

## **SECTION II**

### **INTRODUCTION TO COMMUNITY CHOICE ENERGY**

#### **How Local Energy Aggregation Works**

Enabled by California legislation (AB 117 and SB 790), community choice energy (CCE) allows cities and counties to pool their residential, business and municipal electricity loads, and to purchase power (or generate it) on their behalf. In this model, the current investor owned utility, PG&E, remains an essential partner. Energy transmission, distribution, repair, and customer service functions remain with PG&E, which also continues to provide customer billing. CCE customers are automatically enrolled over time unless they wish to opt out and continue to buy their electricity from PG&E. CCE charges appear as a new section on the current PG&E customer bill (see APPENDIX 10.) All other charges are the same and beneficial programs continue (i.e., CARE, Medical Baseline, and other low-income programs.)

A regional CCE joint powers agency (CCE-JPA) leverages the market power of group purchasing and local control. It can be designed to achieve a number of economic vitality and environmental public policy and program objectives, such as contributing millions of dollars to the local economy, creating local jobs, increasing renewable resources in the community's energy portfolio, reducing greenhouse gas emissions, promoting local development of renewable energy installations and offering comprehensive energy efficiency programs.

In short, a regional CCE-JPA purchases green electricity on the open market and PG&E delivers the energy, maintains the lines and bills the customers. The customers benefit from affordable rates, local control and cleaner energy. CCE offers a choice of service providers, where no choice exists now. By establishing a CCE-JPA, local governments choose to give choice to their constituents.

#### **Why Investigate Community Choice Energy?**

Local Control: Community choice energy puts control of electricity purchasing and pricing into local hands and allows the community to determine what type of energy mix best serves the needs of the region. Right now, consumers do not have these choices. The CCE's local governing Board significantly increases transparent accountability because consumers have direct access to the decision makers as well as the deliberation process. CCE agencies are funded through CCE customers paying their electricity bills, not by taxes. Creating and maintaining a local public agency that is well managed, financially self-sustaining and provides clean locally produced energy strengthens the capacity and resilience of the entire region.

Economic Vitality: Local ratepayer money stays local. Surplus revenues that would normally flow to the investor owned utility will stay in the community to help fund renewable energy projects, create jobs, and stimulate the local economy. The value of redirected revenue over time is millions of dollars. The opportunity to use that revenue to build local renewable energy generation facilities, EV charging stations, energy storage capacity as well as increase the energy efficiency of our buildings is significant and key to the success of a local CCE agency. Surplus revenues may also be used to stabilize or lower consumer rates.

Meeting Local Climate Action Plan Goals: Establishing a regional CCE agency is the single most impactful strategy for meeting state and regional climate goals. In the Monterey Bay Region, roughly half of the greenhouse gas emissions are caused by energy use. Of all the beneficial initiatives identified in the region's 21 climate action plans, CCE is the one that will result in the highest reduction of emissions within just a few years of establishing the agency. It is the one program that we can implement that will make the biggest difference before the "tipping point" of carbon emissions is reached worldwide.

Creating Market Competition: Market competition drives down costs, which has happened in two other regions within California.

Providing Cleaner Energy with the Same Rates: Community choice energy agencies can deliver more renewable energy than the investor owned utility at the same rate. Supply autonomy allows for the greater use of renewable sources (solar, wind, wave, biomass) The two well-established CCEs in California have significantly increased the renewables in their portfolios without charging more than PG&E and, in some cases, are offering meaningful rate savings. The Monterey Bay Community Power technical study indicates we can more than double the renewables in the regional portfolio at the same rate charged by the investor owned utility. That increase could result in a portfolio with 59% renewable energy as compared to the current 27% provided by PG&E.

Maintaining the Same Reliable Service from PG&E: Energy transmission, line maintenance and customer service remains the responsibility of PG&E. PG&E will continue to handle all customer service and support of the grid. Current low-income programs remain available to customers, (i.e., CARE, Medical Baseline, etc.)

Stimulating Private Sector Innovation and Workforce Development:

A regional CCE agency has the ability to create policy and financial incentives that support private sector entities as well as work force development initiatives. Private sector businesses and non-profits focused on developing innovative energy technologies, products and services could be incentivized to locate or expand their business here. The region's educational institutions, apprenticeship programs and job placement programs already provide green jobs training and careers which could receive significant support from a regional CCE-JPA.

## Basic Risks and Mitigations

Establishing a regional CCE-JPA offers many opportunities for the Monterey Bay region but presents some risk. Building solid governance and operational capacity as an organization within the first few years is the first and foremost strategy in mitigating those risks. Following the best practices and principles as recommended by the regional Project Development Advisory Committee and outlined in the cover report can ensure that appropriate capacity is built and a strong foundation is established to serve the region for many successful years.

The other main risks relate to market price fluctuations and regulatory uncertainty. California's energy markets have been stable for several years and prices for electricity from renewable and conventional energy resources are low. The current buyer's market is expected to continue for the next several years because of the excess energy supplies. A local CCE agency can protect itself from future market shifts by forecasting with conservative rates as well as using diverse portfolios that include longer-term energy supplies and investments in local power projects and programs that lower the load needed and help fix the cost of the region's supply. A long-term goal of regional self-sufficiency that aims to provide 100% of our electricity supply from local renewable sources is a highly effective mitigation strategy that addresses future market fluctuations and ensures an abundant supply of clean, affordable energy for future generations. By partnering with other CCEs from around the State and proactively engaging in proceedings with the State legislature and regulatory Boards, regulatory issues may be effectively managed. Here is an outline of short-term and long-term risks:

### Governance and Operational Risks:

- Governing Board with too many members without the appropriate expertise, lowering flexibility and timeliness in decision making
- Not aligning with best practices based on other CCE experiences
- Opt-out rate uncertainty
- Credit availability for power supply

### Market Risks:

- PG&E rate uncertainty (generation rates and exit fees)
- Length of current favorable wholesale energy prices
- Availability of large hydro resources to meet carbon-free content goals

### Political and Regulatory Uncertainties:

- Future CCE-specific State legislation
- Regulatory changes around renewable and capacity mandates
- Rulings that adversely affect the establishment and operations of CCEs from the California Public Utilities Commission (CPUC) in response to requests from the investor owned utilities

## **Snapshots of Success - Marin Clean Energy & Sonoma Clean Power**

The Project Development Advisory Committee and Project Team have been inspired and guided by the proven models of the two established multi-jurisdictional CCE programs in California. Marina Clean Energy and Sonoma Clean Power are offering their customers greener power with a mix that features more renewable sources at competitive rates, and for some plans, lower rates. Both are offering enhanced programs for energy efficiency and locally sourced solar while performing well financially and operationally.

### Marin Clean Energy – Results after six years of full operations

- Serving 170,500 customers, 80% of the total customer meters
- Annual Budget - \$145,993,097
- Reserves- Forecasted to increase to \$16,696,319 by the end of the current fiscal year (March 31, 2016)
- Regular customer plan – 50% renewable portfolio at comparable rates versus 27% renewables from PG&E
- 100% renewable energy customer plan- \$5/more per month than PG&E rates
- 100% Local Solar customer plan- 20% more than PG&E rates
- Key accomplishments - Has created 2400 jobs and has 10 renewable projects completed are under way
- Start-up costs completely paid off

### Sonoma Clean Power – Results after two years of full operations

- Serving 196,206 customers, 89% of the total customer meters
- Annual Budget - \$165,495,000
- Reserves - Forecasted to increase to \$30,000,000 by the end of the current fiscal year (March 31, 2016).
- Regular customer plan – 80% Carbon Free with 36% renewables, 44% hydro energy and 8% less than PG&E rates, versus 27% renewables from PG&E
- EverGreen customer plan - 100 % local renewable energy at 12% more than PG&E rates
- Key Accomplishments - Saved customers \$13 million in its first year of operations and has met California’s 2020 renewable energy targets
- \$1.3 million remaining of start-up costs to pay off

## **Elements of the Technical Feasibility Study**

The technical study was conducted for the purpose of describing the potential benefits and liabilities with forming a CCE agency, including the overall size of the program, forecasted future demand, resource availability, and the ability to be rate competitive. The study analyzed different possible power supply scenarios and the impact on greenhouse gas emissions, as well as the potential for local job creation and surplus

revenues. Estimated CCE-JPA start-up costs were identified and a risk assessment completed. For the Monterey Bay Community Power partnership, the analysis was conducted two ways:

- For the entire tri-county region inclusive of all 18 cities; and
- Each individual county inclusive of the cities within its boundaries.

The executive summary of the technical study (Section IV) describes in greater detail each of these elements. The full study is in APPENDIX 4 with proformas for each scenario for the entire tri-county region as well as for the individual counties. Also included in APPENDIX 4 is an independent peer evaluation of the technical study as well as responses to the peer's comments. The final version of the technical study will incorporate input from the PDAC and will address issues identified by the peer reviewer.