

# **PENINSULA CLEAN ENERGY**

## **DRAFT COMMUNITY CHOICE AGGREGATION IMPLEMENTATION PLAN AND STATEMENT OF INTENT**

**March 2016**

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## CHAPTER 1 – Introduction

The Peninsula Clean Energy Authority (“PCEA”) is a public agency located within the geographic boundaries of San Mateo County, formed for the purposes of implementing a community choice aggregation (“CCA”) program (the “PCE Program” or “PCE”). Member Agencies of the PCEA include the twenty (20) municipalities located within the County of San Mateo (“County”) as well as the unincorporated areas of the County (together, the “Members”), all of which have elected to allow the PCEA to provide electric generation service within their respective jurisdictions. Currently, the following Members have elected to join the PCEA:

Town of Atherton	City of Millbrae
City of Belmont	City of Pacifica
City of Brisbane	City of Portola Valley
City of Burlingame	City of Redwood City
Town of Colma	City of San Bruno
City of Daly City	City of San Carlos
City of East Palo Alto	City of San Mateo
City of Foster City	City of South San Francisco
City of Half Moon Bay	Town of Woodside
Town of Hillsborough	Unincorporated San Mateo County
City of Menlo Park	

This Implementation Plan and Statement of Intent (“Implementation Plan”) describes the PCEA’s plans to implement a voluntary CCA program for electric customers within the jurisdictional boundaries of its Member Agencies that currently take bundled electric service from Pacific Gas and Electric Company (“PG&E”). The PCE Program will give electricity customers the opportunity to join together to procure electricity from competitive suppliers, with such electricity being delivered over PG&E’s transmission and distribution system. The planned start date for the Program is October 1, 2016 (subject to the final review and approval of the PCEA Governing Board). All current PG&E customers within the PCEA service area will receive information describing the PCE Program and will have multiple opportunities to express their desire to remain full requirement (“bundled”) customers of PG&E, in which case they will not be enrolled. Thus, participation in the PCE Program is completely voluntary; however, customers, as provided by law, will be automatically enrolled according to the anticipated phase-in schedule later described in Chapter 5 unless they affirmatively elect to opt-out.

Implementation of PCE will enable customers within PCEA’s service area to take advantage of the opportunities granted by Assembly Bill 117 (“AB 117”), the Community Choice Aggregation Law. The PCEA’s primary objectives in implementing this Program are to provide cost competitive electric services; reduce electric sector greenhouse gas emissions within the County; stimulate and sustain the local economy by developing local jobs in renewable energy and energy

efficiency; implement energy efficiency and demand reduction programs; and develop long-term rate stability and energy reliability for residents through local control. The prospective benefits to consumers include a substantial increase in renewable energy supply, stable and competitive electric rates, public participation in determining which technologies are utilized to meet local electricity needs, and local/regional economic benefits.

To ensure successful operation of the Program, the PCEA will receive assistance from experienced energy suppliers and contractors in providing energy services to Program customers. Following a competitive solicitation process and subsequent contract negotiations (which are expected to occur during the months of April, May and June 2016), one or more qualified energy services providers will be selected to support PCE implementation, providing requisite energy products and scheduling coordinator services to meet the electric energy requirements of PCE's initial customer phase. Information regarding the anticipated solicitation process for PCE's initial energy services providers is contained in Chapter 10. As planned, final selection of PCE's initial energy supplier(s) will be made by the PCEA Board following administration of the aforementioned solicitation process and related contract negotiations.

The PCEA's Implementation Plan reflects a collaborative effort among the PCEA, its Members, the PCE Advisory Committee and members of the public to bring the benefits of competition and choice to residents and businesses within the Member communities. By exercising its legal right to form a CCA Program, PCEA will enable its Members' constituents to access the competitive market for energy products and services for purposes of obtaining access to increased clean energy supplies and resultant reductions in GHG emissions. Absent action by the PCEA and its individual Members, most customers would have no ability to choose an electric supplier and would remain captive customers of the incumbent utility.

The California Public Utilities Code provides the relevant legal authority for the PCEA to become a Community Choice Aggregator and invests the California Public Utilities Commission ("CPUC" or "Commission") with the responsibility for establishing the cost recovery mechanism that must be in place before customers can begin receiving electrical service through the PCE Program. The CPUC also has responsibility for registering the PCEA as a Community Choice Aggregator and ensuring compliance with basic consumer protection rules. The Public Utilities Code requires that an Implementation Plan be adopted at a duly noticed public hearing and that it be filed with the Commission in order for the Commission to determine the cost recovery mechanism to be paid by customers of the Program in order to prevent shifting of costs to bundled customers of the incumbent utility.

On **March 31, 2016**, the PCEA, at a duly noticed public hearing, considered and adopted this Implementation Plan, through PCEA Resolution No. **\_\_\_\_\_** (a copy of which is included as part of Appendix A). The Commission has established the methodology that will be used to determine the cost recovery mechanism, and PG&E now has approved tariffs for imposition of the cost recovery mechanism. Finally, each of the PCEA's Members has adopted an ordinance to implement a CCA program through its participation in the PCEA, and each of the Members has

adopted a resolution permitting the PCEA to provide service within its jurisdiction.<sup>1</sup> With each of these milestones having been accomplished, PCE now submits this Implementation Plan to the CPUC. Following the CPUC's certification of its receipt of this Implementation Plan and resolution of any outstanding issues, the PCEA will take the final steps needed to register as a CCA prior to initiating the customer notification and enrollment process.

### ***Organization of this Implementation Plan***

The content of this Implementation Plan complies with the statutory requirements of AB 117. As required by PU Code Section 366.2(c)(3), this Implementation Plan details the process and consequences of aggregation and provides PCEA's statement of intent for implementing a CCA program that includes all of the following:

- Universal access;
- Reliability;
- Equitable treatment of all customer classes; and
- Any requirements established by state law or by the CPUC concerning aggregated service.

The remainder of this Implementation Plan is organized as follows:

- Chapter 2: Aggregation Process
- Chapter 3: Organizational Structure
- Chapter 4: Startup Plan and Funding
- Chapter 5: Program Phase-In
- Chapter 6: Load Forecast and Resource Plan
- Chapter 7: Financial Plan
- Chapter 8: Ratesetting
- Chapter 9: Customer Rights and Responsibilities
- Chapter 10: Procurement Process
- Chapter 11: Contingency Plan for Program Termination
- Appendix A: PCEA Resolution Approving Implementation Plan and Member Ordinances
- Appendix B: Joint Powers Agreement

The requirements of AB 117 are cross-referenced to Chapters of this Implementation Plan in the following table.

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<sup>1</sup> Copies of individual ordinances adopted by PCEA's Members are included within Appendix A.

### AB 117 Cross References

AB 117 REQUIREMENT	IMPLEMENTATION PLAN CHAPTER
Statement of Intent	Chapter 1: Introduction
Process and consequences of aggregation	Chapter 2: Aggregation Process
Organizational structure of the program, its operations and funding	Chapter 3: Organizational Structure Chapter 4: Startup Plan and Funding Chapter 7: Financial Plan
Disclosure and due process in setting rates and allocating costs among participants	Chapter 8: Ratesetting
Ratesetting and other costs to participants	Chapter 8: Ratesetting Chapter 9: Customer Rights and Responsibilities
Participant rights and responsibilities	Chapter 9: Customer Rights and Responsibilities
Methods for entering and terminating agreements with other entities	Chapter 10: Procurement Process
Description of third parties that will be supplying electricity under the program, including information about financial, technical and operational capabilities	Chapter 10: Procurement Process
Termination of the program	Chapter 11: Contingency Plan for Program Termination

### *Introduction*

This chapter describes the background leading to the development of this Implementation Plan and describes the process and consequences of aggregation, consistent with the requirements of AB 117.

Beginning in late 2014, the County began investigating formation of a CCA Program, pursuant to California state law, with the following objectives: 1) provide cost competitive electric services; 2) reduce greenhouse gas emissions related to the use of electric power within the County; 3) develop long-term rate stability and energy reliability for residents through local control; and 4) stimulate and sustain the local economy by developing local jobs in renewable energy. A technical feasibility study for a CCA Program serving the County was completed in October 2015 and an independent review of the study was completed thereafter in February 2016.

After nearly a year of collaborative work by representatives of the participating municipalities, independent consultants, the PCE Advisory Committee, local experts and stakeholders, the County released a draft Implementation Plan in February 2016, which described the planned organization, governance and operation of the CCA Program. Consistent with the Implementation Plan's described organizational structure, the PCEA was formed in January 2016 to implement the PCE Program.

The PCE Program represents a culmination of planning efforts that are responsive to the expressed needs and priorities of the citizenry and business community within San Mateo County. The PCEA plans to expand the energy choices available to eligible customers through creation of innovative new programs for voluntary purchases of renewable energy, net energy metering to promote customer-owned renewable generation, energy efficiency, demand responsiveness to promote reductions in peak demand, customized pricing options for large energy users, and support of local renewable energy projects through the eventual offering of a standardized power purchasing agreement or "feed-in-tariff".

### *Process of Aggregation*

Before customers are enrolled in the Program, customers will receive two written notices in the mail, from the PCEA, that will provide information needed to understand the Program's terms and conditions of service and explain how customers can opt-out of the Program, if desired. All customers that do not follow the opt-out process specified in the customer notices will be automatically enrolled, and service will begin at their next regularly scheduled meter read date at least thirty days following the date of automatic enrollment, subject to the service phase-in plan described in Chapter 5. The initial enrollment notices will be provided to the first phase of customers in July 2016. Initial enrollment notices will be provided to subsequent customer phases consistent with statutory requirements and based on schedule(s) determined by PCE's Board of Directors. These notices will be sent to customers in subsequent phases beginning 90 to 105 days prior to commencement of service (or twice within 60 days of automatic enrollment).



Customers enrolled in the PCE Program will continue to have their electric meters read and to be billed for electric service by the distribution utility (PG&E). The electric bill for Program customers will show separate charges for generation procured by the PCEA as well as other charges related to electricity delivery and other utility charges assessed by PG&E.

After service cutover, customers will have approximately 60 days (two billing cycles) to opt-out of the PCE Program without penalty and return to the distribution utility (PG&E). PCE customers will be advised of these opportunities via the distribution of two additional enrollment notices provided within the first two months of service. Customers that opt-out between the initial cutover date and the close of the post enrollment opt-out period will be responsible for program charges for the time they were served by PCE but will not otherwise be subject to any penalty for leaving the program. Customers that have not opted-out within thirty days of the fourth enrollment notice will be deemed to have elected to become a participant in the PCE Program and to have agreed to the PCE Program's terms and conditions, including those pertaining to requests for termination of service, as further described in Chapter 8.

### *Consequences of Aggregation*

#### **Rate Impacts**

PCE Customers will pay the generation charges set by the PCEA and no longer pay the costs of PG&E generation. Customers enrolled in the Program will be subject to the Program's terms and conditions, including responsibility for payment of all Program charges as described in Chapter 9.

The PCEA's rate setting policies described in Chapter 7 establish a goal of providing rates that are competitive with the projected generation rates offered by the incumbent distribution utility (PG&E). The PCEA will establish rates sufficient to recover all costs related to operation of the Program, and actual rates will be adopted by the PCEA's governing board.

Initial PCE Program rates will be established following approval of the PCEA's inaugural program budget, reflecting final costs from the PCE Program's energy supplier(s). The PCEA's rate policies and procedures are detailed in Chapter 7. Information regarding final PCE Program rates will be disclosed along with other terms and conditions of service in the pre-enrollment and post-enrollment notices sent to potential customers.

Once the PCEA gives definitive notice to PG&E that it will commence service, PCE customers will generally not be responsible for costs associated with PG&E's future electricity procurement contracts or power plant investments. Certain pre-existing generation costs and new generation costs that are deemed to provide system-wide benefits will continue to be charged by PG&E to CCA customers through separate rate components, called the Cost Responsibility Surcharge and the New System Generation Charge. These charges are shown in PG&E's electric service tariffs,

which can be accessed from the utility's website, and the costs are included in charges paid by both PG&E bundled customers as well as CCA and Direct Access customers.<sup>2</sup>

### **Renewable Energy Impacts**

A second consequence of the Program will be an increase in the proportion of energy generated and supplied by renewable resources. The resource plan includes procurement of renewable energy sufficient to meet a minimum 50 percent of the PCE Program's electricity needs for all enrolled customers, increasing annually thereafter, subject to economic and operational constraints. PCE customers may also voluntarily participate in a 100 percent renewable supply option. To the extent that customers choose PCE's 100 percent renewable energy option, the renewable content of PCE's aggregate supply portfolio will be even greater. Initially, requisite renewable energy supply will be sourced through one or more power purchase agreements. Over time, however, the PCEA may consider independent development of new renewable generation resources, subject to then-current considerations (such as development costs, regulatory requirements and other concerns). The PCEA will emphasize procurement from locally situated renewable energy projects to the greatest extent practical.

### **Energy Efficiency Impacts**

A third consequence of the Program will be an anticipated increase in energy efficiency program investments and activities. The existing energy efficiency programs administered by the distribution utility are not expected to change as a result of PCE Program implementation. CCA customers will continue to pay the public benefits surcharges to the distribution utility, which will fund energy efficiency programs for all customers, regardless of generation supplier. The energy efficiency investments ultimately planned for the PCE Program, as described in Chapter 6, will be in addition to the level of investment that would continue in the absence of the PCE Program. Thus, the PCE Program has the potential for increased energy savings and a further reduction in emissions due to expanded energy efficiency programs. As planned, PCE will apply for administration of requisite program funding from the CPUC to independently administer energy efficiency programs within its jurisdiction.

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<sup>2</sup> For PG&E bundled service customers, the Power Charge Indifference Adjustment element of the Cost Responsibility Surcharge is contained within the tariffed Generation rate. Other elements of the Cost Responsibility Surcharge are set forth in PG&E's tariffs as separate rate charges paid by all customers (with limited exceptions).

## CHAPTER 3 – Organizational Structure

This section provides an overview of the organizational structure of the PCEA and its proposed implementation of the CCA program. Specifically, the key agreements, governance, management, and organizational functions of the PCEA are outlined and discussed below.

### *Organizational Overview*

The PCE Program will have a governing board that establishes PCE Program policies and objectives; management that is responsible for operating the PCE Program in accordance with such policies, and contractors that will provide energy and other specialized services necessary for PCE Program operations.

### *Governance*

The PCE Program would be governed by the PCEA’s Board of Directors (“Board”), which shall include one appointed designee from each of the Members. The PCEA is a joint powers agency created in January 2016 and formed under California law. The Members of the PCEA include the twenty (20) municipalities located within the County as well as the unincorporated areas of the County, all of which have elected to allow the PCEA to provide electric generation service within their respective jurisdictions. The PCEA is the CCA entity that will register with the CPUC, and it is responsible for implementing and managing the program pursuant to the PCEA’s Joint Powers Agreement (“JPA Agreement”). The PCEA Board is comprised of representatives appointed by each of the Members in accordance with the JPA agreement. The PCE Program will be operated under the direction of an Executive Director appointed by the Board, with legal and regulatory support provided by a Board appointed General Counsel.

The Board’s primary duties will be to establish program policies, approve rates and provide policy direction to the Executive Director, who will have general responsibility for program operations, consistent with the policies established by the Board. The Board will establish a Chairman and other officers from among its membership and may establish an Executive Committee and other committees and sub-committees as needed to address issues that require greater expertise in particular areas (e.g., finance or contracts). The PCEA may also form various standing and ad hoc committees, as appropriate, which would have responsibility for evaluating various issues that may affect the PCEA and its customers, including rate-related and power contracting issues, and would provide analytical support and recommendations to the Board in these regards.

### *Management*

The Executive Director may be a person or an operating entity. The Executive Director could be an employee of the PCEA, an individual under contract with the PCEA, a public agency, a private entity, or any other person or organization so designated by the Board. The Board will be responsible for evaluating and managing the Executive Director’s performance.

The Executive Director will have management responsibilities over the functional areas of Resource Planning, Electric Supply, Local Energy Programs, Finance and Rates, Customer Services and Regulatory Affairs. In performing his or her obligations to the PCEA, the Executive Director may utilize a combination of internal staff and/or contractors. Certain specialized functions needed for program operations, namely the electric supply and customer account management functions described below, will be performed initially by experienced third-party contractors.

Major functions of the PCEA that will be managed by the Executive Director are summarized below.

### ***Resource Planning***

The PCEA must plan for meeting the electricity needs of its customers utilizing resources consistent with its policy goals and objectives as well as applicable legislative and/or regulatory mandates. The Executive Director will oversee development of long term resource plans under the policy guidance provided by the Board and in compliance with California Law and other requirements of California regulatory bodies.

Long-term resource planning includes load forecasting and supply planning on a ten- to twenty-year time horizon. The PCEA will develop integrated resource plans that meet program supply objectives and balance cost, risk and environmental considerations. Such integrated resource plans will also conform to applicable requirements imposed by the State of California. Integrated resource planning efforts of the PCEA will make maximum use of demand side energy efficiency, distributed generation and demand response programs as well as traditional supply options, which rely on structured wholesale transactions to meet customer energy requirements. The PCE Program will require an independent planning function even if the day-to-day electric supply operations are contracted to a third party energy supplier. Resource plans will be updated and adopted by the Board on an annual basis.

### ***Electric Supply Operations***

Electric supply operations encompass the activities necessary for wholesale procurement of electricity to serve end use customers. These highly specialized activities include the following:

- *Electricity Procurement* – assemble a portfolio of electricity resources to supply the electric needs of Program customers.
- *Risk Management* – application of standard industry techniques to reduce exposure to the volatility of energy and credit markets and insulate customer rates from sudden changes in wholesale market prices.
- *Load Forecasting* – develop accurate load forecasts, both long-term for resource planning and short-term for the electricity purchases and sales needed to maintain a balance between hourly resources and loads.
- *Scheduling Coordination* – scheduling and settling electric supply transactions with the CAISO.

The PCEA will initially contract with one or more experienced and financially sound third party energy services providers to perform most of the electric supply operations for the PCE Program. These requirements include the procurement of energy, capacity and ancillary services, scheduling coordinator services, short-term load forecasting and day-ahead and real-time electricity trading. Longer term energy procurement and generation project development will be managed by the Executive Director.

### ***Local Energy Programs***

A key focus of the PCE Program will be the development and implementation of local energy programs, including energy efficiency programs, distributed generation programs and other energy programs responsive to community interests. The Executive Director will be responsible for further development of these programs, as these are likely to be implemented on a phased basis during the first several years of operations.

The PCEA will administer energy efficiency, demand response and distributed generation programs that can be used as cost-effective alternatives to procurement of supply-side resources while supporting the local economy. The PCEA will attempt to consolidate existing demand side programs into this organization and leverage the structure to expand energy efficiency offerings to customers throughout its service territory, including the CPUC application process for third party administration of energy efficiency programs and use of funds collected through the existing public benefits surcharges paid by PCE customers.

### ***Finance and Rates***

The Executive Director will be responsible for managing the financial affairs of the PCEA, including the development of an annual budget, revenue requirement and rates; managing and maintaining cash flow requirements; arranging potential bridge loans as necessary; and other financial tools.

The Board of Directors has the ultimate responsibility for approving the electric generation rates for the PCE Program's customers. The Executive Director, in cooperation with staff and appropriate advisors, consultants and committees of the Board will be responsible for developing proposed rates and options for the Board to consider before finalization. The final approved rates must, at a minimum, meet the annual budgetary revenue requirement developed by the Executive Director, including recovery of all expenses and any reserves or coverage requirements set forth in bond covenants or other agreements. The Board will have the flexibility to consider rate adjustments within certain ranges, provided that the overall revenue requirement is achieved. The PCEA will administer a standardized set of electric rates and may offer optional rates to encourage policy goals such as economic development or low income subsidy programs.

The PCEA may also offer customized pricing options such as dynamic pricing or contract-based pricing for energy intensive customers to help these customers gain greater control over their

energy costs. This would provide such customers – mostly larger energy users within the commercial sector – with a greater range of power options than is currently available.

The PCEA’s finance function will be responsible for arranging financing necessary for any capital projects, preparing financial reports, and ensuring sufficient cash flow for successful operation of the PCE Program. The finance function will play an important role in risk management by monitoring the credit of energy suppliers so that credit risk is properly understood and mitigated. In the event that changes in a supplier’s financial condition and/or credit rating are identified, the PCEA will be able to take appropriate action, as would be provided for in the electric supply agreement(s). The Finance function establishes general credit policies that the PCE Program must follow.

### *Communications and Customer Services*

The customer services function includes general program marketing and communications as well as direct customer interface ranging from management of key account relationships to call center and billing operations. The PCEA will conduct program marketing to raise consumer awareness of the PCE Program and to establish the PCE “brand” in the minds of the public, with the goal of retaining and attracting as many customers as possible into the PCE Program. Communications will also be directed at key policy-makers at the state and local level, community business and opinion leaders, and the media.

In addition to general program communications and marketing, a significant focus on customer service, particularly representation for key accounts, will enhance the PCEA’s ability to differentiate itself as a highly customer-focused organization that is responsive to the needs of the community. The PCEA will also establish a customer call center designed to field customer inquiries and routine interaction with customer accounts.

The customer service function also encompasses management of customer data. Customer data management services include retail settlements/billing-related activities and management of a customer database. This function processes customer service requests and administers customer enrollments and departures from the PCE Program, maintaining a current database of enrolled customers. This function coordinates the issuance of monthly bills through the distribution utility’s billing process and tracks customer payments. Activities include the electronic exchange of usage, billing, and payments data with the distribution utility and the PCEA, tracking of customer payments and accounts receivable, issuance of late payment and/or service termination notices (which would return affected customers to bundled service), and administration of customer deposits in accordance with credit policies of the PCEA.

The customer data management services function also manages billing-related communications with customers, customer call centers, and routine customer notices. The PCEA will initially contract with a third party, who has demonstrated the necessary experience and administers appropriate computer systems (customer information system), to perform the customer account and billing services functions.

### ***Legal and Regulatory Representation***

The PCE Program will require ongoing regulatory representation to manage various regulatory compliance filings related to resource plans, resource adequacy, compliance with California's Renewables Portfolio Standard ("RPS"), and overall representation on issues that will impact the PCEA, its Members and customers. The PCEA will maintain an active role at the CPUC, the California Energy Commission, the California Independent System Operator, the California legislature and, as necessary, the Federal Energy Regulatory Commission.

Under the direction of its General Counsel, the PCEA will retain outside legal services, as necessary, to administer the PCEA, review contracts, and provide overall legal support related to activities of the PCE Program.

## CHAPTER 4 – Startup Plan and Funding

This Chapter presents the PCEA's plans for the start-up period, including the necessary expenses and capital outlays, which will commence once the CPUC certifies its receipt of this Implementation Plan. As described in the previous Chapter, the PCEA may utilize a mix of staff and contractors in its CCA Program implementation.

### *Startup Activities*

The initial program startup activities include the following:

- Hire staff and/or contractors to manage implementation
- Identify qualified suppliers (of requisite energy products and related services) and negotiate supplier contracts
  - Electric supplier and scheduling coordinator
  - Data management provider (if separate from energy supply)
- Define and execute communications plan
  - Customer research/information gathering
  - Media campaign
  - Key customer/stakeholder outreach
  - Informational materials and customer notices
  - Customer call center
- Post CCA bond and complete requisite registration requirements
- Pay utility service initiation, notification and switching fees
- Perform customer notification, opt-out and transfers
- Conduct load forecasting
- Establish rates
- Legal and regulatory support
- Financial management and reporting

Other costs related to starting up the PCE Program will be the responsibility of the PCE Program's contractors (and are assumed to be covered by any fees/charges imposed by such contractors). These include capital requirements needed for collateral/credit support for electric supply expenses, customer information system costs, electronic data exchange system costs, call center costs, and billing administration/settlements systems costs.

### *Staffing and Contract Services*

Personnel in the form of PCEA staff or contractors will be added incrementally to match workloads involved in forming the new organization, managing contracts, and initiating customer outreach/marketing during the pre-operations period. During the startup period, minimal personnel requirements would include an Executive Director, a General Counsel, and



other personnel needed to support regulatory, procurement, finance, legal and communications activities.

For budgetary purposes, it is assumed that three to five full-time equivalents staff as well as supporting contracted professional services would be engaged during the initial start-up period. Following this period, additional staff and/or contractors will be retained to support the roll-out of additional value-added services (e.g., efficiency projects) and local generation projects and programs.

### ***Capital Requirements***

The Start-up of the CCA Program will require capital for three major functions: (1) staffing and contractor costs; (2) deposits and reserves; and (3) working capital. Each of these functions and associated capital requirements are discussed below. The finance plan in Chapter 7 provides a more detailed discussion of the capital requirements and Program finances.

Staffing and contractor costs during startup and pre-startup activities are estimated to be approximately \$2.2 million, including direct costs related to public relations support, technical support, and customer communications. Actual costs may vary depending upon how PCE manages its start-up activities and the degree to which some or most of these start-up activities are performed by the selected energy services provider rather than by PCE.

Requisite deposits and operating reserves of the PCE program are estimated to approximate \$6.7 million and include the following items: 1) operating reserves to address anticipated cash flow variations (as well as operating reserve deposits that will likely be required by the PCEA's power supplier(s)) - \$6.1 million; 2) requisite deposit with the California Independent System Operator prior to commencing market operations - \$500,000; 3) CCA bond (posted with the CPUC) - \$100,000; and 4) PG&E service fee deposit - \$30,000.

Operating revenues from sales of electricity will be remitted to the PCEA beginning approximately sixty days after the initial customer enrollments. This lag is due to the distribution utility's standard meter reading cycle of 30 days and a 30 day payment/collections cycle. The PCEA will need working capital to support electricity procurement and costs related to program management, which will be included in the financing program associated with start-up funding. As discussed in Chapter 7, the initial working capital requirement is estimated at \$4.6 million.

Therefore, the total staffing and contractor costs, applicable deposits and working capital costs are expected to be approximately \$13.5 million. These are costs that ultimately will be collected through PCE Program rates; however, some of these costs will be incurred prior to the PCEA selling its first kWh of electricity and will require financing.

### ***Financing Plan***

The majority of anticipated start-up funding (approximately \$12 million) will be provided to the PCEA via a bank credit facility that can be drawn upon as needed to cover expenditures; the

balance of requisite start-up funding (\$1.5 million) has been provided by the County and the PCEA will make monthly repayments (including interest) to the County over a thirty-six month term starting in January 2017. The PCEA will recover the principal and interest costs associated with the start-up funding via retail generation rates charged PCE customers. It is anticipated that the start-up costs will be fully recovered through such customer generation rates within the first several years of operations.

The PCEA will roll out its service offering to customers over the course of three or more phases:

- Phase 1. All municipal accounts, all small and medium commercial accounts, 20 percent of residential accounts, and all customer accounts that have voluntarily expressed interest in Phase 1 enrollment.
- Phase 2. All large commercial and industrial accounts as well as 35 percent of residential accounts.
- Phase 3. All agricultural and street lighting accounts as well as the remaining 45 percent of residential accounts.
- Phase 4. Any remaining accounts, if necessary.

This approach provides the PCEA with the ability to initiate its program with sufficient economic scale and with a manageable number of accounts served, before gradually building to full program integration for an expected customer base of approximately 257,000 accounts. This approach also allows the PCEA and its energy supplier(s) to address all system requirements (billing, collections, payments) under a phase-in approach to minimize potential customer service challenges as well as exposure to uncertainty and financial risk. The PCEA will offer service to all customers on a phased basis expected to be completed within twelve months of initial service to Phase 1 customers.

Phase 1 of the Program is targeted to begin on or about October 1, 2016, subject to a decision to proceed by the Board. During Phase 1, the PCEA anticipates serving approximately 68,000 accounts, comprised of all municipal accounts, small and medium commercial accounts, and a certain portion of residential accounts, totaling nearly 1,185 GWh of annual energy sales. The PCEA is currently refining the potential composition of Phase 1 accounts in consideration of opportunities for maximizing energy efficiency and renewable energy impacts, synergies with local ordinances and other customer programs such as a municipally financed solar program, cost of service and customer load characteristics, and other operational considerations. Specific accounts to be included in Phase 1 will approximate 35 percent of the PCEA's total customer load and will be specifically defined after further analysis and consideration of the Board.

The PCEA will provide the opportunity for any future PCE customer to make a positive election to enroll in Phase 1, even if that customer is not initially scheduled to be offered service during Phase 1. This early enrollment period will open around April 2016 and close at the end of June 2016, prior to the execution of PCE's initial electric power supply contract(s). Depending on the level of early enrollment interest for Phase 1, the PCEA could choose to offer an additional early enrollment period prior to the launch of Phase 2.

Phase 2 of the Program will commence following successful operation of the PCE Program over an approximate 6-month term. It is anticipated that approximately 82,000 additional customers, comprised of large commercial, industrial and additional residential accounts, will be included in Phase 2, with annual energy consumption of approximately 1,570 GWh, or 47 percent of the PCEA's total prospective customer load.

Following this initial operating period, expected to continue for no more than twelve months, the Board will commence the process of completing the CCA roll out to all remaining customers in Phase 3. This phase is expected to comprise the remaining residential accounts within the PCEA's service territory as well as all agricultural and street lighting accounts. Phase 3 is expected to total approximately 107,000 accounts with annual energy consumption of approximately 610 GWh, or 18 percent of the PCEA's total prospective customer load.

To the extent that additional customers require enrollment after the completion of Phase 3, the PCEA will evaluate a subsequent phase of CCA enrollment.

The Board may also evaluate other phase-in options based on then-current market conditions, statutory requirements and regulatory considerations as well as other factors potentially affecting the integration of additional customer accounts.

### *Introduction*

This Chapter describes the planned mix of electric resources and demand reduction programs that will meet the energy demands of the PCEA's customers using a highly renewable, diversified portfolio of electricity supplies. Several overarching policies govern the resource plan and the ensuing resource procurement activities that will be conducted in accordance with the plan. These key policies are as follows:

- The PCEA will seek to increase use of renewable energy resources and reduce reliance on fossil-fueled electric generation.
- The PCEA will manage a diverse resource portfolio to increase control over energy costs and maintain competitive and stable electric rates.
- The PCEA will help customers reduce energy costs through investment in and administration of enhanced customer energy efficiency, distributed generation, and other demand reducing programs.
- The PCEA will benefit the area's economy through investment in local infrastructure, projects and energy programs.

The PCEA's initial resource mix will include a renewable energy content of at least 50%. As the PCE Program moves forward, incremental renewable supply additions will be made based on resource availability as well as economic goals of the PCE Program to achieve increased renewable energy content over time. The PCEA's aggressive commitment to renewable generation adoption may involve both direct investment in new renewable generating resources, partnerships with experienced public power developers/operators and purchases of renewable energy from third party suppliers.

The PCEA will seek to supply the program with local renewable resources to the greatest extent technically and economically feasible. Specific objectives will be identified in resource plans and other planning documents prepared by the PCEA.

The resource plan also sets forth ambitious targets for improving customer side energy efficiency.

The plan described in this section would accomplish the following:

- Procure energy needed to offer two generation rate tariffs: 100 percent renewable and minimum 50 percent renewable through one or more contracts with experienced, financially stable energy suppliers.
- Continue increasing minimum renewable energy supplies over time, subject to resource availability and economic viability.
- Administer customer programs to reduce net electricity purchases by 1%-2% annually.

- Encourage distributed renewable generation in the local area through the offering of a net energy metering tariff; a standardized power purchase agreement or “Feed-In Tariff”; and other creative, customer-focused programs targeting increased access to local renewable energy sources.

The PCEA will be responsible for complying with regulatory rules applicable to California load serving entities. The PCEA will arrange for the scheduling of sufficient electric supplies to meet the hour-by-hour demands of its customers. The PCEA will adhere to capacity reserve requirements established by the CPUC and the CAISO designed to address uncertainty in load forecasts and potential supply disruptions caused by generator outages and/or transmission contingencies. These rules also ensure that physical generation capacity is in place to serve the PCEA’s customers, even if there were a need for the PCE Program to cease operations and return customers to PG&E. In addition, the PCEA will be responsible for ensuring that its resource mix contains sufficient production from renewable energy resources needed to comply with the statewide RPS (33 percent renewable energy by 2020, increasing to 50 percent by 2030). The resource plan will meet or exceed all of the applicable regulatory requirements related to resource adequacy and the RPS.

### *Resource Plan Overview*

To meet the aforementioned objectives and satisfy the applicable regulatory requirements pertaining to the PCEA’s status as a California load serving entity, PCEA’s resource plan includes a diverse mix of power purchases, renewable energy, new energy efficiency programs, demand response, and distributed generation. A diversified resource plan minimizes risk and volatility that can occur from over-reliance on a single resource type or fuel source, and thus increases the likelihood of rate stability. The ultimate goal of the PCEA’s resource plan is to minimize customer energy consumption and maximize use of renewable resources, particularly local resources, subject to economic and operational constraints. The planned power supply is initially comprised of power purchases from third party electric suppliers and, in the longer-term, may also include renewable generation assets owned and/or controlled by the PCEA.

Once the PCE Program demonstrates it can operate successfully, the PCEA may begin evaluating opportunities for investment in renewable generating assets, subject to then-current market conditions, statutory requirements and regulatory considerations. Any renewable generation owned by the PCEA or controlled under long-term power purchase agreement with a proven public power developer, could provide a portion of the PCEA’s electricity requirements on a cost-of-service basis. Depending upon market conditions and, importantly, the applicability of tax incentives for renewable energy development, electricity purchased under a cost-of-service arrangement can be more cost-effective than purchasing renewable energy from third party developers, which will allow the PCE Program to pass on cost savings to its customers through competitive generation rates. Any investment decisions will be made following thorough environmental reviews and in consultation with qualified financial and legal advisors.

As an alternative to direct investment, the PCEA may consider partnering with an experienced public power developer (the Northern California Power Agency, for example) and enter into a long-term (20-to-30 year) power purchase agreement that would support the development of new renewable generating capacity. Such an arrangement could be structured to reduce the PCE Program’s operational risk associated with capacity ownership while providing its customers with all renewable energy generated by the facility under contract. This option may be preferable to the PCEA as it works to achieve increasing levels of renewable energy supply to its customers.

The PCEA’s resource plan will integrate supply-side resources with programs that will help customers reduce their energy costs through improved energy efficiency and other demand-side measures. As part of its integrated resource plan, the PCEA will actively pursue, promote and ultimately administer a variety of customer energy efficiency programs that can cost-effectively displace supply-side resources.

The PCEA’s proposed resource plan for the years 2016 through 2025 is summarized in the following table:

Peninsula Clean Energy Proposed Resource Plan (GWH) 2016 to 2025										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>PCE Demand (GWh)</b>										
Retail Demand	-253	-2,447	-3,382	-3,399	-3,416	-3,433	-3,451	-3,468	-3,485	-3,503
Distributed Generation	0	0	3	4	6	7	9	10	12	13
Energy Efficiency	0	0	0	3	7	10	14	17	21	25
Losses and UFE	-15	-147	-203	-203	-204	-205	-206	-206	-207	-208
Total Demand	-268	-2,593	-3,582	-3,595	-3,608	-3,621	-3,633	-3,646	-3,659	-3,672
<b>PCE Supply (GWh)</b>										
<u>Renewable Resources</u>										
Total Renewable Resources	127	1,223	1,691	1,700	1,708	1,803	1,898	1,994	2,091	2,189
<u>Conventional Resources</u>										
Total Conventional Resources	142	1,370	1,891	1,895	1,900	1,818	1,736	1,652	1,568	1,483
Total Supply	268	2,593	3,582	3,595	3,608	3,621	3,633	3,646	3,659	3,672
Energy Open Position (GWh)	0	0	0	0	0	0	0	0	0	0

### ***Supply Requirements***

The starting point for the PCEA’s resource plan is a projection of participating customers and associated electric consumption. Projected electric consumption is evaluated on an hourly basis, and matched with resources best suited to serving the aggregate of hourly demands or the program’s “load profile”. The electric sales forecast and load profile will be affected by the PCEA’s plan to introduce the PCE Program to customers in phases and the degree to which customers choose to remain with PG&E during the customer enrollment and opt-out periods. The PCEA’s phased roll-out plan and assumptions regarding customer participation rates are discussed below.

### ***Customer Participation Rates***

Customers will be automatically enrolled in the PCE Program unless they opt-out during the customer notification process conducted during the 60-day period prior to enrollment and

continuing through the 60-day period following commencement of service. The PCEA anticipates an overall customer participation rate of approximately 85 percent of PG&E bundled service customers, based on reported opt-out rates for the Marin Clean Energy, Sonoma Clean Power and Lancaster Choice Energy CCA programs. It is assumed that customers taking direct access service from a competitive electricity provider will elect to remain with their current supplier.

The participation rate is not expected to vary significantly among customer classes, in part due to the fact that the PCEA will offer two distinct rate tariffs that will address the needs of cost-sensitive customers as well as the needs of both residential and business customers that prefer a highly renewable energy product. The assumed participation rates will be refined as the PCEA's public outreach and market research efforts continue to develop.

***Customer Forecast***

Once customers enroll in each phase, they will be switched over to service by the PCEA on their regularly scheduled meter read date over an approximately thirty day period. Approximately 2,276 service accounts per day will be switched over during the first month of service. For Phase 2, the number of accounts switched over to PCE service will increase to about 2,759 accounts per day. For Phase 3, the number of accounts switched over to PCE service will increase again to about 3,531 accounts per day. The number of accounts served by the PCEA at the end of each phase is shown in the table below.

<b>Peninsula Clean Energy</b>			
<b>Enrolled Retail Service Accounts</b>			
<b>Phase-In Period (End of Month)</b>			
	<b>Oct-16</b>	<b>Apr-17</b>	<b>Oct-17</b>
<b>PCE Customers</b>			
Residential	46,199	127,682	232,150
Small Commercial	19,808	19,907	19,907
Medium Commercial	2,288	2,299	2,299
Large Commercial	-	1,150	1,150
Industrial	-	37	37
Street Lighting & Traffic	-	-	1,236
Agricultural & Pumping	-	-	237
<b>Total</b>	<b>68,295</b>	<b>151,075</b>	<b>257,016</b>

The PCEA assumes that customer growth will generally offset customer attrition (opt-outs) over time, resulting in a relatively stable customer base (0.5% annual growth) over the noted planning horizon. While the successful operating track record of California CCA programs continues to grow, there is a relatively short history with regard to CCA operations, which makes it fairly difficult to anticipate the actual levels of customer participation within the PCE Program. The



PCEA believes that its assumptions regarding the offsetting effects of growth and attrition are reasonable in consideration of the historical customer growth within San Mateo County and the potential for continuing customer opt-outs following mandatory customer notification periods. The forecast of service accounts (customers) served by the PCEA for each of the next ten years is shown in the following table:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>PCE Customers</b>										
Residential	46,199	232,150	233,311	234,477	235,650	236,828	238,012	239,202	240,398	241,600
Small Commercial	19,808	19,907	20,006	20,106	20,207	20,308	20,410	20,512	20,614	20,717
Medium Commercial	2,288	2,299	2,311	2,322	2,334	2,346	2,357	2,369	2,381	2,393
Large Commercial	-	1,150	1,156	1,162	1,167	1,173	1,179	1,185	1,191	1,197
Industrial	-	37	37	37	38	38	38	38	38	39
Street Lighting & Traffic	-	1,236	1,242	1,248	1,255	1,261	1,267	1,274	1,280	1,286
Agricultural & Pumping	-	237	238	239	241	242	243	244	245	247
<b>Total</b>	<b>68,295</b>	<b>257,016</b>	<b>258,301</b>	<b>259,593</b>	<b>260,891</b>	<b>262,195</b>	<b>263,506</b>	<b>264,824</b>	<b>266,148</b>	<b>267,479</b>

### *Sales Forecast*

The PCEA's forecast of kWh sales reflects the roll-out and customer enrollment schedule shown above. The annual electricity needed to serve the PCEA's retail customers increases from nearly 270 GWh in 2016 to approximately 3,600 GWh at full roll-out. Annual energy requirements are shown below.

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>PCE Energy Requirements (GWh)</b>										
Retail Demand	253	2,447	3,382	3,399	3,416	3,433	3,451	3,468	3,485	3,503
Distributed Generation	0	0	-3	-4	-6	-7	-9	-10	-12	-13
Energy Efficiency	0	0	0	-3	-7	-10	-14	-17	-21	-25
Losses and UFE	15	147	203	203	204	205	206	206	207	208
<b>Total Load Requirement</b>	<b>268</b>	<b>2,593</b>	<b>3,582</b>	<b>3,595</b>	<b>3,608</b>	<b>3,621</b>	<b>3,633</b>	<b>3,646</b>	<b>3,659</b>	<b>3,672</b>

### *Capacity Requirements*

The CPUC's resource adequacy standards applicable to the PCE Program require a demonstration one year in advance that the PCEA has secured physical capacity for 90 percent of its projected peak loads for each of the five months May through September, plus a minimum 15 percent reserve margin. On a month-ahead basis, the PCEA must demonstrate 100 percent of the peak load plus a minimum 15 percent reserve margin.

A portion of the PCEA's capacity requirements must be procured locally, from the Greater Bay area as defined by the CAISO and another portion must be procured from local reliability areas

outside the Greater Bay Area. The PCEA would be required to demonstrate its local capacity requirement for each month of the following calendar year. The local capacity requirement is a percentage of the total (PG&E service area) local capacity requirements adopted by the CPUC based on the PCEA’s forecasted peak load. The PCEA must demonstrate compliance or request a waiver from the CPUC requirement as provided for in cases where local capacity is not available.

The PCEA is also required to demonstrate that a specified portion of its capacity meets certain operational flexibility requirements under the CPUC and CAISO’s flexible resource adequacy framework.

The estimated forward resource adequacy requirements for 2016 through 2018 are shown in the following tables<sup>3</sup>:

**Peninsula Clean Energy  
Forward Capacity and Reserve Requirements  
(MW)  
2016 to 2018**

<b>Month</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
January	-	264	780
February	-	289	839
March	-	246	709
April	-	499	789
May	-	650	785
June	-	692	837
July	-	665	799
August	-	708	854
September	-	719	866
October	165	716	770
November	268	767	769
December	261	769	771

The PCEA’s plan ensures that sufficient reserves will be procured to meet its peak load at all times. The PCEA’s projected annual capacity requirements are shown in the following table:

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<sup>3</sup> The figures shown above are estimates. PCEA’s resource adequacy requirements will be subject to modification due to application of certain coincidence adjustments and resource allocations relating to utility demand response and energy efficiency programs, as well as generation capacity allocated through the Cost Allocation Mechanism. These adjustments are addressed through the CPUC’s resource adequacy compliance process.

**Peninsula Clean Energy  
Capacity Requirements  
(MW)  
2016 to 2025**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Demand (MW)</b>										
Retail Demand	220	631	713	716	720	723	727	731	734	738
Distributed Generation	-	-	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Energy Efficiency	-	-	-	(1)	(1)	(2)	(3)	(4)	(4)	(5)
Losses and UFE	13	38	43	43	43	43	43	43	43	43
Total Net Peak Demand	233	669	753	755	757	759	761	763	765	767
Reserve Requirement (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Capacity Reserve Requirement	35	100	113	113	114	114	114	114	115	115
Capacity Requirement Including Reserve	268	769	866	869	871	873	875	878	880	882

Local capacity requirements are a function of the PG&E area resource adequacy requirements and the PCEA's projected peak demand. The PCEA will need to work with the CPUC's Energy Division and staff at the California Energy Commission to obtain the data necessary to calculate its monthly local capacity requirement. A preliminary estimate of the PCEA's annual local capacity requirement for the ten-year planning period ranges from approximately 268 MW to 882 MW as shown in the following table:

**Peninsula Clean Energy  
Local Capacity Requirements  
(MW)  
2016 to 2025**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
PCE Peak (MW)	233	669	753	755	757	759	761	763	765	767
Local Capacity Requirement (% of Peak)	-	36%	36%	36%	36%	36%	36%	36%	36%	36%
Greater Bay Area Share of Local Capacity Requirement (%)	-	34%	34%	34%	34%	34%	34%	34%	34%	34%
Other PG&E Areas Share of Local Capacity Requirement (%)	-	66%	66%	66%	66%	66%	66%	66%	66%	66%
Authority Local Capacity Requirement Greater Bay (MW)	-	82	92	92	93	93	93	93	94	94
Authority Local Capacity Requirement Other PG&E (MW)	-	159	179	179	180	180	181	181	182	182
Authority Local Capacity Requirement, Total (MW)	-	241	271	272	273	273	274	275	275	276

Due to the timing of Phase 1 customer enrollment, the PCEA will not receive a 2016 local capacity requirement from the CPUC. The CPUC assigns local capacity requirements during the year prior to the compliance period; thereafter, the CPUC provides local capacity requirement true-ups for the second half of each compliance year. Therefore, since PCE does not launch until October 2016, PCE will not have a local capacity requirement until the compliance month of January 2017.

The PCEA will coordinate with PG&E and appropriate state agencies to manage the transition of responsibility for resource adequacy from PG&E to the PCEA during CCA program phase-in. For system resource adequacy requirements, the PCEA will make month-ahead showings for each month that the PCEA plans to serve load, and load migration issues would be addressed through the CPUC's approved procedures. The PCEA will work with the California Energy Commission and CPUC prior to commencing service to customers to ensure it meets its local and system resource adequacy obligations through its agreement(s) with its chosen electric supplier(s).

## Renewables Portfolio Standards Energy Requirements

### Basic RPS Requirements

As a CCA, the PCEA will be required by law and ensuing CPUC regulations to procure a certain minimum percentage of its retail electricity sales from qualified renewable energy resources. For purposes of determining the PCEA’s renewable energy requirements, the same standards for RPS compliance that are applicable to the distribution utilities are assumed to apply to PCE.

California’s RPS program is currently undergoing reform. On October 7, 2015, Governor Brown signed Senate Bill 350 (“SB 350”; De Leon and Leno), the Clean Energy and Pollution Reduction Act of 2015, which increased California’s RPS procurement target from 33 percent by 2020 to 50 percent by 2030 amongst other clean-energy initiatives. Many details related to SB 350 implementation will be developed over time with oversight by designated regulatory agencies. However, it is reasonable to assume that interim annual renewable energy procurement targets will be imposed on CCAs and other retail electricity sellers to facilitate progress towards the 50 percent procurement mandate – for planning purposes, the PCEA has assumed straight-line annual increases (1.7 percent per year) to the RPS procurement target beginning in 2021, as the state advances on the 50 percent RPS. Prior to 2021, the PCEA will adopt a resource plan that complies with SB x1 2, including certain procurement quantity requirements identified in D.11-12-020 (December 1, 2011).

### PCEA’s Renewables Portfolio Standards Requirement

The PCEA’s annual RPS procurement requirements, as specified under California’s RPS program, are shown in the table below. When reviewing this table, it is important to note that the PCEA projects increases in energy efficiency savings as well as increases in locally situated distributed generation capacity, resulting in only a slight upward trend in projected retail electricity sales.

	Peninsula Clean Energy RPS Requirements (MWH) 2016 to 2025									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Retail Sales	253,061	2,446,569	3,382,353	3,399,265	3,416,261	3,433,343	3,450,509	3,467,762	3,485,101	3,502,526
Annual Procurement Target	63,265	660,574	980,882	1,053,772	1,127,366	1,191,370	1,255,985	1,321,217	1,387,070	1,453,548
% of Current Year Retail Sales*	25%	27%	29%	31%	33%	35%	36%	38%	40%	42%

\*Note: Specific details related to SB 350 implementation have yet to be identified. For purposes of this table, the PCEA assumed a straight-line increase from California’s 33 percent RPS procurement mandate in 2020 to California’s new, 50 percent RPS procurement mandate in 2030.

Based on planned renewable energy procurement objectives, the PCEA anticipates that it will significantly exceed the minimum RPS requirements as shown below.

**Peninsula Clean Energy  
RPS Requirements and Program Renewable Energy Targets  
(MWh)  
2016 to 2025**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Retail Sales (MWh)	253,061	2,446,569	3,382,353	3,399,265	3,416,261	3,433,343	3,450,509	3,467,762	3,485,101	3,502,526
Annual RPS Target (Minimum MWh)	50,612	489,314	676,471	679,853	741,329	799,969	862,627	936,296	1,010,679	1,085,783
Program Target (% of Retail Sales)	50%	50%	50%	50%	50%	53%	55%	58%	60%	63%
<b>Program Renewable Target (MWh)</b>	<b>126,530</b>	<b>1,223,284</b>	<b>1,691,177</b>	<b>1,699,632</b>	<b>1,708,131</b>	<b>1,802,505</b>	<b>1,897,780</b>	<b>1,993,963</b>	<b>2,091,060</b>	<b>2,189,079</b>
Surplus In Excess of RPS (MWh)	75,918	733,971	1,014,706	1,019,779	966,802	1,002,536	1,035,153	1,057,667	1,080,381	1,103,296
Annual Increase (MWh)	126,530	1,096,754	467,892	8,456	8,498	94,374	95,275	96,183	97,097	98,018

***Purchased Power***

Power purchased from power marketers, public agencies, generators, and/or utilities will be a significant source of supply during the first several years of PCE Program operation. The PCEA will initially contract to obtain all of its electricity from one or more third party electric providers under one or more power supply agreements, and the supplier(s) will be responsible for procuring the specified resource mix, including PCEA’s desired quantities of renewable energy, to provide a stable and cost-effective resource portfolio for the Program. Based on terms established in the third-party contract(s), the PCEA will be able to substitute electric energy generated by PCE-owned/controlled renewable resources for certain contract quantities in the event that such resources become operational during the delivery period. Initially, it is assumed that one of the Program’s third party electric suppliers will be responsible for fulfilling the needs of PCEA’s overall supply portfolio.

***Renewable Resources***

The PCEA will initially secure necessary renewable power supply from its third party electric supplier(s). The PCEA may supplement the renewable energy provided under the initial power supply contract(s) with direct purchases of renewable energy from renewable energy facilities or from renewable generation developed and owned by the PCEA. At this point in time, it is not possible to predict what projects might be proposed in response to future renewable energy solicitations administered by the PCEA, unsolicited proposals or discussions with other agencies. Renewable projects that are located virtually anywhere in the Western Interconnection can be considered (with a preference for local projects) as long as the electricity is deliverable to the CAISO control area, as required to meet the Commission’s RPS rules and any additional guidelines ultimately adopted by the PCEA’s Board of Directors. The costs of transmission access and the risk of transmission congestion costs would need to be considered in the bid evaluation process if the delivery point is outside of the PCEA’s load zone, as defined by the CAISO.

***Energy Efficiency***

The PCEA’s energy efficiency goals will reflect a strong commitment to increasing energy efficiency within the County, expanding beyond the savings achieved by PG&E’s programs. The PCEA will seek to maximize end-use customer energy efficiency by facilitating customer

participation in existing utility programs as well as by forming new programs that will displace the PCEA's need for traditional electric procurement activities.

Forecast energy efficiency savings building to 0.5 percent of the PCEA's projected energy sales (by 2023) appears to be a reasonable baseline for the demand-side portion of its resource plan. For example, the National Action Plan for Energy Efficiency states among its key findings "consistently funded, well-designed efficiency programs are cutting annual savings for a given program year of 0.15 to 1 percent of energy sales."<sup>4</sup> The American Council for an Energy-Efficient Economy (ACEEE) reports for states already operating substantial energy efficiency programs that an energy efficiency goal of one percent, as a percentage of energy sales, is a reasonable level to target.<sup>5</sup> These savings would be in addition to the savings achieved by PG&E administered programs. Achieving this goal would mean at least a doubling of energy savings relative to the status quo (without the program administered by the PCEA). It is assumed that energy efficiency programs of the PCEA will focus on closing the gap between the vast economic potential of energy efficiency within the County and what is actually achieved.

The PCEA will develop specific energy efficiency programs and seek requisite program funding from the CPUC to administer such programs. Additional details of the PCEA's energy efficiency plan will be developed once the first phase of the PCE Program is underway.

### *Demand Response*

Demand response programs provide incentives to customers to reduce demand upon request by the load serving entity (i.e., the PCEA), reducing the amount of generation capacity that must be maintained as infrequently used reserves. Demand response programs can be cost effective alternatives to procured capacity that would otherwise be needed to comply with California's resource adequacy requirements. The programs also provide rate benefits to customers who have the flexibility to reduce or shift consumption for relatively short periods of time when generation capacity is most scarce. Like energy efficiency, demand response can be a win/win proposition, providing economic benefits to the electric supplier as well as customer service benefits.

In its ruling on local resource adequacy, the CPUC found that dispatchable demand response resources as well as distributed generation resources should be allowed to count for local capacity requirements. This resource plan anticipates that the PCEA's demand response programs would partially offset its local capacity requirements beginning in 2019.

PG&E offers several demand response programs to its customers, and the PCEA intends to recruit those customers that have shown a willingness to participate in utility programs into similar programs offered by the PCEA.<sup>6</sup> The goal for this resource plan is to meet 5 percent of the PCE

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<sup>4</sup> National Action Plan for Energy Efficiency, July 2006, Section 6: Energy Efficiency Program Best Practices (pages 5-6)

<sup>5</sup> Energy Efficiency Resource Standards: Experience and Recommendations, Steve Nadel, March 2006, ACEEE Report E063 (pages 28 - 30).

<sup>6</sup> These utility programs include the Base Interruptible Program (E-BIP), the Demand Bidding Program (E-DBP), Critical Peak Pricing (E-CPP), Optional Binding Mandatory Curtailment Plan (E-OBMC), the Scheduled Load

Program’s total capacity requirements through dispatchable demand response programs that qualify to meet local resource adequacy requirements. This goal translates into approximately 44 MW of peak demand enrolled in PCE’s demand response programs. Achievement of this goal would displace approximately 47 percent of the PCEA’s local capacity requirement within the “Greater Bay Area” Local Reliability Area.<sup>7</sup>

**Peninsula Clean Energy  
Demand Response Goals  
(MW)  
2016 to 2025**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Total Capacity Requirement (MW)	268	769	866	869	871	873	875	878	880	882
Greater Bay Area Capacity Requirement (MW)	-	82	92	92	93	93	93	93	94	94
Demand Response Target (MW)	-	-	-	4	11	17	24	31	37	44
Percentage of Local Capacity Requirement	0%	0%	0%	5%	12%	19%	26%	33%	40%	47%

The PCEA will adopt a demand response program that enables it to request customer demand reductions during times when capacity is in short supply or spot market energy costs are exceptionally high. The level of customer payments should be related to the cost of local capacity that can be avoided as a result of the customer’s willingness to curtail usage upon request.

Appropriate limits on customer curtailments, both in terms of the length of individual curtailments and the total number of curtailment hours that can be called should be included in the PCEA’s demand response program design. It will also be important to establish a reasonable measurement protocol for customer performance of its curtailment obligations and deploy technology to automate customer notifications and responses. Performance measurement should include establishing a customer specific baseline of usage prior to the curtailment request from which demand reductions can be measured. The PCEA will likely utilize experienced third party contractors to design, implement and administer its demand response programs.

***Distributed Generation***

Consistent with the PCEA’s environmental policies and the state’s Energy Action Plan, clean distributed generation is a significant component of the integrated resource plan. The PCEA will work with state agencies and PG&E to promote deployment of photovoltaic (PV) systems within the PCEA’s jurisdiction, with the goal of maximizing use of the available incentives that are funded through current utility distribution rates and public benefits surcharges. The PCEA will also implement an aggressive net energy metering program and eventually a feed-in-tariff to promote local investment in distributed generation.

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Reduction Program (E-SLRP), and the Capacity Bidding Program (E-CBP). The PCEA plans to develop its own demand response programs, which may be similar to those currently administered by the incumbent utility.

<sup>7</sup> The California Public Utilities Commission has defined five local Resource Adequacy areas, including the “Other PG&E” local area (which represents an aggregation of various locations within the PG&E service territory), which have been designated as transmission-constrained. Load serving entities, including the PCEA, must procure a certain portion of their respective resource adequacy obligations from resources located within these transmission-constrained areas. However, demand response programs may be used to directly reduce local resource adequacy obligations; the PCEA plans to reduce such obligations through the implementation of effective demand response programs.

There are significant environmental benefits and strong customer interest in distributed PV systems. The PCEA may provide direct financial incentives from revenues funded by customer rates to further support use of solar power within the local area. Finally, the PCEA plans to provide direct incentives for PV by offering a net metering rate to customers who install PV systems so that customers are able to sell excess energy to the PCEA. Such a program would be generally consistent with principles identified in Assembly Bill 920 (“AB 920”), which directed the CPUC to establish and implement a compensation methodology for surplus renewable generation produced by net energy metered facilities located within the service territories of California’s large investor owned utilities, including PG&E. However, the PCEA may choose to offer enhanced compensation structures, relative to those implemented as a result of AB 920, as part of the direct incentives that may be established to promote distributed generation development within San Mateo County. To the extent that incentives offered by the PCEA improve project economics for its customers, it is reasonable to assume that the penetration of distributed generation within the County would increase.



This Chapter examines the monthly cash flows expected during the startup and customer phase-in period of the PCE Program and identifies the anticipated financing requirements. It includes estimates of program startup costs, including the necessary expenses and capital outlays which will commence once the CPUC has certified its receipt of the Implementation Plan submitted by the PCEA. It also describes the requirements for working capital and long-term financing for the potential investment in renewable generation, consistent with the resource plan contained in Chapter 6.

### *Description of Cash Flow Analysis*

The PCEA's cash flow analysis estimates the level of capital that will be required during the startup and phase-in period. The analysis focuses on the PCE Program's monthly costs and revenues and specifically accounts for the phased enrollment of PCE Program customers described in Chapter 5.

### *Cost of CCA Program Operations*

The first category of the cash flow analysis is the Cost of CCA Program Operations. To estimate the overall costs associated with CCA Program Operations, the following components were taken into consideration:

- Electricity Procurement;
- Ancillary Service Requirements;
- Exit Fees;
- Staffing and Professional Services;
- Data Management Costs;
- Administrative Overhead;
- Billing Costs;
- Scheduling Coordination;
- Grid Management and other CAISO Charges;
- CCA Bond and Security Deposit;
- Pre-Startup Cost Reimbursement; and
- Debt Service.

### *Revenues from CCA Program Operations*

The cash flow analysis also provides estimates for revenues generated from CCA operations or from electricity sales to customers. In determining the level of revenues, the analysis assumes the customer phase-in schedule described herein, and assumes that the PCEA charges a standard, default electricity tariff similar to the generation rates of the existing distribution utility for each

customer class and an optional 100% renewable energy tariff at a premium reflective of incremental renewable power costs. PCE Program rates are assumed to increase by 2.5% annually, which would support the cash flows presented herein – this projected rate increase is somewhat lower than the historical average rate increase that has been observed within the PG&E service territory.<sup>8</sup> More detail on PCE Program rates can be found in Chapter 8.

### ***Cash Flow Analysis Results***

The results of the cash flow analysis provide an estimate of the level of capital required for the PCEA to move through the CCA startup and phase-in periods. This estimated level of capital is determined by examining the monthly cumulative net cash flows (revenues from CCA operations minus cost of CCA operations) based on assumptions for payment of costs or other cash requirements (e.g., deposits) by the PCEA, along with estimates for when customer payments will be received. This identifies, on a monthly basis, what level of cash flow is available in terms of a surplus or deficit.

The cash flow analysis identifies funding requirements in recognition of the potential lag between payments received and payments made during the phase-in period. The estimated financing requirements for the startup and phase-in period, including working capital needs associated with all three phases of customer enrollments, is approximately \$13.5 million. Of this total, approximately \$8.9 million would be needed during the startup period prior to the time Phase 1 customers are enrolled. Working capital requirements peak soon after enrollment of the Phase 1 customers.

### ***CCA Program Implementation Pro Forma***

In addition to developing a cash flow analysis which estimates the level of working capital required to move the PCEA through full CCA phase-in, a summary pro forma analysis that evaluates the financial performance of the CCA program during the phase-in period is shown below. The difference between the cash flow analysis and the CCA pro forma analysis is that the pro forma analysis does not include a lag associated with payment streams. In essence, costs and revenues are reflected in the month in which service is provided. All other items, such as costs associated with CCA Program operations and rates charged to customers remain the same. Cash provided by financing activities are not shown in the pro forma analysis, although payments for debt service are included as a cost item.

The results of the pro forma analysis are shown in the following table. Under these assumptions, over the entire phase-in period (which is projected to occur through 2017) the CCA program is projected to accrue a reserve account balance of approximately \$26 million. The following

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<sup>8</sup> According to the California Energy Commission Utility-wide Weighted Average Electric Utility Prices report, PG&E average electric rates have increased by an average of 4.6% per year since 2000 and 3.4% annually since 2005.

summary of CCA program startup and phase-in addresses projected PCE Program operations for the period beginning January 2016 through December 2025.<sup>9</sup>

Peninsula Clean Energy  
Summary of CCA Program Startup and Phase-In  
(January 2016 through December 2025)

CATEGORY	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
<b>I. REVENUES FROM OPERATIONS (\$)</b>											
ELECTRIC SALES REVENUE	16,643,801	182,856,794	246,925,988	254,330,641	261,958,189	269,815,346	277,909,028	286,246,360	294,834,680	303,681,550	2,395,202,375
LESS UNCOLLECTIBLE ACCOUNTS	(82,713)	(909,391)	(1,227,865)	(1,264,855)	(1,302,958)	(1,342,210)	(1,382,644)	(1,424,296)	(1,467,203)	(1,511,403)	(11,915,538)
<b>TOTAL REVENUES</b>	<b>16,561,088</b>	<b>181,947,403</b>	<b>245,698,123</b>	<b>253,065,786</b>	<b>260,655,230</b>	<b>268,473,136</b>	<b>276,526,384</b>	<b>284,822,063</b>	<b>293,367,477</b>	<b>302,170,147</b>	<b>2,383,286,837</b>
<b>II. COST OF OPERATIONS (\$)</b>											
<b>(A) OPERATIONS AND ADMINISTRATIVE (O&amp;A)</b>											
STAFFING & PROFESSIONAL SERVIC	1,892,292	3,681,606	4,206,469	4,332,663	4,462,642	4,596,522	4,734,417	4,876,450	5,022,743	5,173,426	42,979,229
MARKETING	657,856	1,715,780	1,429,511	1,474,513	1,520,940	1,568,837	1,618,250	1,669,228	1,721,821	1,776,080	15,152,815
DATA MANAGEMENT SERVICES	307,326	2,825,116	4,649,417	4,672,664	4,696,027	4,719,507	4,743,105	4,766,820	4,790,655	4,814,608	40,985,244
IOU FEES (INCLUDING BILLING)	101,558	928,367	1,558,033	1,612,798	1,669,488	1,728,170	1,788,916	1,851,796	1,916,887	1,984,265	15,140,278
OTHER ADMINISTRATIVE & GENER	406,250	901,250	928,288	956,136	984,820	1,014,365	1,044,796	1,076,140	1,108,424	1,141,677	9,562,144
ENERGY PROGRAMS	125,000	901,250	1,060,900	1,092,727	1,125,509	1,159,274	1,194,052	1,229,874	1,266,770	1,304,773	10,460,129
<b>SUBTOTAL O&amp;A</b>	<b>3,490,281</b>	<b>10,953,368</b>	<b>13,832,617</b>	<b>14,141,501</b>	<b>14,459,427</b>	<b>14,786,675</b>	<b>15,123,536</b>	<b>15,470,308</b>	<b>15,827,299</b>	<b>16,194,828</b>	<b>134,279,841</b>
<b>(B) COST OF ENERGY</b>	<b>13,695,230</b>	<b>141,106,875</b>	<b>195,219,317</b>	<b>201,877,099</b>	<b>208,735,199</b>	<b>216,393,701</b>	<b>224,359,013</b>	<b>232,643,378</b>	<b>241,259,517</b>	<b>250,220,653</b>	<b>1,925,509,981</b>
<b>(C) DEBT SERVICE</b>	<b>359,374</b>	<b>3,110,953</b>	<b>3,110,953</b>	<b>3,110,953</b>	<b>2,587,491</b>	<b>2,228,118</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14,507,843</b>
<b>TOTAL COST OF OPERATION</b>	<b>17,544,885</b>	<b>155,171,196</b>	<b>212,162,887</b>	<b>219,129,553</b>	<b>225,782,118</b>	<b>233,408,493</b>	<b>239,482,549</b>	<b>248,113,686</b>	<b>257,086,816</b>	<b>266,415,481</b>	<b>2,074,297,664</b>
<b>CCA PROGRAM SURPLUS/(DEFICIT)</b>	<b>(983,797)</b>	<b>26,776,207</b>	<b>33,535,236</b>	<b>33,936,233</b>	<b>34,873,112</b>	<b>35,064,642</b>	<b>37,043,835</b>	<b>36,708,378</b>	<b>36,280,661</b>	<b>35,754,666</b>	<b>308,989,173</b>

The surpluses achieved during the phase-in period serve to build the PCEA's net worth and credit profile and to provide operating reserves for the PCEA in the event that operating costs (such as power purchase costs) exceed collected revenues for short periods of time.

### *PCE Financings*

It is anticipated that a single financing will be necessary to support PCE Program implementation. Subsequent capital requirements will be self-funded from the PCEA's accrued financial reserves. The anticipated financings are described below.

### *CCA Program Start-up and Working Capital*

As previously discussed, the anticipated start-up and working capital requirements for the PCE Program are \$13.5 million. This amount is dependent upon the amount of load initially served by the PCEA, actual energy prices, payment terms established with the third-party supplier, and program rates. This figure would be refined during the startup period as these variables become known. Once the PCE Program is up and running, these costs would be recovered from customers of the PCEA Program through retail rates.

It is assumed that this financing will be via a short term loan or letter of credit, which would allow the PCEA to draw cash as required. This financing would need to commence in the second quarter of 2016.

<sup>9</sup> Costs projected for staffing & professional services and other administrative & general relate to energy procurement, administration of energy efficiency and other local programs, generation development, customer service, marketing, accounting, finance, legal and regulatory activities necessary for program operation.

### ***Phases 2 and 3 Working Capital***

The next potential financing would be working capital for Phase 2. It is currently estimated that Phases 2 and 3 can be financed with internally generated cash. If external financing were needed, it could be an extension (increase) of the letter of credit for the PCE Program’s start-up capital or a new short-term credit facility. This financing would need to commence prior to the Phase 2 customer enrollments. Another short-term credit facility could be used to support the Phase 3 customer enrollments, if necessary (see table below).

### ***Renewable Resource Project Financing***

The PCEA may consider project financings for renewable resources, likely local wind, solar, biomass and/or geothermal as well as energy efficiency projects. These financings would only occur after a sustained period of successful PCE Program operation and after appropriate project opportunities are identified and subjected to appropriate environmental review. The PCEA’s ability to directly finance projects will likely require a track record of five to ten years of successful program operations demonstrating strong underlying credit to support the financing; direct financing undertaken by the PCEA would not be expected to occur sooner than 2021.

In the event that such financing occurs, funds would include any short-term financing for the renewable resource project development costs, and would likely extend over a 20- to 30-year term. The security for such bonds would be the revenue from sales to the retail customers of the PCEA.

The following table summarizes the potential financings in support of the PCE Program:

**PCE Program Financing Summary**

<b>Proposed Financing</b>	<b>Estimated Total Amount</b>	<b>Estimated Term</b>	<b>Estimated Issuance</b>
1. Start-Up (County)	\$1.5 million	3 years	Issued
2. Start-Up (Bank)	\$12 million	5 years	Second Quarter 2016
3. Phase 2 Working Capital	\$0 million	5 years	Late 2016, if needed
4. Phase 3 Working Capital	\$0 million	5 years	Mid 2017, if needed
5. Potential Renewable Resource Project Financings	\$TBD	20-30 years	TBD

### *Introduction*

This Chapter describes the initial policies proposed for the PCEA in setting its rates for electric aggregation services. These include policies regarding rate design, rate objectives, and provision for due process in setting Program rates. Program rates are ultimately approved by the Board. The Board would retain authority to modify program policies from time to time at its discretion.

### *Rate Policies*

The PCEA will establish rates sufficient to recover all costs related to operation of the PCE Program, including any reserves that may be required as a condition of financing and other discretionary reserve funds that may be approved by the Board. As a general policy, rates will be uniform for all similarly situated customers enrolled in the PCE Program throughout the service area of the PCEA.

The primary objectives of the ratesetting plan are to set rates that achieve the following:

- 100 percent renewable energy supply option (voluntary service offering);
- Rate competitive tariff option (default service offering) with minimum 50% renewable energy;
- Rate stability;
- Equity among customers in each tariff;
- Customer understanding; and
- Revenue sufficiency.

Each of these objectives is described below.

### *Rate Competitiveness*

The primary goal is to offer competitive rates for electric services that the PCEA would provide to participating customers. For participants in the PCEA's standard Tariff, the goal would be for PCE Program rates to be generally equivalent to (or potentially less than, subject to actual energy product pricing and decisions of the PCEA Board of Directors) the generation rates offered by PG&E. For voluntary participants in the PCE Program's 100 percent renewable energy Tariff, the goal would be to offer the lowest possible customer rates with an incremental monthly cost premium reflective of the actual cost of additional renewable energy supply required to serve such customers – based on current estimates, the anticipated cost premium for the PCE Program's 100 percent renewable supply option would be 5 to 10 percent relative to the default PCE tariff.

Competitive rates will be critical to attracting and retaining key customers. In order for the PCEA to be successful, the combination of price and value must be perceived as superior when compared to the bundled utility service alternative. The value provided by the PCE Program will

include a higher proportion of renewable energy relative to the incumbent utility, enhanced energy efficiency and customer programs, community focus and investment, local control, and general benefits that stem from PCE's mission to serve its customers rather than the interests of utility shareholders.

As previously discussed, the PCE Program will significantly increase renewable energy supply to program customers, relative to the incumbent utility, by offering two distinct rate tariffs. The default tariff for PCE Program customers will be the standard Tariff, which will maximize renewable energy supply while maintaining generation rates that are comparable to PG&E's. The initial renewable energy content provided under the standard Tariff will be at least 50%, and the PCEA will endeavor to increase this percentage on a going forward basis, subject to operational and economic constraints. The PCEA will also offer its customers a voluntary 100% renewable energy Tariff, which will supply participating customers with 100 percent renewable energy at rates that reflect PCE's cost for procuring related energy supplies.

Participating qualified low- or fixed-income households, such as those currently enrolled in the California Alternate Rates for Energy (CARE) program, will be automatically enrolled in the standard Tariff and will continue to receive related discounts on monthly electricity bills through PG&E.

#### ***Rate Stability***

The PCEA will offer stable rates by hedging its supply costs over multiple time horizons and by including renewable energy supplies that exhibit stable costs. Rate stability considerations may prevent PCE Program rates from directly tracking similar rates offered by the distribution utility, PG&E, and may result in differences from the general rate-related targets initially established for the PCE Program. The PCEA will attempt to maintain general rate parity with PG&E to ensure that PCE Program rates are not drastically different from the competitive alternative.

#### ***Equity among Customer Classes***

Initial rates of the PCE Program will be set based on cost-of-service considerations with reference to the rates customers would otherwise pay to PG&E. Rate differences among customer classes will reflect the rates charged by the local distribution utility as well as differences in the costs of providing service to each class. Rate benefits may also vary among customers within the major customer class categories, depending upon the specific rate designs adopted by the Board.

#### ***Customer Understanding***

The goal of customer understanding involves rate designs that are relatively straightforward so that customers can readily understand how their bills are calculated. This not only minimizes customer confusion and dissatisfaction but will also result in fewer billing inquiries to the PCE Program's customer service call center. Customer understanding also requires rate structures to reflect rational rate design principles (i.e., there should not be differences in rates that are not justified by costs or by other policies such as providing incentives for conservation).

### ***Revenue Sufficiency***

PCE Program rates must collect sufficient revenue from participating customers to fully fund the PCEA's annual budget. Rates will be set to collect the adopted budget based on a forecast of electric sales for the budget year. Rates will be adjusted as necessary to maintain the ability to fully recover all of costs of the PCE Program, subject to the disclosure and due process policies described later in this chapter.

### ***Rate Design***

The PCEA will generally match the rate structures from the utilities' standard rates to avoid the possibility that customers would see significantly different bill impacts as a result of changes in rate structures that would take effect following enrollment in the PCE Program. The PCEA may also introduce new rate options for customers, such as rates designed to encourage economic expansion or business retention within the PCEA service area.

Initial PCE Program rates are projected to average 6.9 cents per KWh on an annualized basis, which is below PG&E's reported average generation rate. PCE customers' electric bills may increase somewhat due to PG&E's collection of its excess power supply costs through the surcharge known as the Power Charge Indifference Adjustment ("PCIA"). PG&E will add the PCIA to PCE customers' monthly electric bills along with other utility service charges. The PCIA is identified in each of PG&E's rate schedules and is expected to decline over time.

### ***Custom Pricing Options***

The PCEA will work to develop specially-tailored rate and electric service products that meet the specific load characteristics or power market risk profiles of larger commercial and industrial customers. This will allow such customers to have access to a wider range of products than is currently available under the incumbent utility and potentially reduce the cost of power for these customers. The PCEA may provide large energy users with custom pricing options to help these customers gain greater control over their energy costs. Some examples of potential custom pricing options are rates that are based on an observable market index (e.g., CAISO prices) or fixed priced contracts of various terms.

### ***Net Energy Metering***

Customers with on-site generation eligible for net metering from PG&E will be offered a net energy metering rate from the PCEA. Net energy metering allows for customers with certain qualified solar or wind distributed generation to be billed on the basis of their net energy consumption. The PG&E net metering tariff (NEM) requires the CCA to offer a net energy metering tariff in order for the customer to continue to be eligible for service on Schedule E-NEM. The objective is that the PCEA's net energy metering tariff will apply to the generation component of the bill, and the PG&E net energy metering tariff will apply to the utility's portion of the bill. The PCEA will pay customers for excess power produced from net energy metered generation systems in accordance with the rate designs adopted by the PCE Board.

The PCEA may also implement tariff and financing programs to provide incentives to residents and businesses to maximize the size of photovoltaic and other renewable energy systems in order to increase the amount of locally-produced renewable power. Current tariffs create an incentive for residents and businesses considering new PV or renewable systems to limit the size of those systems so that annual generation matches annual on-site load. By implementing tariffs and programs to provide an incentive to maximize the output of such systems, the PCEA can help to increase the amount of local PV and renewable generation with minimal impact on the environment or existing infrastructure.

***Disclosure and Due Process in Setting Rates and Allocating Costs among Participants***

Initial program rates will be adopted by the Board of Directors following the establishment of the first year's operating budget prior to initiating the customer notification process. Subsequently, the Executive Director, with support of appropriate staff, advisors and committees, will prepare an annual budget and corresponding customer rates and submit these as an application for a change in rates to the Board of Directors. The rates will be approved at a public meeting of the Board of Directors no sooner than sixty days following submission of the proposed rates, during which affected customers will be able to provide comment on the proposed rate changes.

Within forty-five days after submitting an application to increase any rate, the PCEA will furnish notice of its application to its customers affected by the proposed increase, either by mailing such notice postage prepaid to such customers or by including such notice with the regular bill for charges transmitted to such customers. The notice will provide a summary of the proposed rate increase and include a link to the PCE Program website where information will be posted regarding the amount of the proposed increase (expressed in both dollar and percentage terms), a brief statement of the reasons the increase is required or sought, and the mailing address of the PCEA to which any customer inquiries relative to the proposed increase, including a request by the customer to receive notice of the date, time, and place of any hearing on the application, may be directed.



## CHAPTER 9 – Customer Rights and Responsibilities

This chapter discusses customer rights, including the right to opt-out of the PCE Program and the right to privacy of customer usage information, as well as obligations customers undertake upon agreement to enroll in the CCA Program. All customers that do not opt out within 30 days of the fourth enrollment notice will have agreed to become full status program participants and must adhere to the obligations set forth below, as may be modified and expanded by the PCE Board from time to time.

By adopting this Implementation Plan, the PCEA Board will have approved the customer rights and responsibilities policies contained herein to be effective at Program initiation. The Board retains authority to modify program policies from time to time at its discretion.

### *Customer Notices*

At the initiation of the customer enrollment process, a total of four notices will be provided to customers describing the Program, informing them of their opt-out rights to remain with utility bundled generation service, and containing a simple mechanism for exercising their opt-out rights. The first notice will be mailed to customers approximately sixty days prior to the date of automatic enrollment. A second notice will be sent approximately thirty days later. The PCEA will likely use its own mailing service for requisite enrollment notices rather than including the notices in PG&E's monthly bills. This is intended to increase the likelihood that customers will read the enrollment notices, which may otherwise be ignored if included as a bill insert. Customers may opt out by notifying the PCEA using the PCE Program's designated telephone-based or internet opt-out processing service. Should customers choose to initiate an opt-out request by contacting PG&E, they would be transferred to the PCE Program's call center to complete the opt-out request. Consistent with CPUC regulations, notices returned as undelivered mail would be treated as a failure to opt out, and the customer would be automatically enrolled.

Following automatic enrollment, a third enrollment notice will be mailed to customers, and a fourth and final enrollment notice will be mailed 30 days after automatic enrollment. Opt-out requests made on or before the sixtieth day following start of PCE Program service will result in customer transfer to bundled utility service with no penalty. Such customers will be obligated to pay charges associated with the electric services provided by the PCEA during the time the customer took service from the PCE Program, but will otherwise not be subject to any penalty or transfer fee from the PCEA.

Customers who establish new electric service accounts within the Program's service area will be automatically enrolled in the PCE Program and will have sixty days from the start of service to opt out if they so desire. Such customers will be provided with two enrollment notices within this sixty-day post enrollment period. Such customers will also receive a notice detailing the PCEA's privacy policy regarding customer usage information. The PCEA's Board of Directors will have the authority to implement entry fees for customers that initially opt out of the Program,

but later decide to participate. Entry fees, if deemed necessary, would aid in resource planning by providing additional control over the PCE Program’s customer base.

***Termination Fee***

Customers that are automatically enrolled in the PCE Program can elect to transfer back to the incumbent utility without penalty within the first two months of service. After this free opt-out period, customers will be allowed to terminate their participation subject to payment of a Termination Fee. The Termination Fee will apply to all customers of the PCE Program that elect to return to bundled utility service or elect to take “direct access” service from an energy services provider following the aforementioned two-month window. Customers that relocate within the PCEA’s service territory would have their CCA service continued at the new address. If a customer relocating to an address within the PCEA’s service territory elected to cancel CCA service, the Termination Fee will apply. Program customers that move out of the PCEA’s service territory would not be subject to the Termination Fee.

PG&E will collect the Termination Fee from returning customers as part of the final bill to the customer from the CCA Program.

The Termination Fee would vary by customer class as set forth in the table below, subject to adjustment by the PCEA’s Board as described below.

**PCE Program: Schedule of Fees for Service Termination**

<b>Customer Class</b>	<b>Fee</b>
Residential	\$5
Non-Residential	\$25

The Termination Fee will be clearly disclosed in the four enrollment notices sent to customers during the sixty-day period before automatic enrollment and following commencement of service. The fee could be changed prospectively by the PCEA’s Board of Directors, subject to applicable customer noticing requirements; provided, however, that in no event will any Termination Fee in excess of the amounts set forth above be imposed on any customer leaving before January 1, 2018, except for terminating customers participating in a voluntary tariff. As previously noted, customers that opt-out during the statutorily mandated notification period will not pay the Termination Fee that may be imposed by the PCEA.

Customers electing to terminate service after the initial notification period (that provided them with at least four enrollment notices) would be transferred to PG&E on their next regularly scheduled meter read date if the termination notice is received a minimum of fifteen days prior to that date. Such customers would also be liable for the nominal reentry fees imposed by PG&E and would be required to remain on bundled utility service for a period of one year, as described in the utility CCA tariffs.

### ***Customer Confidentiality***

The PCEA will establish policies covering confidentiality of customer data that are fully compliant with the California Public Utilities Commission's required privacy protection rules for CCA customer energy usage information, as detailed within Decision 12-08-045. The PCEA will maintain the confidentiality of individual customers' names, service addresses, billing addresses, telephone numbers, account numbers, and electricity consumption, except where reasonably necessary to conduct business of the PCEA or to provide services to customers, including but not limited to where such disclosure is necessary to (a) comply with the law or regulations; (b) enable the PCEA to provide service to its customers; (c) collect unpaid bills; (d) obtain and provide credit reporting information; or (e) resolve customer disputes or inquiries. The PCEA will not disclose customer information for telemarketing, e-mail, or direct mail solicitation. Aggregate data may be released at the PCEA's discretion. The PCEA will handle customer energy usage information in a manner that is fully compliant with the California Public Utility Commission's required privacy protections for customers of Community Choice Aggregators, as defined in Decision 12-08-045.

### ***Responsibility for Payment***

Customers will be obligated to pay PCE Program charges for service provided through the date of transfer including any applicable Termination Fees. Pursuant to current CPUC regulations, the PCEA will not be able to direct that electricity service be shut off for failure to pay PCE bills. However, PG&E has the right to shut off electricity to customers for failure to pay electricity bills, and PG&E Electric Rule 23 mandates that partial payments are to be allocated pro rata between PG&E and the CCA. In most circumstances, customers would be returned to utility service for failure to pay bills in full and customer deposits (if any) would be withheld in the case of unpaid bills. PG&E would attempt to collect any outstanding balance from customers in accordance with Rule 23 and the related CCA Service Agreement. The proposed process is for two late payment notices to be provided to the customer within 30 days of the original bill due date. If payment is not received within 45 days from the original due date, service would be transferred to the utility on the next regular meter read date, unless alternative payment arrangements have been made. Consistent with the CCA tariffs, Rule 23, service cannot be discontinued to a residential customer for a disputed amount if that customer has filed a complaint with the CPUC, and that customer has paid the disputed amount into an escrow account.

### ***Customer Deposits***

Under certain circumstances, PCE customers may be required to post a deposit equal to the estimated charges for two months of CCA service prior to obtaining service from the PCE Program. A deposit would be required for an applicant who previously had been a customer of PG&E or the PCEA and whose electric service has been discontinued by PG&E or the PCEA during the last twelve months of that prior service arrangement as a result of bill nonpayment. Such customers may be required to reestablish credit by depositing the prescribed amount. Additionally a customer who fails to pay bills before they become past due as defined in PG&E Electric Rule 11 (Discontinuance and Restoration of Service), and who further fails to pay such bills within five days after presentation of a discontinuance of service notice for nonpayment of

bills, may be required to pay said bills and reestablish credit by depositing the prescribed amount. This rule will apply regardless of whether or not service has been discontinued for such nonpayment<sup>10</sup>. Failure to post deposit as required would cause the account service transfer request to be rejected, and the account would remain with PG&E.

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<sup>10</sup> A customer whose service is discontinued by the PCEA is returned to PG&E generation service.

### *Introduction*

This Chapter describes the PCEA's initial procurement policies and the key third party service agreements by which the PCEA will obtain operational services for the PCE Program. By adopting this Implementation Plan, the PCEA's Board of Directors will have approved the general procurement policies contained herein to be effective at Program initiation. The Board retains authority to modify Program policies from time to time at its discretion.

### *Procurement Methods*

The PCEA will enter into agreements for a variety of services needed to support program development, operation and management. It is anticipated that the PCEA will generally utilize Competitive Procurement methods for services but may also utilize Direct Procurement or Sole Source Procurement, depending on the nature of the services to be procured. Direct Procurement is the purchase of goods or services without competition when multiple sources of supply are available. Sole Source Procurement is generally to be performed only in the case of emergency or when a competitive process would be an idle act.

The PCEA will utilize a competitive solicitation process to enter into agreements with entities providing electrical services for the program. Agreements with entities that provide professional legal or consulting services, and agreements pertaining to unique or time sensitive opportunities, may be entered into on a direct procurement or sole source basis at the discretion of the PCEA's Executive Director or Board of Directors.

The Executive Director will be required to periodically report (e.g., quarterly) to the Board a summary of the actions taken with respect to the delegated procurement authority.

Authority for terminating agreements will generally mirror the authority for entering into such agreements.

### *Key Contracts*

#### **Electric Supply Contract**

The PCEA will initiate service using one or more multi-year electricity supply contracts with one or more qualified providers. The third party provider(s) will supply electricity and related services to customers under contract(s) between the provider and the PCEA. The PCEA may complete additional solicitations to supplement its energy supply and/or to replace contract volumes provided under the original contract. The PCEA would begin such procurement sufficiently in advance of contract expiration so that the transition from the initial supply contract occurs smoothly, avoiding dependence on market conditions existing at any single point in time.

As anticipated, a primary supplier will be identified and placed under contract, committing such supplier serving the composite electrical loads of customers in the Program. The primary supplier will also be responsible for ensuring that a certified Scheduling Coordinator schedules the loads of all customers in the PCE Program, providing necessary electric energy, capacity/resource adequacy requirements, renewable energy and ancillary services. The primary supplier is responsible for day-to-day energy supply operations of the PCE Program and for managing the predominant supply risks for the term of the contract. It is anticipated that the primary supplier will also contribute to meeting the Program's renewable energy supply goals. However, additional suppliers may be identified to supplement requisite renewable energy supplier of the PCE program. Finally, the primary supplier will be responsible for ensuring the PCEA's compliance with all applicable resource adequacy and regulatory requirements imposed by the CPUC or FERC.

The PCEA anticipates executing the electric supply contract for Phase 1 loads in mid-2016. The contract for Phase 2 and Phase 3 loads will be executed approximately four months prior to commencement of service to these customers.

#### Data Management Contract

A data manager will provide the retail customer services of billing and other customer account services (electronic data interchange or EDI with PG&E, billing, remittance processing, and account management). Recognizing that some qualified wholesale energy suppliers do not typically conduct retail customer services whereas others (i.e., direct access providers) do, the data management contract may be separate from the electric supply contract. A single contractor will be selected to perform all of the data management functions.<sup>11</sup>

The data manager is responsible for the following services:

- Data exchange with PG&E;
- Technical testing;
- Customer information system;
- Customer call center;
- Billing administration/retail settlements; and
- Settlement quality meter data reporting
- Reporting and audits of utility billing.

Utilizing a third party for account services eliminates a significant expense associated with implementing a customer information system. Such systems can impose significant information technology costs and take significant time to deploy. A longer term contract is appropriate for this service because of the time and expense that would be required to migrate data to a new

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<sup>11</sup> The contractor providing data management may also be the same entity as the contractor supplying electricity for the program.

system. Separation of the data management contract from the energy supply contract gives the PCEA greater flexibility to change energy suppliers, if desired, without facing an expensive data migration issue.

It is anticipated that PCE will execute a contract for data management services in mid-2016.

### **Electric Supply Procurement Process**

The PCEA plans to issue a request for proposals (“RFP”) for shaped energy, renewable energy, carbon free energy, resource adequacy capacity, and scheduling coordinator services as part of a competitive solicitation process. This RFP will be released early in the second quarter of 2016 with responses due approximately two weeks thereafter. Contract negotiations will commence immediately following proposal evaluation and short-list selection. Similar to the initial supplier selection processes administered by California’s currently operating CCA programs, the PCEA intends to identify a highly qualified pool of suppliers for further negotiations, which will be completed prior to initiation of CCA service. Following the identification of short-listed energy services provider candidates, the PCEA will update the Commission regarding its selection process. It is anticipated that final supplier selection will be made by the PCEA Board by mid-2016.

### *Introduction*

This Chapter describes the process to be followed in the case of PCE Program termination. By adopting the original Implementation Plan, the PCEA's Board of Directors will have approved the general termination process contained herein to be effective at Program initiation. In the unexpected event that the PCEA would terminate the PCE Program and return its customers to PG&E service, the proposed process is designed to minimize the impacts on its customers and on PG&E. The proposed termination plan follows the requirements set forth in PG&E's tariff Rule 23 governing service to CCAs. The Board retains authority to modify program policies from time to time at its discretion.

### *Termination by PCE*

The PCEA will offer services for the long term with no planned Program termination date. In the unanticipated event that the majority of the Member's governing bodies (County Board of Supervisors and/or City/Town Councils) decide to terminate the Program, each governing body would be required to adopt a termination ordinance or resolution and provide adequate notice to the PCEA consistent with the terms set forth in the JPA Agreement. Following such notice, the PCEA would vote on Program termination subject to voting provisions as described in the JPA Agreement. In the event that the Board affirmatively votes to proceed with JPA termination, the Board would disband under the provisions identified in its JPA Agreement.

After any applicable restrictions on such termination have been satisfied, notice would be provided to customers six months in advance that they will be transferred back to PG&E. A second notice would be provided during the final sixty-days in advance of the transfer. The notice would describe the applicable distribution utility bundled service requirements for returning customers then in effect, such as any transitional or bundled portfolio service rules.

At least one year advance notice would be provided to PG&E and the CPUC before transferring customers, and the PCEA would coordinate the customer transfer process to minimize impacts on customers and ensure no disruption in service. Once the customer notice period is complete, customers would be transferred *en masse* on the date of their regularly scheduled meter read date.

The PCEA will post a bond or maintain funds held in reserve to pay for potential transaction fees charged to the Program for switching customers back to distribution utility service. Reserves would be maintained against the fees imposed for processing customer transfers (CCASRs). The Public Utilities Code requires demonstration of insurance or posting of a bond sufficient to cover reentry fees imposed on customers that are involuntarily returned to distribution utility service under certain circumstances. The cost of reentry fees are the responsibility of the energy services provider or the community choice aggregator, except in the case of a customer returned for default or because its contract has expired. The PCEA will post financial security in the



appropriate amount as part of its registration materials and will maintain the financial security in the required amount, as necessary.

*Termination by Members*

The JPA Agreement defines the terms and conditions under which Members may terminate their participation in the program.

## CHAPTER 12 – Appendices

*Appendix A: PCEA Resolution Adopting Implementation Plan*

*Appendix B: Peninsula Clean Energy Authority Joint Powers Agreement*