewable energy can a CCA provide?

A: When local communities have control over electricity purchasing they can determine how much clean electrical energy they want to offer their customers and at what price, subject to compliance with the State Renewable Portfolio Standard (RPS) requirement. To date, all operational CCAs have significantly exceeded the utility portfolio and State RPS requirements.

- For example, in 2010, Marin Clean Energy (MCE) began service with 26% clean energy at comparable rates to PG&E at a time when the utility was providing only 17% clean energy. MCE is now delivering 56% clean energy in its default "Light Green" product and is also offering a 100% clean energy option for a slight premium.

Q. What is a Renewable Energy Certificate (REC)?

A. Similar in concept to carbon credits, RECs were established by the US-EPA in the early 1990s to serve as a market stimulus for new renewable power generation, regardless of production location. A REC is a certificate of proof that one MWh of electricity was generated and delivered to the grid by an eligible renewable energy resource. A REC can be sold together with the underlying electrons (bundled) or decoupled from the electrons and sold separately, creating an "unbundled" REC. Legally speaking, it is the REC (not the electron) that confers the

environmental attribute of the power that was developed. RECs are tracked by registries and may not be double counted; they may however, be transferred and sold if not already used for compliance and thus retired. Most states do not recognize the difference between bundled and unbundled RECs for compliance purposes. The California renewable portfolio standard, however, uses a compliance scale which gives category 1 (in-state bundled RECs) greatest value, category 2 bundled RECs (primarily from neighboring states) next level of value, and least compliance value to “category 3” unbundled RECs. The costs of each REC product correlate similarly from highest to lowest cost. Most operational CCAs in California use category 1 and 2 RECs and are either phasing out or limiting their use of category 3 RECs in their power portfolios.

Cost Questions

Q: Will my electricity rates go up?

A: The goal of a local CCA is to provide more clean energy at competitive generation rates to the utility, either at the same price or slightly lower. CCAs procure and design their own energy portfolios and set their own electricity rates.

Q: Will a local CCA result in rate parity?

A: A technical feasibility study published in March 2016 indicates that Monterey Bay Community Power will be able to achieve rate parity or perhaps slightly lower rates than PG&E depending on its power mix and percentage of renewables in its portfolio.

Q. What is the Power Charge Indifference Adjustment (PCIA) and how does it affect my bill?

A. The Power Charge Indifference Adjustment (PCIA) is an “exit fee” charged by the utility to cover its stranded energy costs resulting from departing customer load. It is calculated annually by the CPUC based on market price benchmarks and assessed to customers who take service from an electric generation provider (e.g. a CCA) other than the incumbent utility. The PCIA shows as a surcharge on a customer’s bill but is taken into account when a CCA sets rates in order to remain cost competitive or cost neutral with the utility. Operational CCAs have called for PCIA reforms to improve transparency of the methodology and calculations, require third party audits of utility contracts used in the PCIA calculations, find other solutions to avoid costs and over procurement, and a sun setting of the PCIA over a fixed period of time.

Q: How do CCAs generate profit?

A: CCAs are run by a not-for-profit local public agency and operate as a market driven social enterprise that generates its own revenue. Ratepayers provide revenue, and this revenue provides the local CCA with a surplus that can be used to fund local electricity generation, lower electricity rates, and pay off debt.

Q: How do CCAs fund the construction of the Distributed Generation + Intelligent Grid?

A: CCAs can provide funding for renewable energy projects and energy efficiency programs. CCAs can be a catalyst for local build-out of the DG + IG system of the 21st Century by providing funding to implement new technology.

Q: How would solar be financed?

A: Currently, it is difficult for customers to sell excess solar energy back to PG&E. Those that do make an arrangement to sell power to PG&E are offered less than what their power is worth. Under a locally designed net energy metering program, CCAs can provide an incentive by paying property owners fair market rates for the excess energy that their solar systems produce. Or, a CCA can include a Feed in Tariff program that allows the customer to sell all its solar generation to the CCA through a power purchase agreement with favorable terms and pricing. In addition, CCAs could provide 0% loans to leverage expansion of roof-top solar generation.

Q: How does a CCA procure electricity?

A: A CCA must submit a plan to the California Public Utilities commission that specifies how it will purchase 115% of the estimated electricity demand for its area for a period of one year. CCAs negotiate the purchase of electricity (renewable and otherwise) on the open market by entering into power purchase agreements with energy providers. All energy that is generated is identified by certificates that guarantee the type of energy and location of production. CCAs must also enter into a contract with PG&E to transmit the electricity that the CCA buys over PG&E's transmission lines. The latter is part of the CCA/utility service agreement that is codified before program launch.

Q: How does a CCA affect the Investor Owned Utility (PG&E)?

A: The CCA takes control of the procurement of electricity, decides what mix of renewable energy will be delivered to its customers and sets the electricity rates. PG&E continues to provide natural gas and other energy sources, maintain the transmission and power distribution system ("the grid"), provide consolidated customer billing and customer service in the event of a power outage or delivery problem.

Q: Where does the start-up money for a CCA come from?

A: The Phase I Technical Feasibility Study is estimated to cost \$150,000, which was paid through private donations. If a CCA proves feasible in the Monterey Bay Region, then a Phase II Implementation Plan and other elements of program start-up will be required. The cost of Phase II implementation steps will be identified as part of the Phase 1 Study. Program implementation can be funded with a combination of borrowed revenues, private capital, and public/private grant sources. Borrowed funds would be repaid with interest from the revenue generated by the CCA once it is operational and generating a positive cash flow.

Economic Questions

Q: Is there an economic benefit to having a CCA in the local region?

A: Yes. CCAs allow a local region to capture the electrical generation revenue that has been going out of the area to PG&E. Once the cost of program operations and power is covered, CCAs may use a portion of their surplus revenue (formerly PG&E profit) to fund local renewable energy projects, energy efficiency and other energy related programs. This is a new source of

local revenue that will help achieve local climate goals, stabilize customer rates and generate new jobs.

Q: What is an economic multiplier?

A: An economic multiplier effect occurs when a change in spending causes a disproportionate change in total demand.

Q: Do CCAs help provide a local economic multiplier?

A: Yes. CCAs may redirect their surplus revenue to fund clean energy projects and programs. This creates new jobs and new income for people in the region. As people spend money in their communities, these dollars create new demand for goods and services. The multiplier effect represents both the new income from clean energy jobs, and the jobs created to support this additional spending.

Q: Does the formation of a CCA cost PG&E jobs?

A: No. One of the tertiary goals of a CCA is to help stimulate new jobs in the energy sector. The jobs currently serving the PG&E power generation, transmission, grid maintenance and customer billing functions will be retained. Large utility scale energy projects will be constructed by PG&E and their workforce. In addition, smaller scale, locally distributed renewable energy projects may be facilitated by local CCAs in partnership with independent power producers, creating net new jobs for the region and its local communities.

Q: Has Marin Clean Energy developed renewable energy projects?

A: The first obligation for MCE (and any new CCA) is to repay their start-up loans and establish a healthy reserve fund before using surplus revenue to fund local projects. Having now done that, MCE has several local renewable projects in the works, including a 10.5 MW solar facility in the city of Richmond which has provided both local and union jobs. MCE is also pursuing a variety of other programs to increase the percentage of new clean energy as well as energy storage and demand reduction technologies.

Q: How can a CCA be cost competitive with PG&E?

A: CCAs have lower costs because they: can procure power in favorable power market conditions, do not pay shareholder profits or corporate salaries, operate as not-for-profit public agencies with lower overhead and borrowing costs.

Governance Questions

Q: Who is going to buy the electrical power for the cities and counties?

A: Energy procurement would be done by a locally managed CCA with energy procurement specialists to assist in the structuring and terms of energy supply contracts. The agency would be managed as a Joint Powers Authority governed by a local board appointed by participating

cities and counties. All agency activities would be transparent to rate payers via regular local public meetings and deliberations.

Q: Aren't CCAs replicating the California Public Utilities Commission (CPUC)?

A: No. The CPUC regulates the State's investor-owned utilities (including PG&E) and has jurisdiction over some operational elements and procurement requirements of CCA programs. However, CCAs bring the process of energy procurement and energy choice to the local region. This gives residents and business owners more opportunity to participate in the energy procurement and investment process.

Q: Would CCA customers still pay for energy transmission and distribution?

A: Yes. CCAs only provide the electric generation and procurement piece of the energy puzzle. Transmission, grid/power-line maintenance and customer service in the event of a power outage is still provided by PG&E. Customers continue to pay for those services through their PG&E bills just as they always have.

Customer Service Questions

Q: As a customer, will I still get a bill from PG&E?

A: Yes, your consolidated utility bill will still come from PG&E and PG&E will continue to provide you with customer service. PG&E will continue to bill you for your natural gas and will indicate that you are buying electricity from your local CCA. The customer billing and payment process is exactly the same under a CCA as it is with PG&E.

Q: Who do I call when my power goes out?

A: PG&E is responsible for the transmission of gas and electricity. PG&E will still maintain the utility grid. Any issues with power delivery will continue to be handled by PG&E.

Q: Can I opt in or out of a CCA program?

A: Per state law, CCA programs are designed as "opt-out" programs which means that customers are automatically enrolled with the option to opt-out at any time and remain with bundled utility service. Customers are notified a minimum of 4 times over 120 days and may opt-out at any time. Customers may also opt back in to the CCA program after a 12-month hold period at PG&E.

Q: Can I get rid of PG&E smart meter?

A: Customer related PG&E service issues, including smart meters, are still handled by PG&E.

Q: If we installed solar panels on our building would we need a Power Purchase Agreement to sell our excess energy to a CCA?

A: No. Under a net energy metering program, the CCA would be able to offer property owners fair market rates for their excess energy production without a PPA. A longer-term PPA for small-

distributed solar projects (usually below 1 MW) could be contemplated under a feed-in-tariff program.

Q: Would the Monterey Bay CCA propose an unaffordable clean energy program?

A: No. The program is focused on delivering more clean energy with fewer greenhouse gas emissions at rates that are equal to or below PG&E rates. The program will also offer other product options with higher or 100% renewable energy which could carry a small price premium. These options would be offered to customers on a voluntary basis.

Phase I Technical Study - Process Questions

Q: What role does the Community Foundation Santa Cruz County (CFSCC) have in this project?

A: The CFSCC is the fiscal sponsor for the Monterey Bay CCA Phase I Technical Feasibility Study.

Q: Who paid for the Phase I Technical Feasibility Study?

A: Private donors and grants covered the costs of the Phase I Technical Study through charitable contributions. There have been no general fund impacts to participating cities and counties.

Q: What is the Project Development Advisory Committee (PDAC)?

A: The PDAC is the project oversight group comprised of one representative from each participating city, county or joint powers authority. The PDAC directed the Phase I Technical Feasibility Study and prepared a work plan and recommendations to carry the project forward into implementation.

Q: Can the public come to PDAC meetings?

A: Yes. All PDAC meetings are open to the public. Public notice will be given on the website in advance of all PDAC meetings.

Q: What does the Phase I Technical Feasibility Study focus on?

A: The Technical Study was published in March 2016 and focused on the following program elements: 1) cost/benefit/risk analysis, 2) procurement/power supply options, 3) rate/price modeling, 4) employment projections, 5) potential for greenhouse gas emissions/reductions, and 6) program start-up and early operations costs.

Environmental Compliance Questions

Q: If a CCA is created for the Monterey Bay Region, who would get credit for the greenhouse gas reductions?

A: CCA's have proven to be an effective method for rapidly achieving greenhouse gas reduction targets in municipal climate action plans. Participating communities are able to "claim" their pro-rata share of GHG reductions for compliance with CAP goals. It should be noted, however,

that GHG reductions are not formally credited or allocated to any one entity other than the CCA agency itself.

Q: Have CCAs proven to improve air quality?

A: Yes. Marin Clean Energy and Sonoma Clean Power have dramatically reduced their County's greenhouse gas emissions. MCE met the State's AB32 Global Warming Solutions Act targets after only 3 years of operation (several years ahead of schedule), and SCP experienced a 40% reduction in GHG emissions after only a year of operation, due primarily to the large percentage of hydropower in their supply portfolio. Reduced GHGs means cleaner air.

Policy Questions

Q: Are there advantages to including jurisdictions from the Tri-county Area?

A: Yes. There are economies of scale associated with power procurement and the ability to spread costs across a larger customer base. It is possible to phase in cities and customers over a period of time and for jurisdictions to join the JPA even after the initial program has launched.

Q: Is there a connection between CCA and various Desalinization Plant Proposals?

A: No, there is not a direct connection. CCAs offer a variety of community benefits independent from any desalinization plant proposals. However, CCAs would provide an additional source of local clean energy that could help reduce or off-set the increased energy demand and greenhouse gas emissions of any proposed desalinization plant.

Q: Could a CCA offer 100% clean energy?

A: Yes, CCAs can have different power products and rate structures to offer customers a choice in how green they want to go. The Joint Powers Authority would determine how much clean energy would be offered to local customers based on policy goals, customer needs, and the need to maintain rate competition with PG&E.

Q: Does PG&E offer a 100% clean energy option?

A: Yes, PG&E recently launched a new 'solar choice' option program offered to customers on a voluntary, cost-premium basis of 3.58 cents/kwh.

Q: What is Property Assessed Clean Energy (PACE) program?

A: Based on AB811, several counties in the State of California are piloting various approaches to set up the California First Program which is designed to significantly reduce greenhouse gas emissions. This program allows property owners to purchase renewable energy technologies through reimbursable grants to significantly reduce costs through energy savings.

Q: Would a CCA be beneficial to a community if they are already pursuing a Property Assessed Clean Energy (PACE) program:

A: Yes. Forming a CCA in the Monterey Bay Region would create a revenue generating partner for local PACE programs. This would help to:

- Provide additional an additional funding source to support the marketing and installation of solar, wind or thermal renewable generation systems for businesses and residences.
- Pay property owners fair market rates for their excess energy.
- Ensure that rates remain low and stable so that customers can realize the cost savings of their renewable energy generation.