



CITY OF LANCASTER, CALIFORNIA



Community Choice Aggregator (CCA) Initial Feasibility Report

July 2013

Prepared by:



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1. Executive Summary

This report was prepared by Willdan/EnerNex at the request of the City of Lancaster, California (City), in order to evaluate the initial feasibility of the City becoming a Community Choice Aggregator (CCA). This report summarizes the results of the research and analysis, and specifically contains the following:

- Background of the CCA concept.
- Stakeholder discussion.
- Legislative authority and background.
- Review of CCA implementation and operation steps and considerations.
- Analysis of load characteristics within the City.
- Analysis of costs of electricity procurement and scenarios.
- Analysis of administrative and start-up costs.

As a matter of local policy, the City has placed great importance in the development of alternative energy resources and alternative energy generation strategies. There are already several significant alternative energy generating facilities in operation in the City, with more planned or in development. This, in turn, has attracted further alternative energy-related economic development in the City. Within this context, the City has expressed interest in becoming a CCA, and utilizing their growing generation resources of wind and solar to supply electric power to their constituents. In addition, if the initial CCA proves successful, the City may consider partnering with neighboring communities to form a larger CCA entity.

The process of becoming a CCA includes conformance to the rules and regulations of the State of California (State) including registration as a CCA with the California Public Utilities Commission (CPUC), meeting credit requirements, and becoming a California Independent System Operator (CAISO) market participant.

The management of the CCA to supply power to customers would involve a variety of functions and business processes. A load forecast to meet projected customer demand (included in this report) must be compared to the expected generation from wind, solar and other resources. To the extent it is available, excess power can be sold to utilities or through different CAISO market products. If the expected demand from customer load exceeds the expected amount of generation supply at any point in time, the CCA would be required to procure additional power in order to satisfy the demand.

Operationally, the City will need to determine which aspects of the CCA will be staffed and managed by City staff and which aspects are candidates for outsourcing to other entities. This report outlines options and includes costs associated with them in the cash flow analysis.

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After completion of the Initial Feasibility Analysis, the margin between CCA expenses and potential revenue from retail energy sales indicates a positive cash flow. This margin is highly contingent on the volatility of energy procurement costs and generating similar retail energy sales revenue to what Southern California Edison (SCE) currently reports. Next steps would be facilitated by the City's filing of a CCA Declaration to obtain more specific information from SCE.

Phase II of this analysis was described as an optional component in the original Willdan/EnerNex proposal Preparation of a Preliminary Feasibility Study for the City of Lancaster, California to Explore Becoming a Community Choice Aggregator and Implementation Steps.

2. Purpose of a Community Choice Aggregator (CCA)

The City has placed great importance in the development of alternative energy resources and alternative energy generation strategies. Within this context, the City has expressed interest in becoming a CCA utilizing their growing generation resources of wind and solar to better manage electricity pricing in the City to the benefit of the City and its constituents, and to provide an additional revenue source to the City. It is envisioned that becoming a CCA could prove to be an important component of the City's overall economic development strategy, and a key tool for generating local employment opportunities. Becoming a CCA may also allow the City to exercise more local control over retail electric rates, and help ensure stability in future electricity costs for its constituents. In addition, depending upon the success of the initial CCA efforts, the City may partner with neighboring communities to form a larger CCA entity at some point in the future.

The City has adopted a Blue Skies Program as well as a resolution to utilize alternative fuels whenever possible. In recognition of these efforts, Lancaster has been designated a "Clean City" by the US Department of Energy.

The City's location is very conducive to both solar and wind renewable generation. Commercial solar generation plants have been developed in and around the City and additional facilities are being planned and constructed. In addition, the Solar Lancaster program encourages both residential and commercial constituents to invest in solar generation through financing and taking advantage of the California Solar Initiative.

The process of becoming a CCA includes conformance to the rules and regulations of the State of California (State), including registration as a CCA with the California Public Utilities Commission (CPUC), meeting credit requirements and becoming a CAISO market participant. The purpose of the initial CCA feasibility study is to advise and guide the City regarding the required CCA startup process and to help the City understand the feasibility of forming a CCA, with the option of continuing with the CCA implementation phase if the feasibility study demonstrates a positive outcome.

(Continued)

If the CCA option is pursued, the management of the CCA to supply power to customers involves a variety of functions and business processes. The load forecast to meet projected customer demand must be compared to the expected generation from wind, solar and other resources. Excess power can potentially be sold to utilities or through different CAISO market products. If the expected demand from customer load exceeds the expected amount of generation supply at any point in time, then additional power must be procured through CAISO to satisfy the demand.

The City may also want to consider implementing Demand Response (DR) programs for their customers where designated levels in electricity prices can trigger conservation by participating customers, or DR programs that function as electricity resources by initiating DR events to trigger electricity load curtailment from participating customers. These programs have proven successful in many areas as mitigation for intermittent renewable generation resources that do not always generate the amount of power originally forecast.

Operationally, the City will need to determine which aspects of the CCA will be staffed and managed by City staff and which aspects are candidates for outsourcing to other entities. For example, there are multiple third party Electricity Service Providers (ESPs) that can provide energy procurement services as well as the required Schedule Coordinator interface to the CAISO. Utilization of this type of contracted service by the City has been initially explored during this phase of the feasibility analysis.

3. Feasibility Study Approach

The formation of a CCA is a multi-step process which has been organized into two phases. This initial feasibility study is the first phase of a process to assess and plan the formation of a CCA. The initial CCA feasibility study focused on evaluating the economic viability of the City forming a CCA by forecasting the load requirements of the City's constituent customer base, estimating the costs of procuring the necessary electricity to supply them, and layering on the costs of starting up and administering a CCA program.

Following the evaluation of the results presented in this feasibility report, the City would then need to make a decision on whether to move forward, and if so, proceed with the development of a detailed implementation plan as described in the Phase II CCA Implementation section of the Willdan/EnerNex proposal. The implementation plan would be completed following the adoption of an ordinance by the City Council indicating its intent to become a CCA. The implantation plan is required to contain a Statement of Intent by the City, which states its intention to meet the requirements established by the CPUC and State law. Once the plan is complete, it will be reviewed and approved by the City and be submitted to the CPUC. Following the CPUC's review of the plan, the CCA would be required to register with the CPUC and execute an agreement with SCE which would formalize the arrangement of services between the CCA and SCE.

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4. Stakeholder Management

4.1 *Southern California Edison (SCE)*

SCE is the Investor Owned Utility (IOU) which currently supplies power to customers in the City. Through both legislation and regulation, SCE is required to work cooperatively with a CCA during exploration, implementation and operation of the CCA. It is in SCE's best interest to ensure that the CCA has the necessary information for basing power procurement decisions, as the legislation and regulations also require SCE to be the provider of last resort. In other words, if the CCA is unable to satisfy their constituent customers' electric power needs, SCE must still deliver electricity to the CCA customers.

SCE is committed to working with CCAs in their territory in a Business to Business (B2B) relationship. Electric restructuring transitioned California IOUs to a "decoupled" model for regulated utilities. As a result, SCE does not earn money (profit) on electricity sales. Therefore, a CCA taking responsibility to procure and sell electric power to their constituent customers does not impact SCE earnings. SCE will assign an Account Representative to the Lancaster CCA to work with the City in the preparation, plan execution and operation phases of launching a CCA. The City met with their likely account representative Martha Dobler, as well as her manager Chris Tran, on Wednesday, April 24, 2013 with Chris Fisher from Willdan and Jeremy Laundergan from EnerNex in attendance. The formal B2B relationship is contractual with implementation of a CCA Service Agreement with SCE.

SCE has specific documented rules and processes that define the B2B relationship with a CCA that were developed to satisfy both their legislative and regulatory responsibilities. Understanding these rules and following the prescribed processes will ensure that the establishment of the CCA proceeds smoothly, as SCE is constrained to operate within the scope of the rules and processes.

A high level Overview of Establishing CCA Service in SCE Territory is illustrated Figure 1¹, located on the page that follows. Many of these steps are described below in order to elaborate the scope of work required to support the possible implementation of the Lancaster CCA.

¹ Excerpt from SCE CCA Handbook Chapter 1: Welcome, Preface, & CCA Overview:
https://www.sce.com/wps/wcm/connect/12fd9ce1-990a-4966-a373-6421acac44df/0901_CCAHandbookChapter1.pdf?MOD=AJPERES

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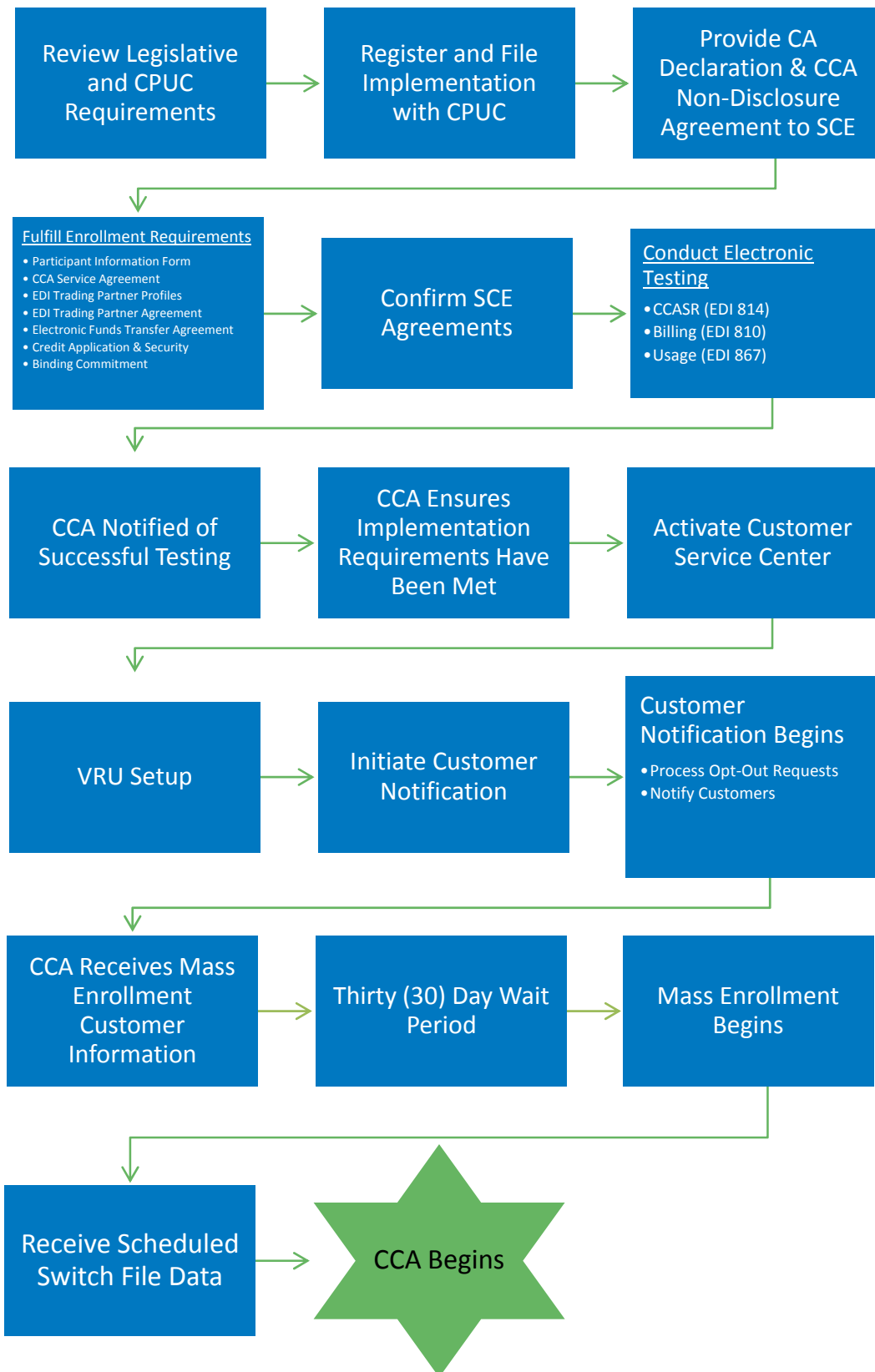


Figure 1: Overview of Establishing CCA Service in SCE Territory

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4.2 California Public Utilities Commission (CPUC)

Assembly Bill 117, establishing the basis and framework for CCA, provides the CPUC with only a limited role in providing oversight of a CCA. Essentially, the primary role of the CPUC in this process is to ensure that regulated IOUs provide required services to both the CCA and the CCA customers. In addition, the CPUC has a role to ensure that costs incurred for CCA customers are not passed along to other IOU customers. However, the CPUC still has some requirements for CCAs in relation to filing the following documents with the CPUC:

- Registration with the CPUC;
- Implementation Plan;
- Statement of Intent; and
- Evidence of Bond Insurance

The CPUC will not approve or disapprove a CCA implementation plan. Instead, the CPUC can facilitate an informal review process for the CCA and IOU to understand the implementation plan and ensure compliance with utility tariffs.

In addition, the CCA public advisor can work with the CCA to ensure that public notices regarding the CCA are clear, complete and easy to understand. SCE is required to include customer notices with the utility billing statements on a cost basis for the CCA.

4.3 California Independent System Operator (CAISO)

In order to become a CAISO market participant, multiple requirements must be met:

- Assignment of a certified Scheduling Coordinator
- Development and implementation of processes and systems to support resource interconnection:
 - Generation
 - Generator interconnection application process
 - Participating generator certification
 - Load
 - Resource adequacy (RA) planning and scheduling requirements
 - Price Responsive Demand as Participating Load or Proxy Demand Resource
- Utilization of appropriate metering and telemetry
- Participation in CAISO energy markets and related market products:
 - Energy;
 - Ancillary Services (AS);
 - Congestion Revenue Rights (CRR); and

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- Convergence bidding processes.

5. CCA Operational Planning

5.1 Obtaining Customer Information

In order to assess CCA feasibility and plan for CCA operations, the City obtained load information for its potential constituent customers. After receiving Lancaster's CCA Non-Disclosure Agreement (NDA) and collecting the appropriate fees (fee amount shown in parentheses with each item), SCE provided aggregate customer and usage data including:

- Aggregate customer information (free):
 - Number of accounts in each Rate Group;
 - Aggregate annual consumption for each Rate Group;
 - Aggregate non coincident demand in each Rate Group (where metered data is available);
 - Aggregate coincident demand in each Rate Group (where metered data is available);
 - Coincidence peak factors which estimate coincident demands (where metered data is available);
 - Standard system average load profiles by Rate Group;
 - Monthly Energy Efficiency participation data provided for Commission Group where metered data is available; and
 - Mapping of Rate Schedules by Rate Group.
- Additional Information (\$302.01):
 - Public Goods Charge;
 - Residential Tier Data;
 - Generation Revenue.
- Base Processing Fee (\$197.82):
 - Detailing the monthly usage (kWh);
 - Peak demand (kW) {where available};
 - Rate class average load profiles;
 - Rate class average coincident peak factors; and
 - Number of customers within the requesting CCA's service area.
- Aggregate by Customer Status (Direct Access vs. Bundled Customers) (\$77.38 additional)
- Aggregate by Rate Schedule (\$123.80 additional).

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5.2 Service Fees

As part of the total cost of providing service for their constituent customers, the City will need to take into account applicable service fees. A CCA is expected to reimburse SCE for services provided and costs incurred, including those related to billing and the customer notification process, according to an incremental costing methodology. CCA charges are categorized into:

- Service Fees:
 - CCA Establishment;
 - Electronic Data Interchange (EDI) Testing;
 - CCA Credit Establishment;
 - Customer Notification;
 - Mass Enrollment Fee;
 - Opt-out requests;
 - Community Choice Aggregation Service Request (CCASR) fee;
 - Consolidated Bill-Ready Billing Services; and
 - Meter and Data Management Agent (MDMA);
- Monthly Account Maintenance Fee
- Discretionary Service Fees:
 - Meter Services
 - Metering and Data Management Agent (MDMA) Services
- Information Fees:
 - Reports
 - Customer Information Standardization Request (CISR)
- Cost Responsibility Surcharge (CRS)

5.3 SCE Electric Rates

5.3.1 SCE Electricity Pricing - Domestic

SCE electricity tariffs are regulated by the CPUC. For domestic customers, there are two components to the electricity rates: Delivery Service and Generation Rates; SCE bundled customers that receive both delivery and energy from SCE pay both the delivery service and generation rates. Direct Access (DA) and CCA customers only pay SCE the delivery component while paying their CCA or ESP for the electricity consumed.

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Traditionally, flat rates have applied to electricity consumption with a certain price for each Kilowatt Hour (kWh) consumed. The CPUC has required that SCE and the other state IOUs utilize a tiered rate structure with the intent of encouraging energy conservation and efficiency.

With the current existing domestic tiered rate structures, there are multiple tiers of flat rates, and the rate for each tier increases with increased energy consumption. The baseline and Tier 2 rates are essentially frozen with a limited 3-5% increase allowed per year until the California Department of Water Resources (DWR) is paid back in full for their expenditures that were incurred to procure electricity for the California IOUs during the electricity crisis.

- Tier 1: usage up to Baseline quantities
- Tier 2: 100% - 130% of Baseline
- Tier 3: 130% - 200% of Baseline
- Tier 4: 200% - 300% of Baseline
 - Less than 200% of Baseline; anticipated to start later in 2013
- Tier 5: less than 300% of Baseline
 - Anticipated to be eliminated starting later in 2013

SCE is currently completing a General Rate Case (GRC) proceeding with the CPUC. As a result, the electricity rates have been fairly volatile as shown in Figure 2. Overall, there is a trend towards increasing delivery charges and decreasing generation charges. This trend is justified by the lower cost of power procurement, resulting from the relatively cheap natural gas pricing due to the currently abundant supply, as well as the continued investment in modernizing and replacing distribution infrastructure. However, this trend also has the effect of making SCE rates more competitive than the alternative ESP rates.

Not reflected in this table are potential rebates provided by SCE if a customer curtails their electricity usage relative to their Customer Specific Reference Level (CSRL) on certain days specified as Peak Time Rebate (PTR) or Save Power Days (SPD).

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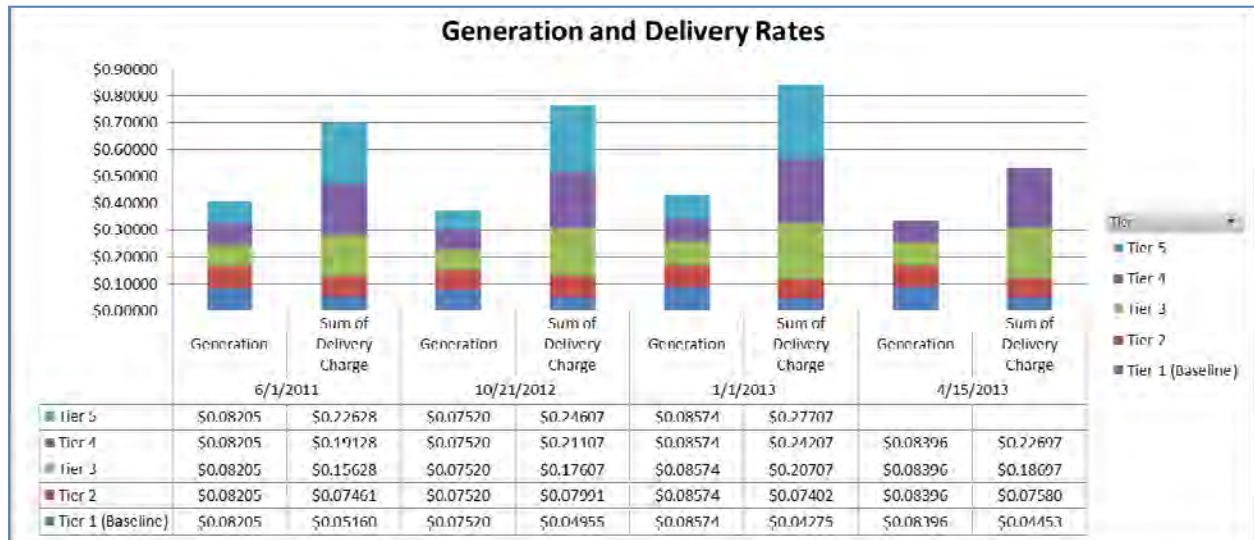


Figure 2: SCE Generation and Delivery Rates

The generation gate is the component that Lancaster CCA constituent customers would stop paying SCE and begin paying the City based on the rate developed for the CCA. The Lancaster CCA residential rate should be competitive with the SCE generation rate.

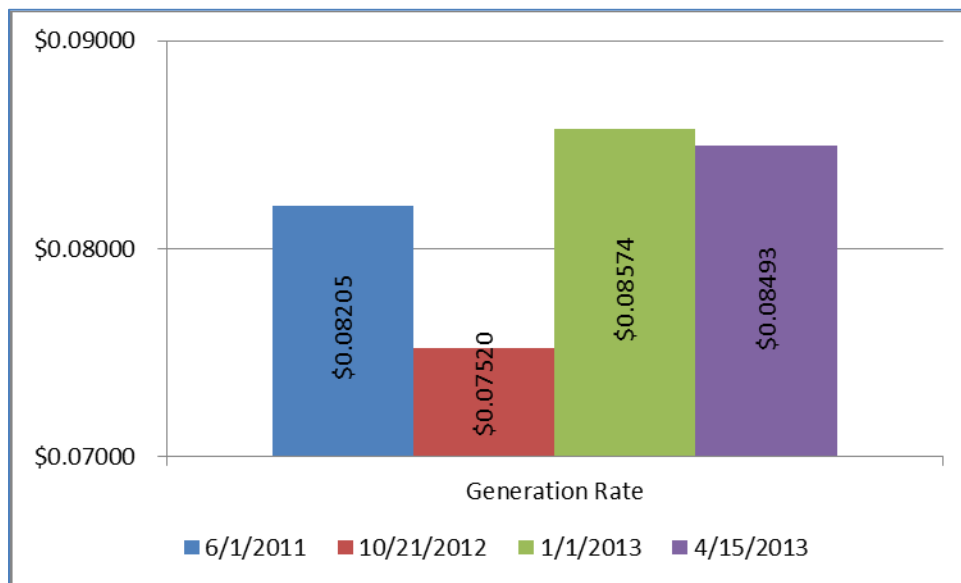


Figure 3: SCE Generation Rates

5.3.2 SCE Electricity Pricing - Commercial and Industrial

The CPUC has ordered SCE to implement mandatory Time of Use (TOU) rates for small and medium commercial customers with up to 200 kW demand and mandatory Critical Peak Pricing (CPP) rates for

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large commercial customers with over 200 kW demand. Large commercial customers have already transitioned to their default CPP rate or positively selected an alternative rate. Small and medium commercial customers will begin their transition to TOU rates including the opportunity to positively select an alternative rate in 2014. Customers are defaulted to a certain rate, but have the option of selecting an alternative rate:

- Time of Use rates seek to better align the customer price of electricity with the supply cost of electricity. Typically there are several TOU periods per day such as Night, Morning, Day and Evening. (Default rate structure for small and medium non-residential customers)
- Critical Peak Pricing rates seek to impose higher electricity prices on the days of highest electricity usage (peak days). Electricity generation capacity needs to meet the electricity demand on those peak days despite the fact that only 6-12 peak days occur per year. Electricity tends to get more expensive as demand approaches the available capacity (as would be expected in a typical commodity supply and demand market). Therefore, imposing higher prices on the days that high demand is forecasted should result in a lower demand. (Default rate structure for large non-residential customers)
- Real Time Pricing (RTP) seeks to align retail electricity pricing with the cost of supply. True RTP programs have been limited to date.

SCE Rate Classes

SCE categorizes commercial and industrial customers based on the industry or use for the electricity as well as the amount of electricity demand by the customer. In keeping with the logic to promote conservation through increased prices for higher usage, larger customers pay higher rates than smaller customers. The different SCE rate classes applicable within the City are:

- GS-1 (General Service Non-Demand)
 - This rate class includes single- and three-phase general service including lighting and power, except that the customer whose monthly maximum demand, in the opinion of SCE, is expected to exceed 20 kW or has exceeded 20 kW in any three months during the preceding 12 months.
- GS-2 (General Service - Demand)
 - This rate class includes single- and three-phase general service including lighting and power customers whose monthly maximum demand registers, or in the opinion of SCE is expected to register, above 20 kW and below 200 kW. The customer whose monthly maximum demand, in the opinion of SCE, is expected to exceed 200 kW or has exceeded 200 kW for any three months during the preceding 12 months is ineligible for service under this rate class. Customers that exceed the 200 kW will be placed in TOU-GS rate class.

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- TOU-GS (Time-Of-Use - General Service - Demand Metered)
 - This rate class includes single- and three-phase general service including lighting and power customers whose monthly maximum demand registers, or in the opinion of SCE is expected to register, above 200 kW through 500 kW. The customers whose monthly Maximum Demand, in the opinion of SCE, is expected to exceed 500 kW or has exceeded 500 kW for any three months during the preceding 12 months is ineligible for service under this rate class.
- TOU-8 (Time-Of-Use - General Service – Large Customer)
 - This rate class includes general service, lighting and power, except agricultural water pumping accounts. This rate class is mandatory for all customers whose monthly maximum demand, in the opinion of SCE, is expected to exceed 500 kW or has exceeded 500 kW in any three months during the preceding 12 months.

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- PA-1 (Power - Agricultural and Pumping Connected Load Basis)
 - This rate class includes accounts where SCE determines that 70% or more of the customer's electrical usage is for general agricultural purposes or for general water or sewerage pumping and none of any remaining electrical usage is for purposes for which a domestic schedule is applicable.
- PA-2 (Power - Agricultural and Pumping Demand Metered)
 - This rate class includes accounts where SCE determines that 70% or more of the customer's electrical usage is for general agricultural purposes or for general water or sewerage pumping and none of any remaining electrical usage is for purposes for which a domestic schedule is applicable. The customer whose monthly Maximum Demand, in the opinion of SCE, is expected to, or has reached, 200 kW or above in any three months during the preceding 12 months shall have a Real Time Energy Meter (RTM) or other type of interval meter installed and shall become ineligible for service under this Schedule. Upon such ineligibility a customer whose Maximum Demand is 500 kW or below shall be transferred to an applicable agricultural TOU rate schedule, while a customer whose Maximum Demand exceeds 500 kW will be transferred to Schedule TOU-8. However, in accordance with Schedule TOU-8, a large individual water agency or other large water pumping account with 70% or more of the water pumped used for agricultural purposes, must take service on a TOU agricultural class rate schedule.
- TOU-PA-5 (Time-Of-Use Agricultural and Pumping - Demand Metered)
 - This rate class includes accounts where SCE determines that: 70% or more of the customer's electrical usage is for general agricultural purposes or for general water or sewerage pumping or for oil pumping by customers with a Standard Industrial Classification (SIC) Code of 1311; none of any remaining electrical usage is for purposes for which a domestic schedule is applicable; and, the customer's account has 35 horsepower or more of total connected load or 35 kilowatts or more of Maximum Demand.
- AG TOU (Time-Of-Use Agricultural and Pumping - Demand Metered)
 - This rate class includes accounts where SCE determines that: 70% or more of the customer's electrical usage is for water pumping used for agricultural purposes, except where the customer's monthly Maximum Demand, is expected to exceed 500 kW or has exceeded 500 kW for any three months during the preceding 12 months. These accounts are time-of-use agricultural and pumping accounts that do not qualify for the TOU-PA-5 tariff.

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- TC-1 (Traffic Control Service)
 - This rate class includes single- and three-phase service: for traffic directional signs or traffic signal systems located on streets, highways and other public thoroughfares and to railway crossing and track signals; for public thoroughfare lighting that is utilized 24 hours per day or is not controlled by switching equipment, such as tunnel or underpass lighting; and, to public authorities for the illumination of bus stop shelters located in the dedicated road right-of-way where such service is combined with other traffic control service as defined above.

- Street Lighting (Lighting - Street and Highway Company-Owned System)
 - This rate class includes service for the lighting of streets, highways, and publicly-owned and publicly- operated automobile parking lots which are open to the general public where SCE owns and maintains the street lighting equipment and associated facilities included under this schedule.

Sample SCE Tariff Rates for Identified Rate Classes

The default rates for different customer classes are reflected in Table 1. Each customer class has additional rates available to them, but an additional report from SCE would be required in order to determine which specific customers are on the different rates available. For the purposes of this initial feasibility report, that level of detail is not required.

Table 1 - Sample Non-Residential Tariff Rates

Rate Class	Summer			Winter	
	On-Peak	Mid-Peak	Off-Peak	Mid-Peak	Off-Peak
GS-1	\$0.15085	\$0.10636	\$0.07676	\$0.08163	\$0.07028
GS-2	\$0.31164	\$0.11009	\$0.03589	\$0.06213	\$0.04082
TOU-PA-1	\$0.21709	\$0.08411	\$0.02977	\$0.06988	\$0.02781
TOU-PA-2	\$0.31901	\$0.09645	\$0.03664	\$0.06617	\$0.04263
Street Lighting	\$0.04424	\$0.04424	\$0.04424	\$0.04424	\$0.04424
TC-1	\$0.08727	\$0.08727	\$0.08727	\$0.08727	\$0.08727
TOU-8	\$0.24996	\$0.10726	\$0.03386	\$0.05745	\$0.03895
TOU-GS	\$0.15085	\$0.10636	\$0.07678	\$0.08163	\$0.07028

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(Continued)

Average Rates	\$0.17776	\$0.07923	\$0.03915	\$0.06412	\$0.04457
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The electricity rate pressure on commercial and industrial customers has anecdotally cited the price of electricity is one of the factors cited when companies move operations to another state or another country. Offering electricity rate incentives to commercial and/or industrial businesses can be a one part of a package of economic incentives to consider Lancaster as a location for doing business in the City.

(Continued)

5.3.3 Billing Options for Customers

In addition to the tariff rates described in Table 1, there are payment programs available to customers:

- Low income discount programs like the California Alternate Rates for Energy (CARE) program charge lower rates to low income customers under certain qualifying criteria.
- Level pay plans seek to provide customers with a consistent bill to assist customers in their monthly budgeting. Level pay plans are based on the forecasted average annual bill with scheduled true-up periods to adjust for actual usage that is either above or below the forecasted usage.
- Pre-pay programs enable customers to purchase their electricity prior to consumption. This has been a growing trend for the telecom industry, with pre-paid cell phones and long distance cards. IOUs operating in the State are exploring pre-pay options but have not yet implemented any programs.

5.4 CCA Establishment

5.4.1 Lancaster CCA Responsibilities

Operationally, a Lancaster CCA will be responsible for:

- Procuring and providing electric power needs for constituent customers;
- Electric power resource adequacy and reserve requirements;
- Electric power scheduling and related financial settlement with the CAISO; and
- Customer communications including responding to customer inquiries.

5.4.2 Potential Lancaster CCA Implementation Phases

Many municipalities considering CCA have considered phasing in their CCA service offering. A CCA has the ability to phase in their CCA Service by incrementally enrolling customers in the program. SCE has developed Standard Phase-In Service including three options for the City to consider in their implementation plan:

- Phase-in by customer class, or
- Phase-in by rate class, or
- A Specialized Services Agreement with SCE with a customized Phase-in plan.

(Continued)

5.4.3 Open Season

During Open Season, a CCA may submit a Binding Notice of Intent (BNI) to SCE and the CPUC. The BNI provides the number of customers, the customer class and specific dates that a CCA will begin serving customers. The BNI can reflect the schedule for a phased-in approach for CCA service. SCE will then utilize the BNI to modify power procurement forecasts which will mitigate the Cost Responsibility Surcharge (CRS) that CCA customers could owe SCE for power already procured on their behalf. While Open Season is optional, it can reduce customer costs by being exempt from CRS related to subsequent SCE power procurement contracts or generation capital expenses.

Open Season is available annually during January 1 through February 15 or as late as March 1 if the California Energy Commission (CEC) Load Serving Entity (LSE) Load Forecasts are due on or after May 1.

5.4.4 Customer Notification

A CCA must inform potential constituent customers at least twice within two months (60 days) prior to the customers' designated date of CCA enrollment. Notifications shall include the following information:

- The customer is to be automatically enrolled in the CCA;
- The customer has the right to Opt-Out of the CCA without penalty; and
- The terms and conditions of the services offered.

A similar notification must be made twice within two billing cycles subsequent to a customers' enrollment in the CCA.

5.4.5 CCA Load Forecast

After SCE has received the CCA BNI, SCE will meet with the CCA to develop a Load Forecast for the first year of CCA service. SCE is committed to collaborate to the extent possible in the development of this load forecast. For phased-in CCA service, the load forecast will reflect the incremental increases in load for each phase.

5.4.6 Electronic Communications and Compliance Testing

Communications with SCE are vital to ensuring successful transactions related to electric meter reading and billing. SCE utilizes the Electronic Data Exchange (EDI) standard to facilitate the electronic communications and data exchange with CCAs. As part of the process of working with SCE to establish the CCA, SCE will conduct EDI testing to ensure that operational data exchange is functioning prior to the CCA commencing service.

(Continued)

5.4.7 Contracted Services

The City may elect to outsource or contract certain aspects of CCA operations. For example, some ESPs and CCAs have considered contracting a Scheduling Coordinator to act on their behalf with the CAISO. Identification of which functions can be self-performed, and determining which functions will be contracted services will be determined as part of the development of the CCA business plan. The roles for contracted services will likely evolve as the CCA progresses in maturity.

6. Phase I – Initial Feasibility Analysis Results

6.1 Task 1: Project Initiation and Management

The purpose of Task 1 was to gather the necessary data, formalize the lines of communication between Willdan/EnerNex and appropriate City personnel, coordinate the project schedule with other members of the project team and ensure that the project objectives are clearly defined and understood by all parties. Table 2 outlines the deliverables required and the dates they were provided.

Table 2 - Task 1 Deliverables

#	Deliverable	Status	Date
1	Initial data request	<ul style="list-style-type: none"> Paperwork for SCE CCA Information data request provided to Lancaster Initial list of information needed from Lancaster provided in <i>Lancaster CCA Feasibility Project Plan v3 130205</i> 	2/8/13 2/5/13
2	Initial draft document articulating vision, purpose and goals for City’s CCA	Draft provided to City for review in <i>Lancaster CCA Feasibility Project Plan v3 130205</i>	2/5/13
3	Reference documentation regarding legal precedent for establishing CCA within the State	List provided in <i>Lancaster CCA Feasibility Project Plan v4 130215</i>	2/25/13
4	Reference documentation regarding benchmarking existing CCA efforts within the State	List provided in <i>Lancaster CCA Feasibility Project Plan v4 130215</i>	2/25/13

6.1.1 Deliverable 2 – Draft Vision

“The City will determine whether pursuing CCA is a financially and operationally feasible course of action to augment the City’s alternative energy, Blue Skies Program and other environmentally-friendly practices.”

(Continued)

Becoming a CCA should support the broader vision for the City:

“The vision for the City of Lancaster is to be a most desirable place to live, work, visit, and play².”

And further the mission of the City:

“To achieve our vision through the delivery of highly effective public services for the common good.²”

6.1.2 Subtask 1a: Project Communications Kick-Off and Status Meetings

Description: Willdan and EnerNex met with the City via conference call on Thursday, January 31. This project plan and related requirements reflect what was discussed during that meeting as well as the plan outlined in the proposal to the City.

- Chenin Dow will be the primary point of contact for the City.
- Chris Fisher is the Project Manager for the Willdan/EnerNex team.
- Jeremy Laundergan will be the primary point of contact for EnerNex.

It was decided to initially utilize informal email and ad-hoc conference calls as necessary to communicate between parties during this early stage of this project.

In addition, brief monthly summaries of project status will accompany Willdan’s monthly invoices.

6.1.3 Subtask 1b: Data Request – Deliverable 1

Information from the City

Description: The following information was gathered in order to facilitate the CCA feasibility analysis being performed by Willdan/EnerNex:

- Copies of prior relevant studies;
- Any information on historical or projected customer usage and demands;
 - e.g. any large construction or sub-division development projects that may affect the future electricity load in the City.
- Any relevant City ordinances and policies;
 - e.g. Blue Skies Program and Alternative Fuels Resolution.
- Any relevant sale and purchase agreements – especially in regard to electric power;

² <http://www.cityoflanasterca.org/Modules/ShowDocument.aspx?documentid=3792>

(Continued)

- e.g. memorandum of understanding (MOU) and a power purchase agreement (PPA) with US Topco Energy, Inc.
- Information regarding existing generation (including solar and wind) capacity within or near the City either on City-owned land or on privately-owned land;
 - e.g. eSolar 20-acre 5 MW Sierra SunTower solar thermal power tower plant).
- Information regarding generation being planned or constructed (including solar and wind) within or near the city either on city land or on privately owned land;
- Of the current and planned generation listed, details regarding what generation capacity (if any) the City has access to through contractual or other agreement;
- Information regarding residential and commercial solar installations being planned, under construction or currently operating; and
 - e.g. Solar Lancaster participants
- Other related information including existing and anticipated policies that would be useful to the study.

Upon receiving the City's response(s) to the initial data request, Willdan/EnerNex reviewed the information and incorporated it into the feasibility analysis.

Customer Information from SCE

Description In order to assess CCA feasibility and plan for CCA operations, the City obtained load information for its potential constituent customers from SCE including aggregate customer and usage data (subject to certain criteria). However, customer-specific information is not available without a CCA Non-Disclosure Agreement (NDA) and a signed CCA Declaration.

Aggregate customer information (up to twice per year) Free

- Number of accounts in each Rate Group;
- Aggregate annual consumption for each Rate Group;
- Aggregate non coincident demand in each Rate Group (where metered data is available);
- Aggregate coincident demand in each Rate Group (where metered data is available);
- Coincidence peak factors which estimate coincident demands (where metered data is available);
- Standard system average load profiles by Rate Group;
- Monthly Energy Efficiency participation data provided for Commission Group where metered data is available; and
- Mapping of Rate Schedules by Rate Group.

Additional information regarding the Public Goods Charge, Residential Tier Data and Generation Revenue information can be requested for a fee:

(Continued)

1. Additional Information: \$302.01

Information detailing the monthly usage (kWh), peak demand (kW) {where available}, rate class average load profiles, rate class average coincident peak factors, and the number of customers within the requesting CCA's service area can be obtained with the Base Processing Fee:

2. Base Processing Fee: \$197.82

- a. Aggregate by Zip Code: \$ 100.59
- b. Aggregate by Customer Status (Direct Access vs. Bundled Customers): \$77.38
- c. Aggregate by Rate Schedule: \$123.80

Individual customer information including customer account name, service account, service address, mailing address, monthly usage (kWh), monthly peak demand (kW) {where available}, rate class average load profiles, rate class average coincident peak factors³ including summaries of the Standard Output File aggregated by Rate Group in addition to the specific aggregation method called out by the report.

3. Standard Output File⁴ \$ 197.82

- a. Aggregate by Zip Code: \$ 61.90
- b. Aggregate by Customer Status (Direct Access vs. Bundled Customers): \$ 61.90
- c. Aggregate by Rate Schedule: \$ 61.90

In addition, a CCA can utilize a CPUC Customer Information Service Request (CISR) in order to obtain specific customer usage data.

4. CISR Base Processing Fee (per CISR): \$9.91

- a. Cumulative Meter Usage Data Base Fee (per request): \$4.52
- b. Cumulative Meter Service Account Usage Data Fee (per service account): \$5.54
- c. Interval Meter Base Fee (per request): \$4.32
- d. Interval Meter Service Account Usage Data Fee (per service account): \$7.73

³ A CCA shall be required to be registered with, and have an Implementation Plan on file with, the CPUC prior to the release by SCE of residential customer specific information.

⁴ The 15/15 Rule will be applied to data provided to the CCA. The 15/15 Rule was adopted by the CPUC in the Direct Access Proceeding (CPUC Decision 97-10-031) to protect customer confidentiality. The 15/15 rule requires that any aggregated information provided by SCE must be made up of at least 15 customers and a single customer's load must be less than 15% of an assigned category. If the number of customers in the complied data is below 15, or if a single customer's load is more than 15% of the total data, categories must be combined before the information is released.

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(Continued)

At this stage of the analysis, Willdan/EnerNex recommended that we proceeding with a request for the following items:

Table 3 – Customer Information Request from SCE

Description	Cost
Aggregate Information	Free
Additional Information	\$302.01
Base Processing	\$197.82
b) Customer Status	\$77.38
c) Rate Schedule aggregate	\$123.80
Total Cost	\$701.01

(Continued)

Deliverable 1 - SCE Data Request

February 8, 2013

Debbie Hess, Region Manager
Southern California Edison
42060 West 10th St West
Lancaster, CA 93534

Dear Ms. Hess,

The enclosed CCA declaration form and CCA NDA forms and check for \$701.01 are in support of a request for the following information detailed in Schedule "CCA-INFO Sheet 1 Community Choice Aggregation Information". We alerted Chris Tran, SCE Manager of Customer Choice Services, that this request would be forthcoming and he may have reached out to you to expect this request would be submitted. The enclosed fee should cover generation of the following information:

1. Aggregate customer information (free):
 - Number of accounts in each Rate Group;
 - Aggregate annual consumption for each Rate Group;
 - Aggregate non coincident demand in each Rate Group (where metered data is available);
 - Aggregate coincident demand in each Rate Group (where metered data is available);
 - Coincidence peak factors which estimate coincident demands (where metered data is available);
 - Standard system average load profiles by Rate Group
 - Monthly Energy Efficiency participation data provided for Commission Group where metered data is available; and
 - Mapping of Rate Schedules by Rate Group.
2. Additional Information: \$302.01
 - a. Public Goods Charge
 - b. Residential Tier Data
 - c. Generation Revenue
3. Base Processing Fee: \$197.82
 - Detailing the monthly usage (kWh),
 - peak demand (kW) (where available),
 - rate class average load profiles,
 - rate class average coincident peak factors,
 - number of customers within the requesting CCA's service area
 - a. Aggregate by Customer Status (Direct Access vs. Bundled Customers): \$ 77.38 addl.
 - b. Aggregate by Rate Schedule: \$ 123.80 addl.

Please let us know if you have any questions or need additional information.

Thank you,

Chenin Dow
City of Lancaster

6.2 Task 2: Identify CCA Requirements

Task 2 identified the business and process requirements for the City to establish a CCA in the state. In order to establish a CCA, the City must meet the requirements defined by the CPUC, by CAISO and by SCE. The CCA requirements are described in detail in this section, and general time sequences for performing the actions needed to establish the CCA are provided.

(Continued)

6.2.1 CPUC requirements for registering as a CCA

Table lists the detailed CPUC requirements for establishing a CCA in the state of California. Requirements include developing an implementation plan, preparing a Statement of Intent, registering the implementation plan with the CPUC, providing evidence of a bond, ensuring resource adequacy and signing a Non-Disclosure Agreement (NDA) with SCE.

Table 4 - CPUC Requirements for CCAs

Requirement	Note
Develop an implementation plan <ul style="list-style-type: none"> • An organizational structure of the program, its operations, and its funding • Rate setting and other costs to participants • Provisions for disclosure and due process in setting rates and allocating costs among participants • The methods for entering and terminating agreements with other entities • The rights and responsibilities of program participants, including, but not limited to, consumer protection procedures, credit issues, and shutoff procedures • Termination of the program • A description of the third parties that will be supplying electricity under the program, including, but not limited to, information about financial, technical, and operational capabilities 	A CCA shall develop an Implementation Plan, as defined in PU Code Section 366.2(c)(3)
Prepare a Statement of Intent providing for the following: <ul style="list-style-type: none"> • Universal access • Reliability • Equitable treatment of all classes of customers • Any requirements established by state law or by the Commission concerning aggregated service 	
Register and file an implementation plan with the CPUC	Within 90 days after the Community Choice Aggregator establishing load aggregation files its implementation plan, the Commission is required to certify that it has received the implementation plan, including any additional information necessary to determine a cost- recovery mechanism
Provide evidence of Bond/Insurance	Pursuant to Resolution-E-4133, the Commission adopted an interim bond amount of \$100,000 (or that amount in cash) that CCAs shall post with the Commission as part of their registration packet pursuant to Decision 05-12-041

(Continued)

Requirement	Note
Ensure resource adequacy	
Signed NDA between CCA and SCE	

6.2.2 CAISO Requirements for Market Participants / Scheduling Coordinator

The CAISO requires a certified Scheduling Coordinator (SC) to participate in the California energy market, thus the Lancaster CCA will require the services of a Scheduling Coordinator. The SC must both be specially trained in CAISO procedures and must have access to a secure communications link to the CAISO system through either the Internet or through the Energy Communications Network (ECN). The City may either hire a certified SC directly or contract for SC services.

The CAISO SC manages bids in the CAISO ancillary service and energy markets. Pricing within the CAISO markets is determined by Locational Marginal Prices (LMP) which define the cost of delivery to specific locations based on the cost of generation, distance from generation resources and congestion of transmission to that location. Energy bids are made hourly on the day-ahead market and real time balancing of supply and demand is achieved through the real time market including the Hour Ahead Scheduling Process (HASP) and ancillary services.

An SC Applicant is responsible for and must meet all CAISO SC certification requirements in order to receive SC certification. However, the certification requirements to complete real time and contact drills and the establishment of Settlement Quality Meter Data System (SQMDS) connectivity and functionality of other technical systems may be completed by the Scheduling Agent acting on behalf of the SC Applicant.

The SC itself, not the Scheduling Agent, is ultimately responsible for all CAISO market and administrative costs, scheduling, operating performance, and CAISO network security, as well as contractual and financial settlement issues consistent with its executed Scheduling Coordinator Application (SCA).

Scheduling Coordinator Application Timeline

1. CAISO Tariff Section 4.5.1.1.4, Scheduling Coordinator Applicant Returns Application
2. CAISO Tariff Section 4.5.1.1.5, Notice of Receipt
3. CAISO Tariff Section 4.5.1.1.6, CAISO Review of Application
4. CAISO Tariff Section 4.5.1.1.7, Deficient Application
5. CAISO Tariff Section 4.5.1.1.7.1, Scheduling Coordinator Applicant’s Additional Information
6. CAISO Tariff Section 4.5.1.1.7.2, No Response from Scheduling Coordinator Applicant
7. CAISO Tariff Section 4.5.1.1.8.2, Time for Processing Application
8. CAISO Tariff Section 4.5.1.1.9.1, Scheduling Coordinator Applicant’s Acceptance
9. CAISO Tariff Section 4.5.1.1.11, Final Certification of Scheduling Coordinator Application

(Continued)

10. At least 120 days prior to the proposed start of service, the SC Applicant must submit a completed application form to the CAISO with a non-refundable application fee

The SC Applicant has twelve (12) months in which to complete and pass the requirements for certification. If certification is not completed within twelve (12) months from the initial submittal date, the CAISO can close the application upon the provision of thirty (30) days advance notice.

Table 5 - CAISO Scheduling Coordinator Requirements

Requirement
Establish Financial Security with CAISO and meet the Minimum Participation Requirements
Establish Network Interface <ul style="list-style-type: none"> • Internet • ECN – secure private network
Point of Contact
Request Application Access
Attend Training
Complete Market Proficiency Test
Test Fed-Wire - a computerized high-speed communication system linking the banks within the Federal Reserve System
Submit SC Emergency Plan - The SC emergency plan ensures that a procedure is in place that gives the SC the capability to submit, withdraw, or adjust Bids and Self-Schedules in the case of an emergency
Complete Real-Time and Contact Drills
Establish CAISO Automated Dispatch System (ADS) Access
Establish SLIC System Access
Attend SLIC Training
Establish Access to Operation Meter Analysis and Reporting (OMAR)
Submit Acknowledgement Forms
Training & Testing - SCs are required to maintain continued proficiency and compliance with the rules and regulations concerning participation in the CAISO Markets

6.2.3 CCA Business-to-Business Interfaces and Processes with SCE

The Lancaster CCA will need to perform specific steps to coordinate formation of the CCA with SCE. Necessary and recommended steps include:

- a submitting a BNI;
- calculating the CCA’s load forecast;
- completing a Participant Information Form (PIF);
- developing a CCA Service Agreement;
- completing Credit Forms;
- writing the EDI Trading Partner Agreement;
- developing the EDI Trading Partner Profiles;

(Continued)

-
- completing an Electronic Funds Transfer Agreement;
 - signing a CCA Non-Disclosure Agreement;
 - submitting a DUNS Number;
 - confirming agreements with SCE;
 - conducting Electronic Interface & Compliance Testing;
 - successfully completing the testing;
 - activating a customer service center;
 - setting up a Voice Response Unit with SCE;
 - notifying customers of the CCA;
 - providing mass enrollment information to SCE;
 - conducting a waiting period;
 - performing mass enrollment;
 - handling CCASRs;
 - conducting a Follow up Notification Period;
 - setting up billing procedures;
 - performing load profiling and calculating distribution loss factors;
 - performing usage data reconciliation;
 - paying service fees and non-energy costs; and
 - resolving disputes.

Requirements for terminating a CCA are also included in this section.

Details on the SCE requirements are contained in Section 5.4 5.4 CCA Establishment. References to SCE documentation related to those requirements is contained in Section 6.1.3.

Table 6 - Binding Notice of Intent (BNI)

Requirement	Note
A CCA is bound to accept the transfer of customers that have not opted-out of the mass enrollment.	
The BNI provides the specific date, and forecasted number of customers by rate class, that a CCA will begin serving customers	
The specified date will refer to the first day that a CCA assumes responsibility for the purchase of electrical energy for CCA Service customers that transfer from SCE to the CCA during mass enrollment	
In the event that a CCA intends to phase-in its CCA service and participate in the Open Season - the CCA will then provide in its BNI the schedule by which it intends to phase- in service which will include the number of customers for each rate class to be served according to the schedule provided	Pursuant to D.04-12-046, a CCA has the ability to offer service to some eligible customers before others. This incremental enrollment process is defined as a Phase- In and shall be subject to the provisions set forth in Section E of Rule 23
The CCA load forecast would then reflect the incremental changes in the CCA's load as a result of phasing in the program	

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Table 7 - CCA Load Forecast Requirements

Requirement	Note
The CCA will meet and confer with SCE upon submission of its BNI to develop a Load Forecast for the CCA for the year it commits to commence service	
CCA's description of customer classes which the CCA intends to offer service	
Description of the terms and conditions of the CCA's service	
CCA rate forecasts for the year the CCA commences service	
<i>The SCE estimates for bundled customers who do not qualify for mass enrollment</i>	SCE requirement
Information either party has received on customer intent to opt-out of the CCA program	

Table 8 - Participant Information Form Requirements

Requirement	Note
This form is required prior to a CCA operating in the SCE service territory	SCE Community Choice Aggregation Handbook Chapter 4 – page 3

Table 9 - CCA Service Agreement Requirements

Requirement	Note
The CCA Service Agreement (Form 14-768) incorporates SCE's applicable tariffs and is required prior to commencement of CCA Service within SCE service territory	SCE Community Choice Aggregation Handbook Chapter 4 – page 6

(Continued)

Table 10 - Credit Form Requirements

Requirement	Note
<i>From Rule 23</i>	
<i>A CCA with a demonstrable current credit rating of Baa2 or higher from Moody's or BBB or higher from Standard and Poor's, Fitch or Duff & Phelps, is deemed to be creditworthy unless SCE determines that a material change in the CCA's creditworthiness has occurred</i>	
<ol style="list-style-type: none"> <i>The CCA or its authorized agent may submit and maintain a cost-based security deposit in lieu of submitting to or being qualified under a creditworthiness evaluation</i> 	
The Credit Profile Application is required prior to a CCA operating in the SCE service territory	
Adequate security in the form of a cash deposit or other acceptable form prior to enrolling end-use customers in CCA Service	
Credit Profile Application	SCE Community Choice Aggregation Handbook Chapter 4 – page 21
Adequate security – Certificate of Deposit	SCE Community Choice Aggregation Handbook Chapter 4 – page 24
Letter of Credit	SCE Community Choice Aggregation Handbook Chapter 4 – page 26
Corporate Guaranty Agreement	SCE Community Choice Aggregation Handbook Chapter 4 – page 29
Corporate Guaranty Resolution	SCE Community Choice Aggregation Handbook Chapter 4 – page 32

Table 11 - EDI Trading Partner Agreement Requirements

Requirement	Note
This agreement sets forth the general responsibilities of the Electronic Data Interchange (EDI) partnership. It is required for transmitting EDI transactions with SCE	SCE Community Choice Aggregation Handbook Chapter 4 – page 33

Table 12 - EDI Trading Partner Profiles Requirements

Requirement	Note
The EDI Trading Partner Profiles are utilized to establish EDI communications for CCAs. These forms capture critical information that is necessary for the CCA to communicate with SCE via EDI	
CCA EDI Trading Partner Profile for Inbound and Outbound 814	SCE Community Choice Aggregation

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(Continued)

Requirement	Note
CCASRs & Transaction Set-ID 810/820/824/867	Handbook Chapter 4 – page 41

Table 13 - Electronic Funds Transfer Agreement Requirements

Requirement	Note
This agreement establishes the terms and conditions for the electronic funds transfer (ETF) of payments to the CCA	SCE Community Choice Aggregation Handbook Chapter 4 – page 45

Table 14 - CCA Non-Disclosure Agreement Requirements

Requirement	Note
The CPUC requires that SCE provide certain relevant confidential utility information to CCAs and potential CCAs to investigate, pursue or implement Community Choice Aggregation (CCA). SCE shall provide such information following the receipt of the CCA Non-Disclosure Agreement and Declaration by Mayor or Chief County Administrator	SCE Community Choice Aggregation Handbook Chapter 4 – page 51

Table 15 - Binding Commitment Requirements

Requirement	Note
A binding commitment by a CCA establishes the date a CCA commits toward initiating CCA Service to customers and relieves the CCA for power commitments made on behalf of the CCA's customers up to the date the CCA begins operations	

Table 16 - DUNS Number Requirements

Requirement	Note
CCAs will need to submit Dun & Bradstreet (D&B) numbers during their CCA enrollment with SCE. These numbers are critical identifiers for a variety of CCA-SCE interactions	
D&B numbers provided to SCE must be valid and singularly used by only one CCA	
CCA subcontractors providing related services are also required to provide D&B numbers	

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(Continued)

Requirement	Note
Should there be a change to a CCA or subcontractor’s D&B number, SCE should be notified immediately	
For information regarding the establishment of D&B numbers contact Dun & Bradstreet directly at (800)234-3867	

Table 17 - Confirm SCE Agreements Requirements

Requirement	Note
The CCA will be notified when its CCA Service Agreement has been received and approved. The CCA should confirm in this step that the other agreements are complete and accurate	
<i>A letter will be sent confirming receipt of the agreements, as well as providing information CCA’s must use for successfully processing Community Choice Aggregation Service Requests (CCASRs)</i>	SCE Provides
If any information about the CCA contained on the confirmation letter is incorrect, the CCA should contract SCE immediately	

Table 18 - Electronic Interface & Compliance Testing Requirements

Requirement	Note
Coordinating the provision of Community Choice Aggregation (CCA) services will require that SCE and Community Choice Aggregators (CCAs) follow a clear and consistent set of communication protocols. In addition to the communication necessary between SCE and a CCA, should a CCA acquire a Direct Access (DA) customer, communication with the existing Electric Service Provider (ESP) is also necessary. For the most part, SCE will use the California Retail Market protocols and electronic communication methods that were implemented in support of DA for exchanging transactions with a CCA. Lancaster will need to refer to SCE Community Choice Aggregation Handbook Chapter 8 to create the EDI interfaces.	
A CCA must be able to communicate electronically with SCE on an ongoing basis	
Following the initial mass enrollment process, the CCA will be required to submit CCASRs as necessary for enrolling <u>individual</u> customers in CCA Service	
The CCA will be required to submit disconnect CCASRs for customers wishing to return to bundled SCE service at a customer’s request	
The CCA will need to submit monthly bill data on a daily basis as well as be able to receive payments electronically from SCE	
The CCA is required to submit certain background information	An SCE Electronic Communications

(Continued)

Requirement	Note
described in the “Fulfill SCE Establishment Requirements” step of the CCA process.	Coordinator (ECC) may contact the CCA to ensure that all the required information is complete prior to initiating this step of the process
The CCA is required to follow a prescribed testing procedure prior to enrolling end-use customers in CCA Service.	The CCA should contact SCE's ECC for information on compliance testing at (626) 812-7649 or refer to SCE Community Choice Aggregation Handbook Chapter5
The CCA will be required to contact SCE's metering operations department to obtain a <u>User ID</u> and <u>password</u> for retrieving customer usage data from the Meter Data Management Server (MDMA) and to demonstrate that they can access, download, and interpret meter usage data.	This can be attained by contacting the metering desk at (626)967-8369 or by email: metering@sce.com
<p>SCE intends to use standard EDI transactions developed and maintained by the Accredited Standards Committee X12 (ASC X12). This Committee and its standard transaction formats are sanctioned and approved by the American National Standards Institute (ANSI). ASC X12 transactions have been adopted for EDI by the Utility Industry Group (UIG), an industry action group working in the interest of electric and combination utilities, ESP's, end-use customers, and suppliers to improve the methods of exchanging business information through EDI. Specifically, SCE intends to use UIG Implementation Guidelines for the following ASC X12 transaction sets to communicate key data in the CCA process:</p> <ul style="list-style-type: none"> • <u>814- General Request, Response, or Confirmation Transaction Set, version/release 4010</u> (SCE Community Choice Aggregation Handbook Chapter 5, page 2) • <u>UDC Consolidated Billing 810 -Invoice Transaction Set, version/release 3070</u> (SCE Community Choice Aggregation Handbook Chapter 5, page 2) • <u>UDC Consolidated Billing 824 -Application Advice Transaction Set, version/release 3070</u> (SCE Community Choice Aggregation Handbook Chapter 5, page 2) • <u>820- Payment Order/Remittance Advice Transaction Set, version/release 3030</u> (SCE Community Choice Aggregation Handbook Chapter 5, page 3) • <u>867- Product Transfer and Resale Report Transaction Set, version/release 4010</u> (SCE Community Choice Aggregation Handbook Chapter 5, page 4) 	<p>Establishing the information system infrastructure necessary to implement CCA on schedule represents a significant challenge for both CCAs and SCE. In addition to this system testing, SCE provides testing procedures designed to assist CCAs in establishing electronic communications with SCE for the first time. As part of establishing and maintaining CCA services, CCAs will need to follow unique protocols as they-communicate data through EDI In order to assist CCAs in following these protocols, SCE has developed the "Community Choice Aggregation System Interface Specification: Communication Methods and Protocol Specifications," (see SCE Community Choice Aggregation Handbook Chapter 5, page 5) a document that describes the data interfaces necessary to properly transfer information between SCE and the CCA. <i>Note: The Chapter 5 descriptions for these interfaces are not presented very well.</i></p>

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(Continued)

Requirement	Note
<p>Confidential Customer Information & Historical Customer Usage</p> <ul style="list-style-type: none"> • The historic usage data will be posted to the MDMA server in EDI format. SCE posts twelve (12) months of historic usage for the CCA to retrieve. To utilize EDI transactions, the CCA must have EDI-INT compatible software • The method for the transmission can be a standard file transmission method, or, preferably, EDI. The Transaction Set 867 version 4010 - "Product Transfer and Resale Report" is appropriate 	
<p>Mass Enrollment Data & Opt-Out Notifications</p> <ul style="list-style-type: none"> • The method for the transmission can be a standard file transmission method, or, preferably, EDI. The Transaction Set 867 version 4010 - "Product Transfer and Resale Report" is appropriate 	
<p>Community Choice Aggregation Service Requests (CCASRs)</p> <ul style="list-style-type: none"> • CCASR Acknowledgment • CCASR Processing Confirmation • SCE will receive EDI transmissions through a VAN for Transaction Set 814 version 4010 • CCA shall have <i>EDI Trading Partner Agreement</i> and <i>EDI Trading Partner Profile(s)</i> completed to use this interface 	
<p>Non Energy Bill & Non Energy Bill Payment – billing and payment exchange between SCE and the CCA for CPUC approved service fees</p> <ul style="list-style-type: none"> • E-mail Bill Statement with attachment (spreadsheet of detailed charges) • Payment methods available to the CCA <ol style="list-style-type: none"> a. Online Payment (through www.sce.com) b. Direct Pay (Automatic Debit to Bank Account Monthly) c. Check via US Mail • If EDI is used for payment, the protocol is the Transaction Set 820 version 3030 Remittance Advice. See SCE Implementation Guide for current requirements 	
<p>Meter Usage Data - monthly meter usage exchange between SCE and SCE's MDMA server, as well as between the CCA and SCE's MDMA server</p> <ul style="list-style-type: none"> • Internet based EDI. SCE posts monthly usage data to the 	

(Continued)

Requirement	Note
<p>MDMA Server for the CCA to retrieve. To utilize EDI via the Internet, the CCA must have EDI-INT compatible software</p> <ul style="list-style-type: none"> • The method for the transmission is EDI Transaction Set 867 version 4010 "Product Transfer and Resale Report." • CCA shall have <i>EDI Trading Partner Profile(s)</i> completed to use this interface 	
<p>Account Maintenance - messaging for the mutual exchange of data related to a specific customer's service account</p> <ul style="list-style-type: none"> • notification will be provided by SCE using email • CCAs should notify SCE's CCA Services group of any account maintenance changes via e-mail or by phone. The e-mail address is CCASVCS@sce.com and the phone number is (626) 633-7116 • SCE will support internet exchange • SCE will support EDI Transaction Set 814 version 4010 "General Request, Response, or Confirmation" • CCA shall have <i>EDI Trading Partner Agreement</i> completed if it chooses to use the EDI interface 	
<p>Billing Data Exchange & Bill Data Acknowledgments and Confirmations - exchange of bill-ready data from the CCA to SCE for consolidation. Additionally, it reflects the interface of customer payments, adjustments, and/or uncollected receivables being returned from SCE to the CCA</p> <ul style="list-style-type: none"> • Consolidated Billing Data Interchange - Information is exchanged via EDI, except for the returned receivable listings, which are sent via email • Customer Payment Data Interchange - Information is exchanged via EDI, money is transferred through Automated Clearinghouse/Electronic Funds Transfer (ACH/EFT) • Required Characteristics of Communication Methods for the Interface - Use of Value Added Network and Value Added Bank • Required Characteristics of Protocols for the Interface - Transaction Set 810 version 4010 "Invoice" and transaction Set 820 version 3030 "Remittance Advice." See SCE Implementation Guide for current requirements • Other Required Characteristics for the Interface - EDI Trading Partner Agreement, Electronic Funds Transfer 	

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Requirement	Note
Payments Agreement, 810 and 820 Trading Partner Profiles	
Load Profiles - Each day a load profile for each of the identified rate classes will be available over the Internet on the SCE website <ul style="list-style-type: none"> • Internet access • See SCE Community Choice Aggregation Handbook Chapter 5, page 17 for data table format 	
Distribution Loss Factors - Each day a distribution loss factor will be available on the Internet at the SCE website <ul style="list-style-type: none"> • Internet access • See SCE Community Choice Aggregation Handbook Chapter 5, page 18 for data table format 	
Meter and Data Exception Notification (MADEN) - provides the CCA with notification of a potential or actual problem obtaining a meter read, with a metering device, or issue related to a metering device. Exchanged via e-mail.	
Settlement Meter Usage Data - CCA's will provide SCE with meter usage data settlement files that are to be submitted to the ISO for each trade day. Exchanged via e-mail.	
CCA Support Desk Interactions - Customer Service function with a different set of interactions specific to a CCA- SCE relationship <ul style="list-style-type: none"> • Email • Phone 	
Compliance Testing - Compliance testing is required before a CCA can implement within the SCE service territory. SCE will provide a test plan, test procedures, and sample test data <ul style="list-style-type: none"> • Per other sections • SCE proposes a standard Entity ID. This would be a standard four (4) character ID much like the standard ticker symbols, airline codes, airport codes, etc. SCE will assign a "Ticker" symbol for every CCA 	

Table 19 - Notification of Successful Testing Requirements

Requirement	Note
<i>CCA will be notified by SCE's Electronic Communications Coordinator (ECC) whether they have successfully passed the required interface testing for exchanging CCASR, Billing, and Payment Data</i>	SCE Provides

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Requirement	Note
The CCA must advise the ECC that they have acquired an MDMA <u>User ID</u> and <u>password</u> and have obtained qualification status for retrieving meter usage data	

(Continued)

Table 20 - Customer Service Center Requirements

Requirement	Note
The CCA will need to respond to inquiries from customers	
Prior to initiating customer communication, the CCA should plan to activate its customer service center and be prepared to respond to customer calls and questions regarding their program	The City has a “Submit a Request” website that can be used to provide answers to commonly asked questions. See https://clients.comcate.com/newrequest.php?id=6# . The CCA contact number can be added to the list of local utility companies, see https://clients.comcate.com/faq.php?id=6&faqId=1346 . Frequently asked questions about the CCA can be answered at this site, in addition to providing a phone number.
The CCA should provide SCE with a telephone number, or other contact information, for customer referrals	

Table 21 - Voice Response Unit Setup Requirements

Requirement	Note
<i>The CCA will be provided with a SCE toll-free telephone number that has been setup for the CCA</i>	SCE Provides
This number can be used by the end-use customers to perform a variety of actions, including: opting-out of CCA service, and speaking to a Customer Service Representative	

Table 22 - Customer Notification Requirements

Requirement	Note
The CCA must provide the required Customer Notifications during the Initial Notification Period and Follow-up Notification Period	The CCA may request (at their expense) that SCE perform the required customer notifications on their behalf
The CCA should contact SCE to reach agreement on the date upon which the CCAs notification process will begin to ensure that all parties are ready to support customer inquiries	

(Continued)

Table 23 - Rule 23 Customer Notification Requirements

Requirement	Note
<p>From Rule 23: <i>CCA Customer Notification is the required CCA customer notification that informs customers of the CCA’s CCA Service. The CCA Customer Notification must inform customers that (a) they are to be automatically enrolled in CCA Service, (b) the terms and conditions of CCA Service, and (c) the customer has the right to opt-out of CCA Service. The notification must also include a mechanism by which a potential customer may opt-out of CCA Service. To qualify for Automatic Enrollment the CCA shall fully inform participating customers (1) at least twice during a sixty (60) day period in advance of the date of Automatic Enrollment, and (2) at least twice during a 60-day period following enrollment in a CCA’s Service</i></p>	
<p>CCAs must notify all participating customers of their right to opt-out of a CCA program and provide the terms and conditions at least twice within two calendar months, or 60 days, in advance of the date of commencing automatic enrollment</p>	
<p>Should the CCA elect to notify customers, the CCA must not use SCE's logo or express or imply in any way that SCE is affiliated with, is a sponsor of, or endorses the CCA's program</p>	
<p>All notifications must include the necessary customer data and instructions that will allow customers to gain access to and complete SCE's Opt-Out service</p>	

Table 24 - Mass Enrollment Information Requirements

Requirement	Note
<p><i>Within fifteen (15) days after the conclusion of the Initial Notification Period SCE will provide an update of the customer enrollments, providing individual specific customer information and usage data to the CCA for those customers scheduled for automatic enrollment</i></p>	<p>From SCE</p>
<p>The CCA should be ready to serve the load requirement before mass enrollment begins</p>	

(Continued)

Table 25 - Notification Waiting Period Requirements

Requirement	Note
The mass enrollment will occur at a time not less than thirty (30) days and not more than forty-five (45) days after the conclusion of the Initial Notification Period unless another date is mutually agreed to by the CCA and SCE	
The CCA shall confirm the wait period	
In advance of implementing the Mass Enrollment process, SCE must be in receipt of the CCA's confirmation, indicating the CCA has fulfilled its Initial Notification requirements.	SCE has no responsibility for verifying that the CCA has complied with its notification requirements

Table 26 - Mass Enrollment Requirements

Requirement	Note
During the Mass Enrollment Process, all eligible CCA customers who have not opted-out of the CCA program will be automatically enrolled on the assigned billing cycle (scheduled meter read date) during a one (1) month period	
<i>SCE will provide these customers with written notification of the transfer to CCA service</i>	SCE Action
<i>SCE will provide a mass enrollment data file, reflecting each individual service account's switch date, to the CCA</i>	From SCE
The CCA will be responsible for updating their system and scheduling load for each account on their respective switch dates	
In order to provide Community Choice Aggregation to a specific service address for an individual customer the CCA is required to submit a Community Choice Aggregation Service Request (CCASR)	This request serves as the central communication mechanism between CCAs and SCE in establishing, modifying, and disconnecting customers. Under mass enrollment, one CCASR must be submitted for all individual SCE service accounts within CCA's service area. Detailed instructions on completing the CCASR are provided in SCE Community Choice Aggregation Handbook Chapter 9

(Continued)

Table 27 - CCA Service Request (CCASR) Requirements

Requirement	Note
<p>The CCA will need to submit one CCASR for all end-use customer service addresses to:</p> <ul style="list-style-type: none"> • Switch customer from SCE bundled service to CCA service • Return customer from CCA service to SCE bundled service • Update customer's CCA service options • Cancel a customer's pending CCASR • Switch customer from Direct Access (DA) service to CCA service 	
<p>The CCA will be required to submit all CCASRs electronically in EDI format</p>	
<p>Connect CCASR: Initial CCASR requesting a customer to be switched from bundled SCE service to CCA, a new or moving customer requesting CCA at the time of turn on, and a customer requesting to switch from an ESP to a CCA</p> <ul style="list-style-type: none"> • date and time stamped upon receipt by SCE • CCA will receive a response indicating that electronic information has been received • CCASRs are processed at 5 pm on SCE business days, which includes a validation process • After validation, SCE will notify the CCA of the status of the CCASR. SCE will either: (a) reject the CCASR, or (b) confirm and schedule the CCASR, or (c) confirm a CCASR and initiate a Meter Investigation when meter ownership or new meter changes are required. SCE must provide notification within five (5) business days of the time SCE received the CCASR • Connect CCASRs are read on their scheduled meter read date. The customer's switch date is the scheduled meter read date. If a meter change is required on a Connect CCASR, the switch date will be the meter change date. Routine reads can be read anywhere between 27- 33 days • SCE will send confidential customer information and basic metering information to CCAs automatically through the CCASR process for all initial CCASRs. This information will be sent in the form of an EDI transaction on the CCASR response. This information will be 	

(Continued)

Requirement	Note
<p>provided to CCAs no later than five (5) days before the effective date</p> <ul style="list-style-type: none"> • If the CCASR is rejected, the CCA will receive a response from SCE indicating the reason(s) for the rejection - See Reject Code List on SCE Community Choice Aggregation Handbook Chapter 6, page 6 • If an accepted CCASR requires a meter ownership change, or a change to the meter itself, then SCE will initiate a Meter Investigation. See SCE Community Choice Aggregation Handbook Chapter 7 for more information. SCE will send the CCA a confirmation message that provides the CCA service effective date once arrangements are made to complete the meter change 	
<p>Cancel CCASR: A CCASR requesting to cancel a pending CCASR that has been submitted but not yet completed</p> <ul style="list-style-type: none"> • To cancel a CCASR, CCAs will be required to submit a separate, new CANCEL CCASR transaction • CCAs can only cancel CCASRs that are in queue for processing, and only those created by the CCA. CCAs have up to three (3) days before the scheduled effective date to cancel a pending CCASR • CCAs may be charged for any costs incurred by SCE, in the processing of CCASRs, prior to the cancel date. If metering equipment has been ordered or purchased, and costs have already been incurred, SCE will contact the CCA to determine what to do with the equipment • SCE has the ability to also cancel pending CCASRs, but prefers the request to come from the CCAs. CCAs will receive notice of any such change • Customers may contact SCE to determine the status of a CCASR, and can request to switch back to SCE service at anytime 	
<p>Disconnect CCASR: A CCASR requesting that a service account be disconnected from CCA service and returned to bundled service/BPS (see switching exemption rules)</p> <ul style="list-style-type: none"> • To cancel a CCASR, CCAs will be required to submit a separate, new CANCEL CCASR transaction • CCAs can only cancel CCASRs that are in queue for processing, and only those created by the CCA. CCAs have up to three (3) days before the scheduled effective 	

(Continued)

Requirement	Note
<p>date to cancel a pending CCASR</p> <ul style="list-style-type: none"> • CCAs may be charged for any costs incurred by SCE, in the processing of CCASRs, prior to the cancel date. If metering equipment has been ordered or purchased, and costs have already been incurred, SCE will contact the CCA to determine what to do with the equipment • SCE has the ability to also cancel pending CCASRs, but prefers the request to come from the CCAs. CCAs will receive notice of any such change • Customers may contact SCE to determine the status of a CCASR, and can request to switch back to SCE service at anytime 	
<p>Update CCASR: A CCASR requesting to change the service options for end-use customers. These changes would include Metering options and CCA internal ID# only</p> <ul style="list-style-type: none"> • Update CCASRs are accepted both for customers already switched to CCA (completed CONNECT CCASR) and also for customers who are switching to CCA (pending CONNECT CCASR). To change the meter owner or the unique customer identifier a new UPDATE CCASR must be submitted 	
<p>Re-entry CCASR: A CCASR requesting to return a service account to BPS after the 60 day post-enrollment window (see switching exemptions). These CCASRs are always initiated by SCE</p>	From SCE
<p>Opt-Out CCASR: A CCASR requesting that a service account not receive CCA service (pre and post enrollment). These are always initiated by SCE</p>	From SCE
<p>For inventoried (unmetered) streetlight rates LS-1, LS-2, OL-1, and OWL, SCE is able to accept Connect and Disconnect CCASRs for these rates via the standard automated CCASR process</p>	
<p>CCASRs may be rescheduled for a number of reasons. These include: Metering equipment not available, Customer access issues, and Rescheduling CCASRs that require a meter change</p>	
<p>The CCA Services Center will be available to assist CCAs in developing, submitting, and tracking the status of individual CCASRs. To contact the CCA Services Center, please call (800) 795-6723</p>	
<p>SCE has a list of the types of CCA correspondence that they send to end use customers – See SCE Community Choice Aggregation Handbook Chapter 6, pages 12 - 35</p>	
<p>If a CCA Customer elects to become a Customer- Generator, or a</p>	Net Energy Metering and CCA

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(Continued)

Requirement	Note
Customer-Generator Utilizing Wind Energy Co-Metering, they must contact their CCA to confirm that NEM is supported. The CCA must provide notice of eligibility in writing to SCE. Where SCE provides metering and billing for a CCA NEM customer, the CCA shall be responsible for the applicable charges for such services, as set forth in Schedule CCA-DSF for the CCA. See Special Condition 2.d of Schedule NEM. A copy of Schedule NEM can be obtained on SCE's Web site	

Table 28 - Follow-up Notification Period Requirements

Requirement	Note
The Follow-Up Notification Period is a sixty (60) day period of time commencing immediately following the date a customer is automatically enrolled.	
The CCA must provide these Customers two notifications during this 60-day period. These notifications must provide the terms and conditions of the CCA program and advise customers of their right to opt-out.	See Rule 23, section B, #21 and Rule 23, section H, #1-3 which describes follow up (post-enrollment) customer notification requirements

Table 29 - CCA Billing Requirements

Requirement	Note
SCE Community Choice Aggregation Handbook Chapter 9 provides an overview of billing policies and procedures under Community Choice Aggregation (CCA)	
Retrieving Usage Information – the first step in the Consolidated Billing Cycle process is for both SCE and the CCA to retrieve each customer's usage information for the billing cycle.	This information can be obtained from the MDMA Server at: https://mdma.sce.com
Calculating Charges - both the CCA and SCE must calculate their respective charges. The CCA and SCE have a set of specific charges each are responsible for and must calculate based on the usage data for each customer in a given billing period	
CCAs are responsible to calculate: <ul style="list-style-type: none"> • Energy Charges • City Tax (or Utility User's Tax-see 9.6 for additional information) • State Tax • Other Charges (based upon agreements with customers) 	

(Continued)

Requirement	Note
CCA must prepare and send the charges to SCE in electronic "bill-ready" form by 5:00 p.m. of the second business day, following the usage posting	
The Billing data must be transmitted through Electronic Data Interchange (EDI)	
SCE will collect payment from customers, and forward funds associated with CCA charges to CCAs	
A CCA must meet SCE compliance requirements to utilize consolidated billing. These compliance requirements are designed to allow CCAs to demonstrate that they are able to send billing data to SCE.	The Electronic Communications Coordinator for SCE will coordinate the compliance and testing process. The Coordinator can be reached at (626) 812-7649
CCA must complete compliance testing requirements at least three business days prior to any scheduled CCA Service switch dates	
CCA's will be required to show that they possess the ability to properly send charges (per test scenarios) through to SCE. These charges include, but are not limited to: energy charges, city tax (UUT), and state tax charges	
<p>CCAs are required to calculate the Utility User's Tax and state tax as part of their participation in CCA</p> <ul style="list-style-type: none"> • When SCE collects payment for the UUT (along with the other billed charges), SCE will pass payment for those charges back to the respective CCA. The CCA must then remit the UUT on their respective products and services to the appropriate local government • The CCA is responsible for calculating state tax for the electricity that the end-use customer consumes • The CCA is also responsible for collecting and remitting state taxes, which are based on kWh consumption • Under SCE Consolidated billing, the CCA should include state tax charges as part of its bill-ready data transmission. When SCE collects payment for the state tax (along with the other billed charges), SCE will pass payment back to the respective CCA • CCAs are responsible for establishing relationships with each individual city and for acquiring tax exempt status information from their customers 	
<p>Load Profiling and Distribution Loss Factor Protocols Applicability</p> <ul style="list-style-type: none"> • CCAs can use but do not have to use the Load Profiling 	

(Continued)

Requirement	Note
<p>and Distribution Loss Factor Protocol for forecasting or customer billing</p> <ul style="list-style-type: none"> • Purpose of this protocol is to convert non-hourly (monthly) usage recorded at the point of metering to hourly received energy at the UDC-ISO interconnection point for use in settlement with the ISO • Data Source - SCE will provide the CCA with the customer's rate group (used to identify the appropriate load profile) and distribution loss factor category in the CCASR response file, which is provided after a Community Choice Aggregation Service Request has been processed • Hourly Energy Calculation - Each CCA will need to maintain customer rate group and distribution loss factor category information for each of its customers 	
<p>CCA are responsible for calculating their own corrected charges, which should include the negation of any charges that were previously billed</p>	

Table 30 - Payments and Remittance Requirements

Requirement	Note
<p><i>SCE will pay the CCA the amounts paid to SCE for CCA charges only after the payment is received from the customer on or before the later of:</i></p> <ul style="list-style-type: none"> • <i>17 calendar days after the bill was rendered to the customer</i> • <i>the next business day after the payment is received from the customer</i> 	<p>From SCE</p>
<p>The CCA should use the customer account number provided in the file to assist in reconciling their receivables</p>	

Table 31 - Terminating CCA Requirements

Requirement	Note
<p>The CCA is required to provide at least one (1) year advance written notice to the CPUC and SCE of the CCAs intention to discontinue its</p>	

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Requirement	Note
CCA Service	
In the event a CCA has failed to meet its obligations under Rule 23 or the CCA Service Agreement such that SCE seeks to invoke its remedies and the failure constitutes an emergency or may substantially compromise SCE operations or service to the bundled customers, SCE may seek an emergency order from the CPUC to terminate a customer's CCA Service, or a CCA's ability to provide CCA services	

Table 32 - Load Profiling & Distribution Loss Factors Requirements

Requirement	Note
SCE provides statistical load profiles in place of interval metering allowing CCAs to use the load profiles as Settlement Quality Meter Data in accordance with ISO Tariffs	ISO tariffs require that, for ISO energy settlement, Settlement Quality Meter Data be provided which can be either (1) an accurate measure of the actual consumption of Energy by each Scheduling Coordinator Metered Entity in each Settlement Period (e.g. interval meter data), or (2), a profile of that consumption derived directly from an accurate cumulative measure of the actual consumption of energy (e.g. utility provided load profiles for a given customer class)
CCAs should use the dynamic load profiles for residential (Domestic- Single/Multiple), small commercial (GS-1), and medium commercial/industrial (GS-2) accounts	Information on all load profile classes is provided to CCAs upon completion of the Community Choice Aggregator (CCA) Service Agreement. CCAs are informed of the load profile identification number automatically through the Community Choice Aggregation Service Request (CCASR) process
CCA will need to maintain customer rate group and distribution loss factor category information for each of its customers	SCE's Distribution Loss Factors are available by hour and by customer voltage level. These loss factors are based on a system load forecast and will be available one day prior to each transaction day
CCAs will calculate the load profile as a fraction from the load profiling data posted on the Internet	For customers with Time-Of-Use meters, that is meters which record usage by on-peak, mid-peak, off-peak periods, load profiling should be performed separately with the data for each TOU period

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Requirement	Note
	The hourly usage (for ISO reporting) will be calculated by multiplying the hourly usage (meter level) by the appropriate distribution loss factor

(Continued)

Table 33 - Usage Data Reconciliation Requirements

Requirement	Note
CCAs are required to submit to SCE, or cause to be submitted, the aggregated settlement quality meter data generated for submission to the ISO	As defined in the Meter Data Exchange Format (MDEF) data requirements, settlement quality meter data is actual consumption, aggregated by hour, for your customers, with the appropriate distribution loss factors applied The information must be submitted electronically on a daily basis for each hour of each day, consistent with data exchange guidelines delineated in the ISO protocols. The SCE system has been designed to utilize CCA data in similar formats and timing requirements as already necessary for submission to the ISO, thereby minimizing the incremental costs for gathering, processing, and transmitting this data to SCE
CCA will submit the aggregated settlement quality meter data to SCE using a secure FTP server established by SCE	
Data may be submitted by demand zone, load group, or take-out point. Only data for the SCE demand zone (SCE1) needs to be submitted	Additional detailed rules about use of Service Coordinators (SC) and data submission – see SCE Community Choice Aggregation Handbook Chapter 13, page 2
All data submissions to the ISO must be done by midnight of each day, for usage 45 days prior to the reporting date	
<i>Energy reconciliation data packages are provided to CCAs on a quarterly basis by the Customer Choice Services Account Manager</i>	From SCE
The ISO requires all scheduling coordinators to perform an annual self-audit	The SCE reconciliation data package is helpful for the self-audit

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Table 34 - Service Fees and Non-Energy Billing Requirements

Requirement	Note
CCAs will receive a hard copy invoice for products and services used or purchased from SCE such as metering services, consolidated billing, testing fees, mass enrollment fees, customer notification fees, and others	From SCE
SCE will track any transactions that have a fee associated with them. These fees can originate from one or many departments within SCE. On a monthly basis, all billable transactions are consolidated for each CCA and applied onto a non-energy billing account	From SCE
SCE may charge service fees for CCA related services described in Rule 23 only for the incremental costs associated with providing these services. SCE will not assess charges on CCAs for billing processes or customer services that are unrelated to services and customer billing associated with the CCAs' service or that are collected in other SCE rates, charges, or fees	SCE service charges approved by the Commission include, but are not limited to, service establishment charges and special meter reading fees, if the fees are contained within or authorized by other tariffs that are not affected by this Rule

Table 35 - Requirements for Resolving Disputes

Requirement
CCA customers who have a dispute should first contact the CCA Support Center
If SCE and the CCA fail to reach an agreement within the times specified in the Service Agreement, the dispute can be submitted to the CPUC for resolution, in accordance with the CPUC's rules, regulations, and procedures

(Continued)

Table 36 - CPUC Rule 23 Requirements

Requirement
CCAs shall make all payments owed to SCE under this Rule in a timely manner subject to applicable payment dispute provisions
CCAs shall be solely responsible for having contractual or other arrangements with their customers necessary to implement CCA consistent with all applicable laws, Commission requirements and this Rule
CCAs providing electric power shall have one or more Scheduling Coordinators
CCAs have exclusive responsibility for obtaining and providing the electric power needs (including ancillary services) of their CCA customers and to deliver such power to the necessary grid location required to serve electric power needs to those customers
CCAs may aggregate individually metered electric loads located within the service area of the CCA only for the purpose of procuring electric power and ancillary services. Load aggregation shall not be used to determine SCE charges or tariff applicability. The right of customers to physically aggregate by combining multiple accounts into a single metered account as permitted under Commission-approved tariffs is not restricted by this section
All residential customers, as defined in Rule 1, located within a CCA’s service area shall be offered CCA Service
The CCA shall be responsible for notifying its Scheduling Coordinator of any notice issued to the CCA by SCE to shed or curtail customer load at the request of the CAISO, or as otherwise provided by Commission-approved tariffs
The earliest possible date a CCA may implement CCA Service shall be the date the CCA has fulfilled all requirements in the applicable tariffs, including service establishment requirements set forth in this Rule, or the date the CCA and SCE agree is reasonable, whichever is later, unless stated otherwise in a Commission order or in a letter from the Commission’s Executive Director. In advance of providing service to the first CCA in SCE’s service territory, SCE shall require six (6) months from the date the first CCA files its Implementation Plan with the Commission or a mutually agreed upon date between SCE and the CCA
In accordance with PU Code Section 366.2, at the request and expense of any CCA SCE shall install, maintain and calibrate metering devices at mutually agreeable locations within or adjacent to the CCA’s service area. SCE shall read the metering devices and provide the data collected to the CCA at the CCA’s expense. All costs incurred by SCE as a result of providing this specialized service, hereinafter referred to as Boundary Metering shall be the sole responsibility of the requesting CCA

6.3 Task 3: Identify CCA Alternative Scenarios

The goal of Task 3 is to identify current and potential future alternative generation resources available to the proposed Lancaster CCA, and to establish the characteristics of the available resources. Task 3 also quantifies the potential range of generation output available to serve customers of the CCA.

One of the catalysts for the City considering becoming a CCA is the growing portfolio of distributed and renewable generation resources in the City. Becoming a CCA is just one of the possibilities for the City to take advantage of these resources. In order to develop CCA business and implementation plans, an understanding of the currently available generation resources as well as a forecast for new generation must be developed. This will quantify the amount of generation that will potentially be available to serve constituent customers.

(Continued)

6.3.1 Scenario Simulation

Energy procurement is similar to other commodity trading. When demand is high, the prices are high. When demand is low, pricing is low. However, electricity is different because the consumers do not receive feedback regarding the cost of supply. The retail electricity rates are instead based in part on the average pricing of the electricity supply.

The time of year also has a significant impact on the electricity demand and cost of power supply. In Southern California, the summer peak hours in the afternoon are typically the highest demand and highest cost due to the air conditioning system load. Similarly, for example, there is a noticeable demand increase at sunset in late December due to the number of holiday lights that are switched on by daylight sensors. Therefore, the primary variables for determining the cost of power procurement were analyzed as a part of this initial feasibility analysis:

- Month and time – each of the variables below was analyzed to identify the average and standard deviation for any given hour of any month. This average and variation were utilized to identify the potential range of operating conditions.
- Electricity Load – Based on the 2012 data provided by SCE, the customer load for each tariff classification of customer was analyzed.
- Solar Output – Based on the National Renewable Energy Laboratory (NREL) PVWatts⁵ analysis tool, an estimated solar output was developed to identify the approximate nameplate solar generation required for different levels of renewable power generation.
- Power Procurement
 - The range of prices for Power Purchase Agreements (PPAs) was analyzed and the price was estimated to be higher with higher demand.
 - CAISO
 - Day Ahead market pricing
 - Hour Ahead Scheduling Process (HASP) pricing

6.3.2 Lancaster Electricity Load and Usage

Utilizing the data provided by SCE for electricity usage within the City during 2012, the total load within the City was analyzed to determine the load profile for a 24 hour period for each month. Additional historical data, up to 10 years, can be requested to develop a forecast based on a longer history.

⁵ National Renewable Energy Laboratory (NREL) PVWatts™ Site Specific Data Calculator
http://www.nrel.gov/redc/pvwatts/site_specific.html

(Continued)

However, the 2012 data provides a basis for this initial feasibility analysis. Figure 4 reflects the Monthly Peak, Average and Minimum 24 hour Load Profiles for the total load within the City.

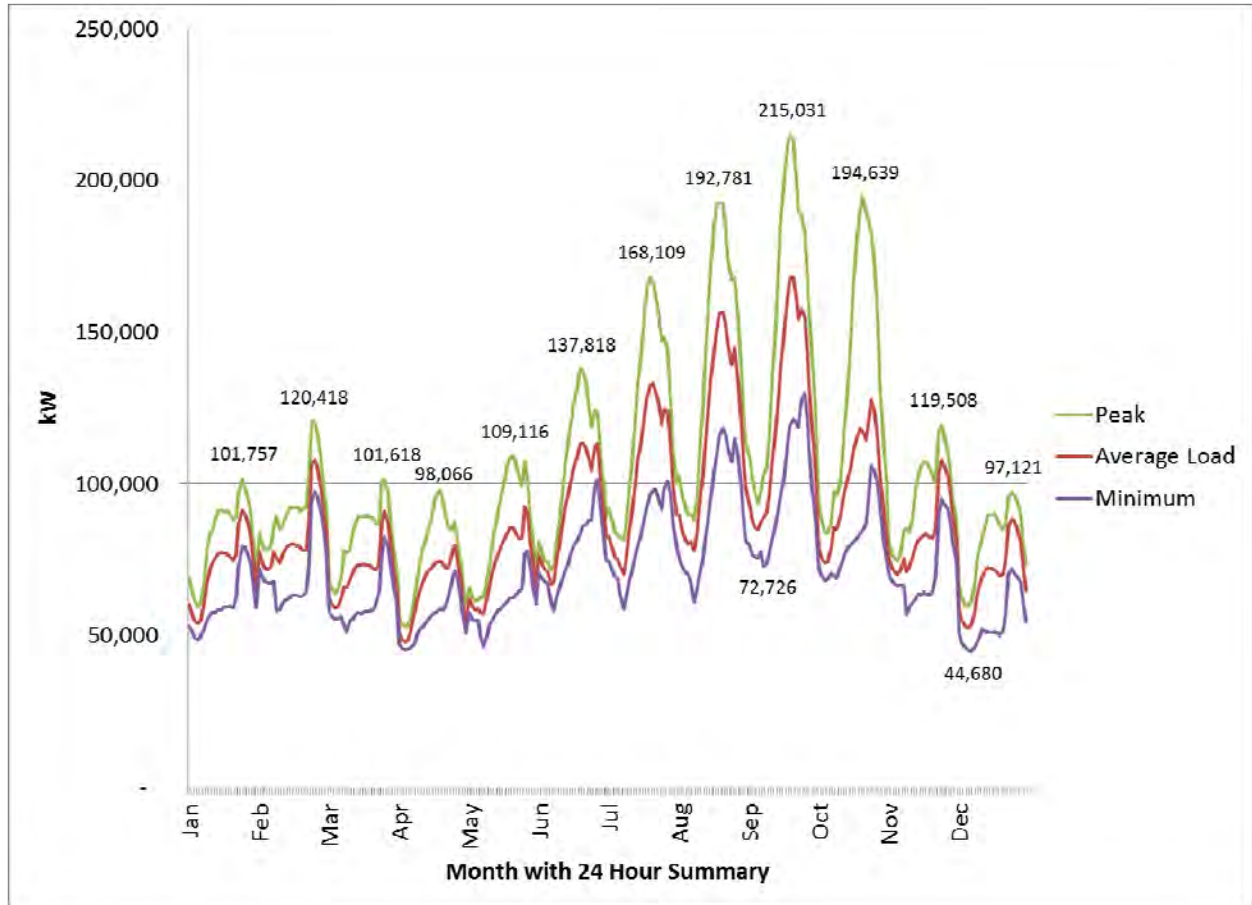


Figure 4: Monthly Peak, Average and Minimum 24 hour Load Profiles for Lancaster

To operate as a CCA, the City must forecast the load for the City and its constituent customers and procure energy to meet the demand. Fundamentally, power procurement is a forecasting and risk management task based on historical data as well as weather forecasts and other forward looking variables. The forecasts are never exactly accurate. Therefore, PPAs are utilized to procure electricity through contracts with generators or 3rd party providers on both annual and monthly basis. As the timeframe for the forecast becomes shorter, the forecast is likely to improve as the weather forecast gets more accurate. The day-ahead CAISO market is the forum to finalize the load forecast and either procure the additional energy required or sell any excess available from PPAs. The real-time market then balances the day-of supply and demand. The CAISO markets have been cost competitive with PPAs recently as the recession lowered overall electricity demand. However, as the recovery continues to gain momentum electricity prices are likely to increase due to higher demand and more constrained capacity.

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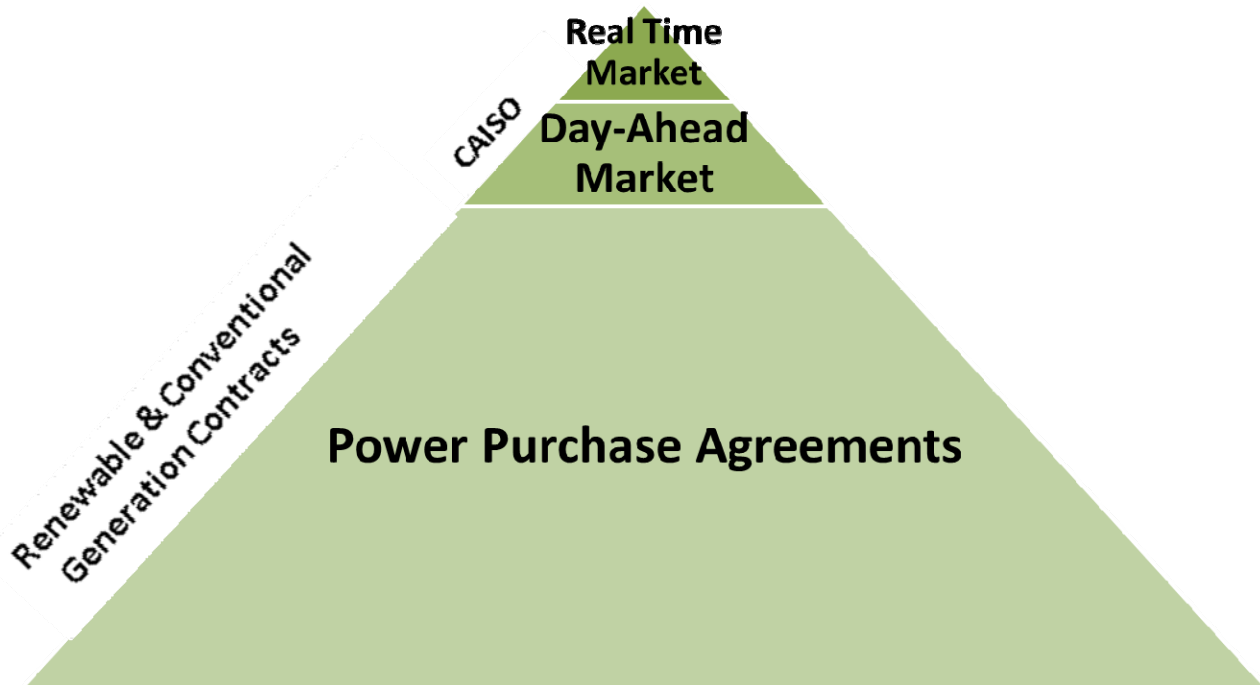


Figure 5: Sources for Power Procurement

6.3.3 Renewable Portfolio

CCAs, like other electricity providers, will be required to provide at least 33% renewable energy resources to their customers by 2020. The current CPUC requirement for percentage of renewable energy is 20%. The City has actively encouraged and facilitated renewable energy generation. Thus the City has abundant local renewable generation to help meet the required 20% and future 33% Renewable Portfolio Standard (RPS).

It should be noted that customer owned solar generation facilities are not required to sell their renewable energy to the CCA, and further the City is free to purchase renewable energy from any provider, regardless of the location of the renewable generation. Purchasing of renewable energy is typically implemented with long term PPAs. From NREL's Power Purchase Agreement Checklist for State and Local Governments⁶, advantages to the City of PPAs to purchase renewable energy include:

- No/low up-front cost;
- Ability for tax-exempt entity, like the City, to enjoy lower electricity prices thanks to savings passed on from federal tax incentives to the system owner;

⁶ *Power Purchase Agreement Checklist for State and Local Governments*
<http://www.nrel.gov/docs/fy10osti/46668.pdf>

(Continued)

- A predictable cost of electricity over 15–25 years; and
- No operating and maintenance responsibilities.

Other possible alternative generation possibilities would be for the City to own or lease renewable generation plants. With both solar PV and wind turbine prices falling, the City could purchase renewable generation plants. Although purchasing renewable generation would require financing, leasing of solar generation is possible without up-front costs.

For planning and cost estimation purposes, we have used an estimate of 35% renewables to ensure that the 33% RPS goal is met. Note that renewable energy is typically more expensive to purchase. The use of the higher RPS figure in the cost estimates helps to ensure that the CCA can meet the RPS requirement and that the CCA financial plan is sound.

City of Lancaster Identified Renewable Generation

The identified set of installed and planned renewable energy plants near or within the City is shown in the table below.

Table 37 - Installed and Planned Solar Generation near Lancaster

Facility	Rating	Estimated Annual Production ⁷ (MWh)
Silverado Power 7 (CUP 12-15)	330 MW	594,000
Silverado Power 6 (CUP 11-09)	40 MW	72,000
Beautiful Earth (CUP 10-22)	38 MW	68,400
Recurrent Energy (CUP 10-03)	20 MW	36,000
Silverado Power 2 (CUP 11-05)	20 MW	36,000
Silverado Power 3 (CUP 11-06)	20 MW	36,000
Silverado Power 5(CUP 11-08)	20 MW	36,000
Green State Power (DR 05-10)	199.93 kw	36,000
Silverado Power 1 (CUP 11-03)	10 MW	18,000
Silverado Power 4 (CUP 11-07)	10 MW	18,000
US Topco LLC (2 sites)	7.5 MW	13,500
eSolar (SPR 08-01)	5 MW	9,000
Absolutely Solar (CUP 11-02)	3.4 MW	6,100
Sunlight Partners (CUP 10-23)	1.5 MW	2,700
Sunlight Partners (1)	1.5 MW	2,700
Sunlight Partners (2)	1.5 MW	2,700
Sunlight Partners (3)	1.5 MW	2,700

⁷ For solar sites with no available annual production, estimate is based on average annual production factor of 1.8 kwh per installed kilowatt (AC, CEC rating)

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

Facility	Rating	Estimated Annual Production ⁷ (MWh)
989 kW	900 kW	1,550
Kaiser Parking Solar PV	621 kW	1,130
Desert Christian (DR 11-76A)	412 kW	700
Central Christian (DR 11-88)	339 kW	600
First Assembly of God (DR 11-95)	202.86 kW	400
Milana VIII (DR 10-42)	166.32 kW	300
Roseian I LLC (DR 10-80)	188.700 kW	300
Signature Fundraising (DR 11-09)	118.40 kW	300
Desert Christian High School (DR 11-77A)	190 kW	300
Lancaster Baptist (DR 11-11)	1,089 kW	200
DR 11-26	617 kW	120
DR 12-28	78.96 kW	100
DR 10-31	8.4 kW	15
Total		995,815

Net Zero Energy

Early in this analysis, the City requested a review to determine the amount of solar generation required to achieve Net Zero Energy (NZE) use for the City. Using the same average load curve as shown in Figure 6, an estimated solar generation output curve for 530 MW in nameplate capacity would achieve NZE based on NREL PVWatts solar output estimation.

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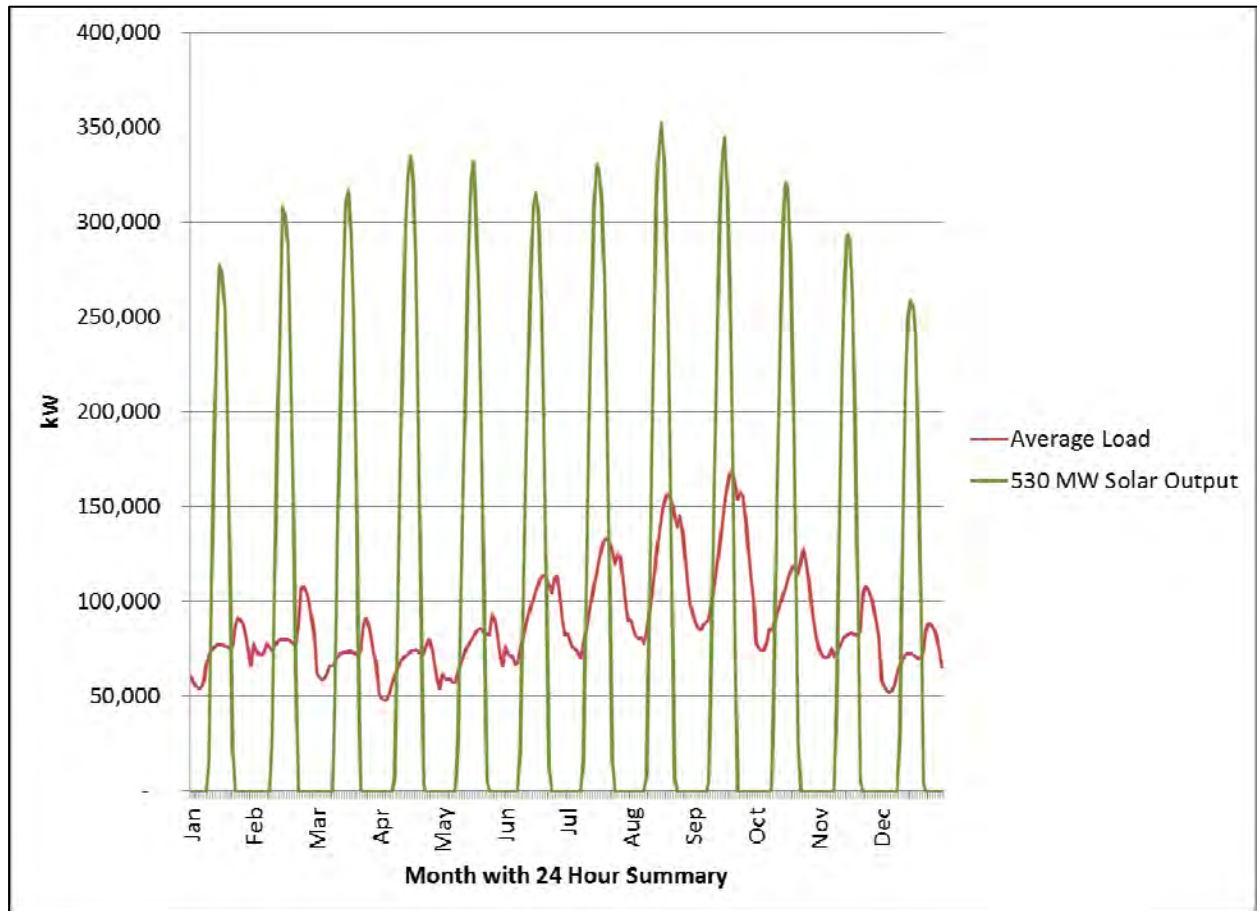


Figure 6: Lancaster Average Load and NZE Solar Output (requires 530 MW Nameplate Solar Generation)

With an NZE approach, the solar output would meet most of the City’s electricity needs during the day (although the peak demand lags the peak solar output) and the excess solar energy could be sold to offset PPAs and CAISO power purchases. The assumption (based on input from the Director of Public Works) is that the City can procure solar energy for approximately \$70/MWh and sell the excess for approximately \$80/MWh. In this scenario, approximately 58% of the 752 GWh annual solar generation procured would be available for resale. However, this approach carries financial risk including the risk that excess solar energy cannot be sold at a higher price than it was purchased. For example, if the City’s load plus PPAs did not utilize the full solar output procured by the City on any given day, the excess energy would likely be sold through the CAISO real-time energy market at prices lower than the solar procurement cost.

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

Until 2011, the CPUC reported on the weighted average time of day adjusted cost of delivered renewable energy by year⁸. The delivered energy cost for renewable resources shown in

Table aligns with the \$70 - \$80 per MWh range estimated by the City. However, it is believed that there has been a downward trend of renewable generation costs recently (2012-13) – especially for solar generation.

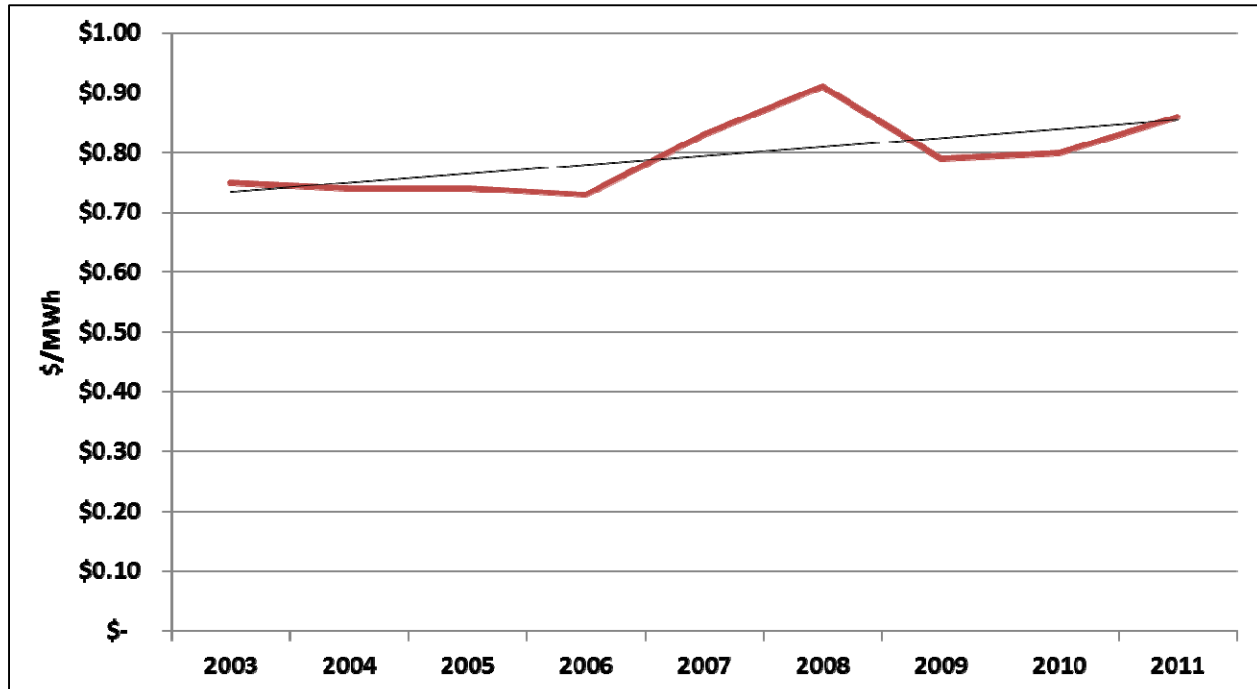


Figure 7: Trending Cost of Renewable Resources in California

NZE, as well as the other renewable generation scenarios below, could also be achieved through a mixture of solar and wind generation. However, this initial feasibility analysis did not explore the potential of a combined of wind and solar generation portfolio.

Solar Generation to meet Peak Demand

A second iteration was run to determine the amount of solar generation required to meet coincident electricity demand in the summertime. In this case, approximately 225 MW of nameplate solar generation would provide approximately 42% of the City's electricity needs. In this scenario,

⁸ February 3, 2012: Q4 2011 RPS Report to the Legislature: Cost Reporting in Compliance with SB 836
<http://www.cpuc.ca.gov/NR/ronlyres/3B3FE98B-D833-428A-B606-47C9B64B7A89/0/Q4RPSReporttotheLegislatureFINAL3.pdf>

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approximately 16% of the 318 GWh annual solar generation procured is available for resale through PPA to other ESPs or utilities or through the CAISO markets.

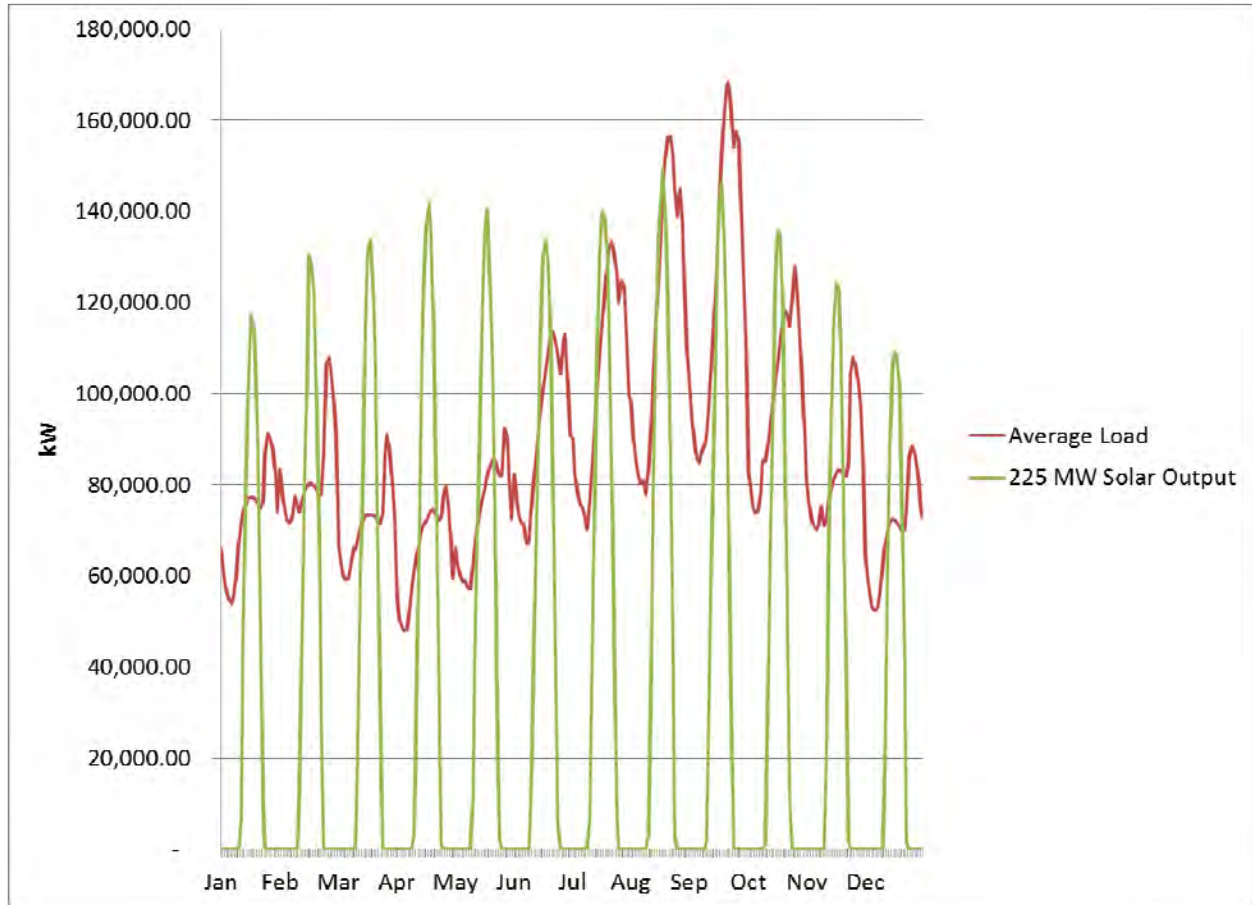


Figure 8: Lancaster Average Load and 42% Solar Output (requires 225 MW Nameplate Solar Generation)

33% Renewable Portfolio Standard (RPS)

After the April 24, 2013 meeting with the SCE CCA Account Representatives, the City met with Willdan and EnerNex to review the analysis completed to date, and receive feedback on direction for this report. Based on that meeting, the Initial Feasibility report findings are based on achieving a 33% Renewable Portfolio Standard (RPS)⁹ mandated by Senate Bill X1-2. This California 33% RPS mandate is to be achieved by 2020. However, given the City’s relationship with solar generators in the area, the City has the opportunity to achieve this level of renewable energy utilization early in their CCA implementation.

⁹ Renewables Portfolio Standards (RPS) Proceeding Docket # 11-RPS-01 and 03-RPS-1078
<http://www.energy.ca.gov/portfolio/index.html>

(Continued)

In this scenario, approximately 8% of the 262 GWh solar generation procured is available for resale through PPA to other ESPs or utilities or through the CAISO markets.

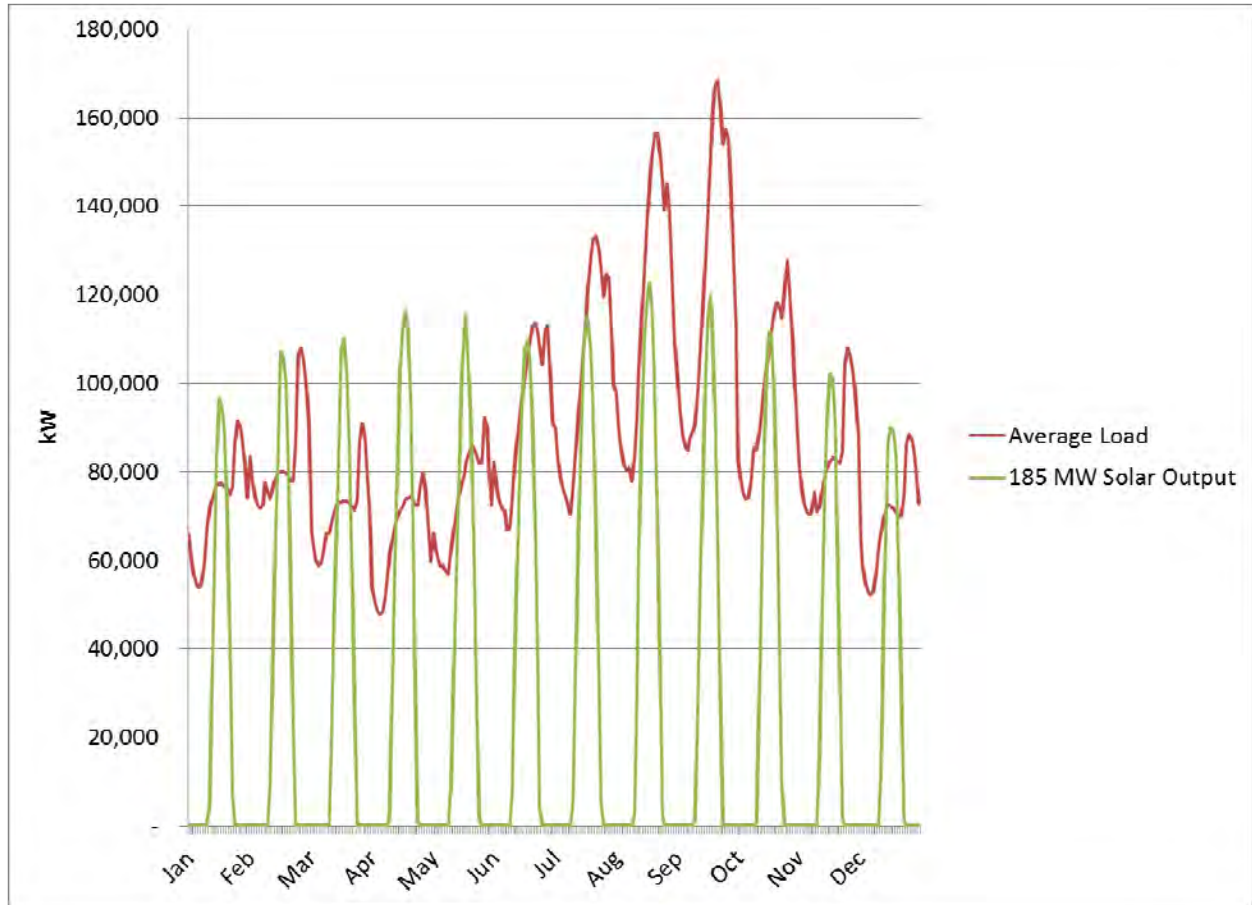


Figure 9: Lancaster Average Load and 35% RPS Solar Output (requires 530 MW Nameplate Solar Generation)

Benchmark Renewable Data

In comparison with the solar generation scenarios above, SCE and CAISO energy portfolios have significantly less percentage from solar generation but their overall portfolio also includes other qualified renewable power generation resources.

In 2011, SCE utilized approximately 15.5 billion kWh of renewable power which translates to about 21.1% of their electricity demand being met by qualified renewable resources. Another 20% of power was supplied from large hydro generation which does not count towards the California RPS mandate. The contribution from different types of renewable resources is shown in Figure 10.

(Continued)

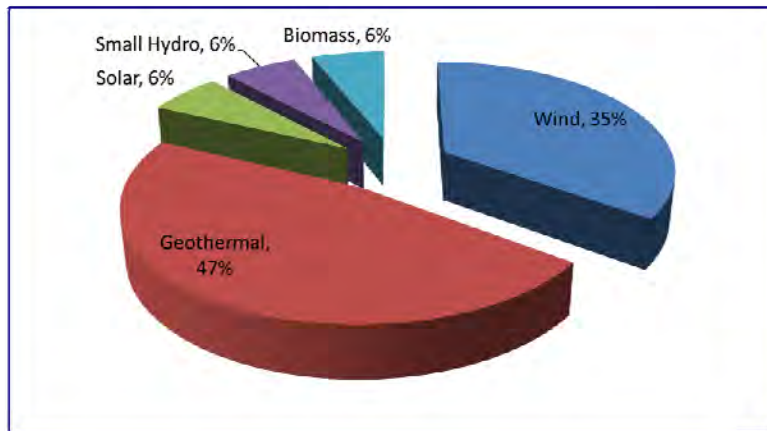


Figure 10: SCE 2011 Renewable Energy Portfolio

Generation resources provided through CAISO only incorporate 11.16% of renewable generation. The contribution from renewable generation likely includes the excess generation output from solar and wind resources above the contracted supply through PPAs. The CAISO role is to maintain transmission and supply reliability. As a result their resources and portfolio contain resources that can provide a specified amount of generation for a specified period of time. In the Real Time market, resources must also be able to respond within 5-10 minutes. Therefore, rather than renewable resources being a primary generation source for CAISO, the variability of renewable resources must be absorbed by the CAISO markets by incorporating the excess generation when the wind or solar generation exceeds expectations or by providing alternate generation supply when the wind or solar generation does not meet expectations.

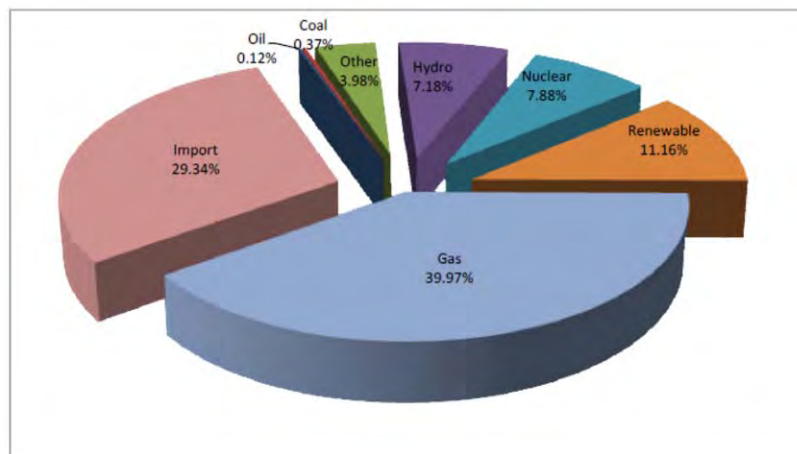


Figure 11: 2012 CAISO Generation Portfolio

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6.4 Task 4: Development of Estimated Load Characteristics and Purchased Power Costs

6.4.1 Estimated Load Characteristics

With a simulation based forecast, Confidence Intervals can be established as parameters for the forecast. For example, a range for the estimated load can be established with 90% confidence that the total load will be within the upper and lower limits specified. PPAs can reflect the desired level of certainty so as not to over procure resources and allow flexibility for procurement through shorter term PPAs and CAISO. A lower end confidence interval estimate can be selected for longer term PPAs and a tighter confidence interval can be utilized for more near term procurement.

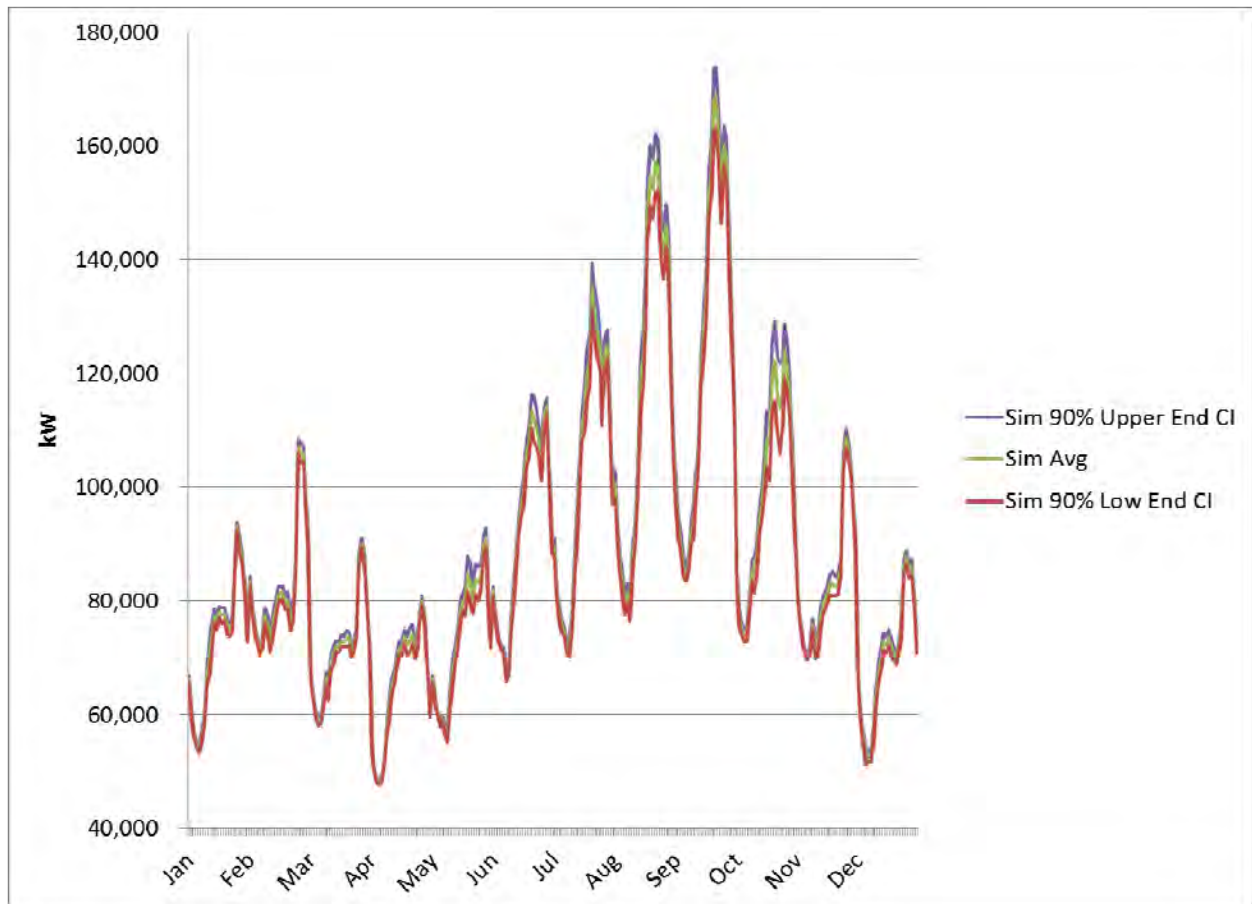


Figure 12: 90% Confidence Interval Band for Lancaster Hourly Load for each Month

(Continued)

For the annual energy procurement, the above graph reflects a forecast with 90% confidence that the electricity usage will be between 731,513,399 kWh and 769,653,953 kWh with an expected (average) of 747,263,359 kWh.

6.4.2 Purchased Power Costs

The first step in power procurement is to develop a load forecast as reflected in Figure 4. The next step is to determine how to fulfill this load forecast with available power supply resources. As discussed in Section 6.3.3.4, the power procurement for Lancaster CCA will incorporate a 185 MW solar generation resource through PPAs. Of the load not forecast to be fulfilled by solar PPAs, additional PPAs for conventional generation resources can be pursued on a yearly and monthly basis. The load forecast becomes more accurate with a decreasing time horizon. The near term load forecast is fulfilled by the CAISO day ahead market and day-of load balancing is achieved CAISO real-time market participation.

Power Purchase Agreements (PPAs)

Power Purchase Agreements are long term contracts to purchase energy. Generators will typically enter contractual agreements for approximately 80% of their capacity to cover their operations and maintenance cost and then trade in the CAISO market to achieve their profit margin. The Market Redesign and Technology Upgrade (MRTU) modification to CAISO markets is constructed to assist generation resources when determining how much of their capacity should be provided through PPA, CAISO Day-Ahead and Real-Time markets. The MRTU optimization of this balance is intended to ensure an efficient supply chain for each aspect of power procurement

Power Purchase Agreements are confidential contracts. As a result, precise pricing is not readily available. However, the 2012 CAISO Market Performance Metric Catalog contains a range of pricing for Southern California as shown in Figure 13.

(Continued)

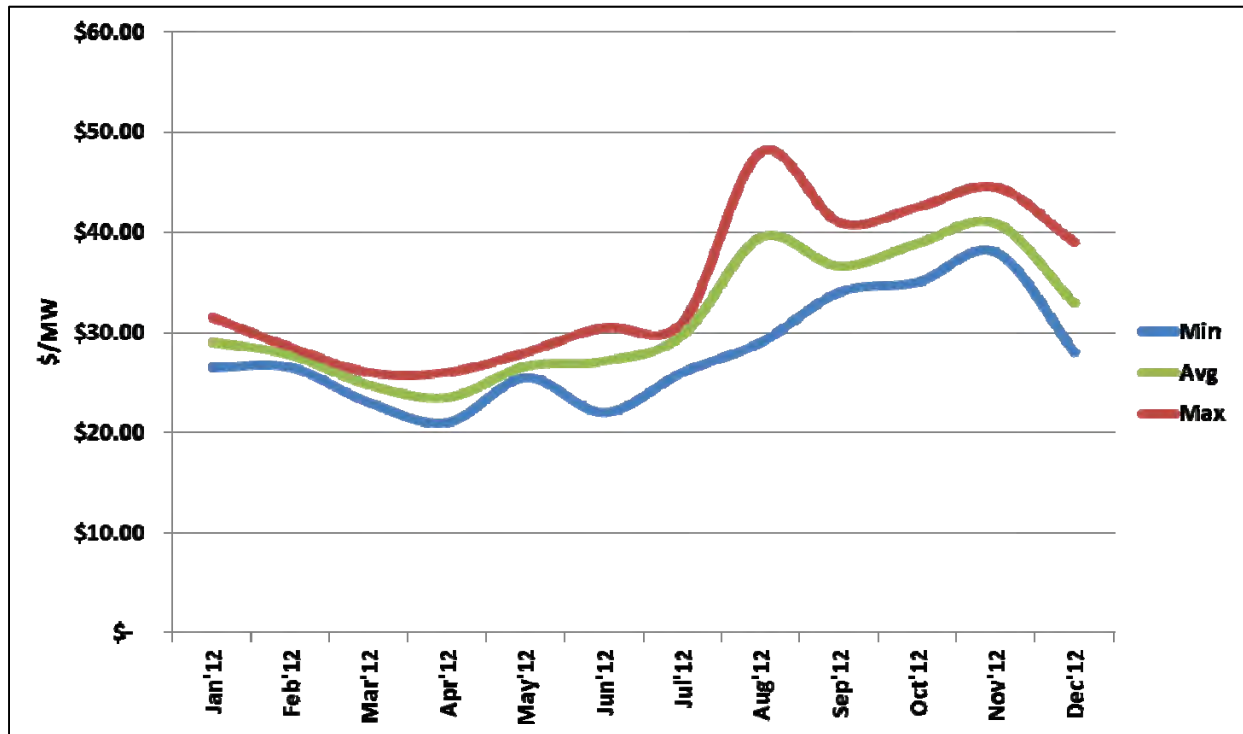


Figure 13: 2012 CAISO Market Performance Metric Catalog – Southern California PPAs

In comparison, renewable resources are procured at a premium price due to the cost of the technologies and infrastructure. In addition, due to basic supply and demand economics, the cost of renewable resources has trended even though the cost of the underlying technologies has decreased. This is due to the IOUs procuring renewable resources in order to meet their old 20% RPS goals and all LSEs now procuring renewable resources to meet their 33% RPS mandate by 2020.

(Continued)

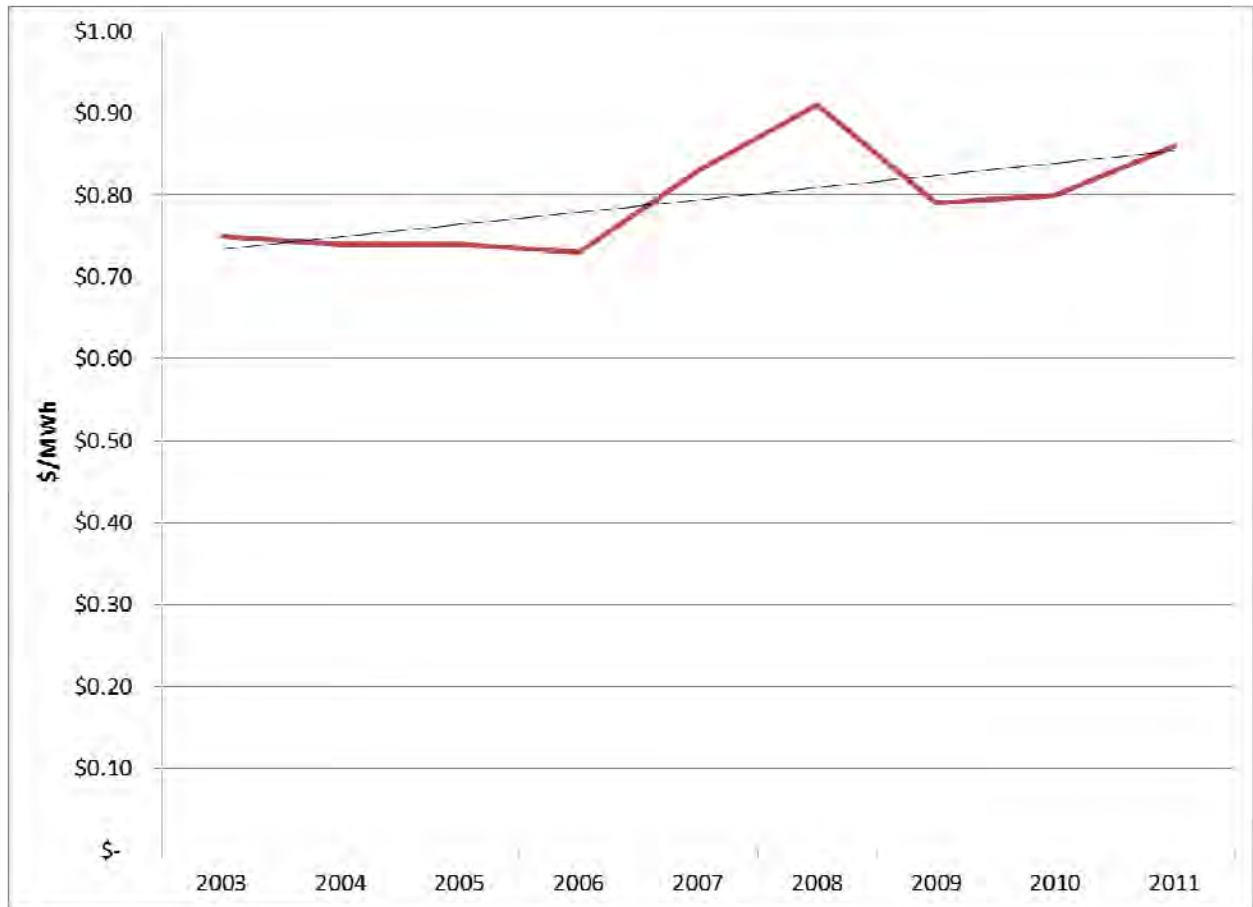


Figure 14: 2012 CAISO Market Performance Metric Catalog – Southern California PPAs¹⁰

CAISO

CAISO MRTU utilizes Locational Marginal Pricing, defined previously as LMP, to determine the cost to deliver electricity to specified locations. The local cost of electricity varies based on generation price, proximity to the generation resource due to line losses as well as the congestion on transmission infrastructure. The City is served by two LMPs in the CAISO pricing model:

- LANCSTR_6_N002
- LANCSTR_6_N030

Specific pricing for the City from these two pricing nodes were utilized for the power procurement analysis below as well as the overall initial feasibility report.

¹⁰ CPUC Renewables Portfolio Standard Quarterly Report – 4th Quarter 2011

(Continued)

Day-Ahead Locational Marginal Price

Day-Ahead Market (DAM) pricing sees significant variability and volatility when compared to the range of costs for the PPA contracts. As seen in February last year, pricing can even go negative when there is an overabundance of electricity.

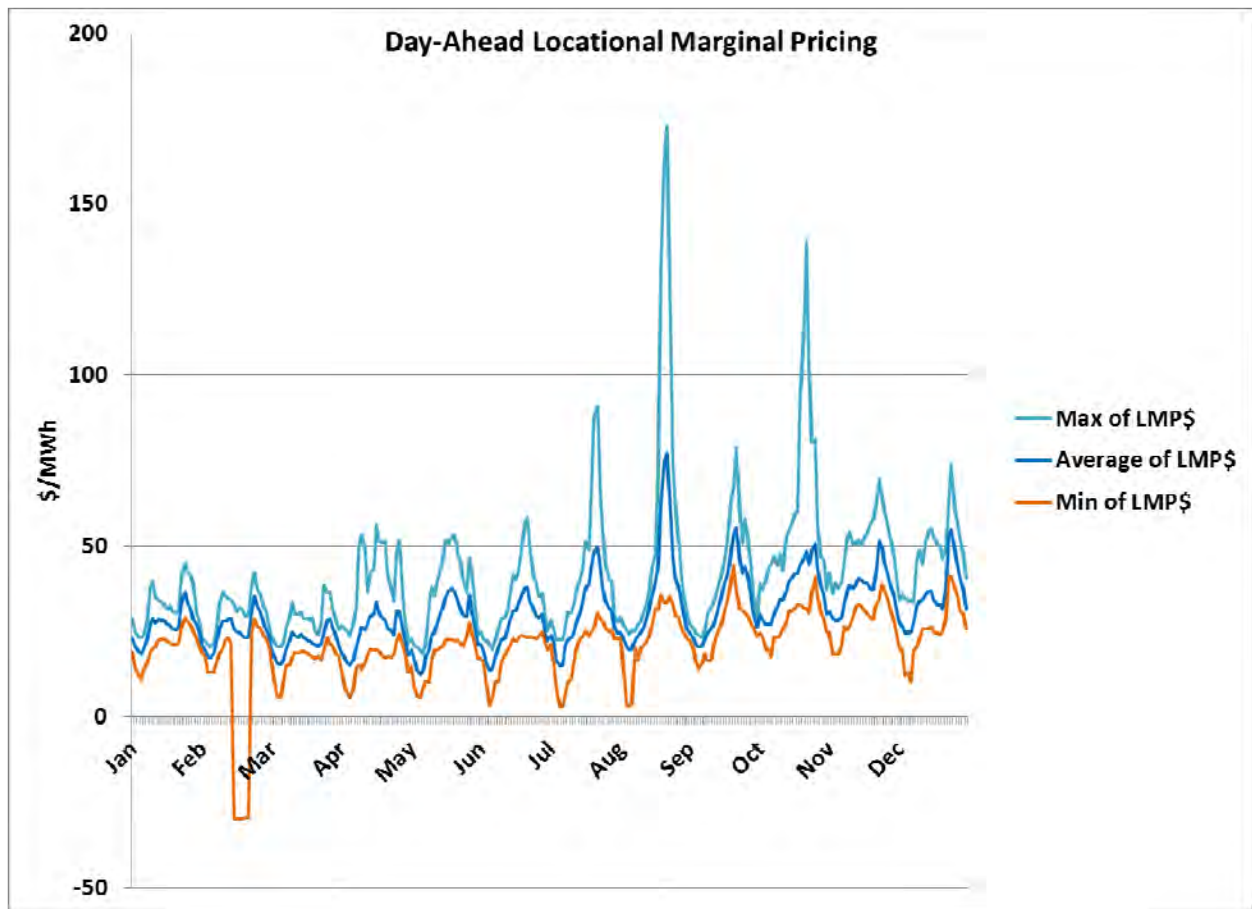


Figure 15: Range of Lancaster specific 2012 CAISO Day-Ahead Pricing

Hour Ahead Scheduling Process (HASP)

The Hour Ahead Scheduling Process, defined herein as HASP, is a component of the Real-Time CAISO market and is utilized to dispatch no-dynamic system resources to meet near-term system balancing requirements. When compared to day-ahead market pricing, HASP contains even more variability and volatility with higher highs and more frequent negative pricing.

(Continued)

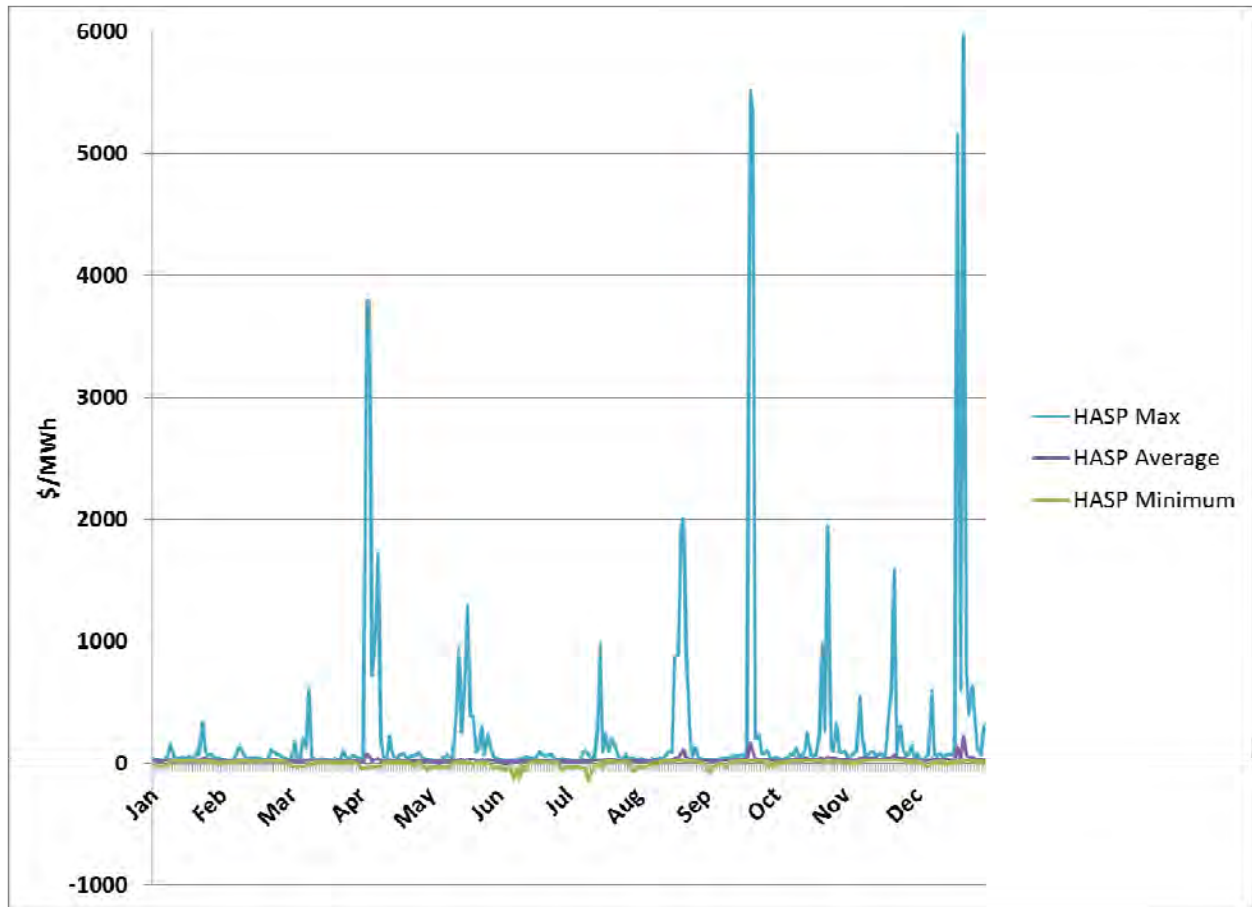


Figure 16: Range of Lancaster specific 2012 CAISO HASP Pricing

Ancillary Services (AS)

Ancillary Services (AS) serve the real-time balancing needs for electricity supply and demand. AS is comprised of Non-Spinning Reserve (NR), Spinning Reserve (SR) and Regulation. The pricing for AS is also variable and volatile, but surprisingly was more stable than HASP. However, because of the balancing aspect of AS, the power procurement analysis aspect of this initial feasibility report incorporates HASP procurement but not AS procurement.

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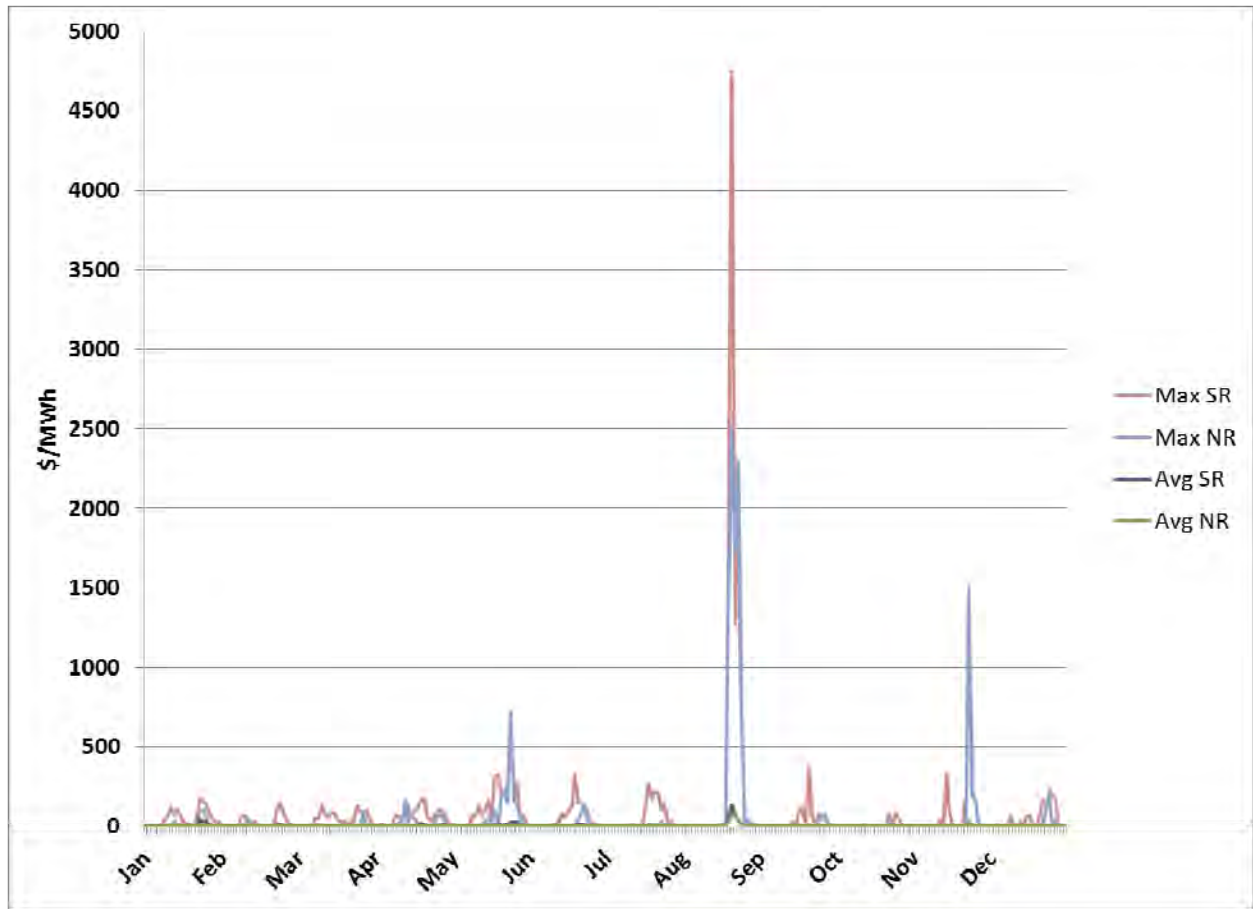


Figure 17: Range of Lancaster specific 2012 CAISO Ancillary Services Pricing

Estimated Power Procurement Costs

Utilizing the power procurement costs outlined above for PPAs and CAISO markets, simulations were run to obtain a range of expected power procurement costs. Table contains monthly estimates for power procurement from each of the generation sources and includes potential revenue from excess solar generation sales. This simulation scenario is at the higher end of the cost range encountered during the simulation runs.

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

Table 38 - Power Procurement Costs Including Sales of Excess Solar Generation

Month	PPA	35% Solar	Solar	CAISO	CAISO	Procurement	Total	\$/kWh
	Contracts	Generation	Sales	DAM	HASP	TOTAL	kWh	
Jan	\$1,174,185	\$1,192,046	\$(155,520)	\$(1,492)	\$333	\$2,209,552	54,018,462	\$0.0409
Feb	1,254,880	1,104,426	(148,078)	(1)	(324)	2,210,903	55,589,099	\$0.0398
Mar	1,086,142	1,493,707	(377,574)	(1,953)	143	2,200,465	53,174,208	\$0.0414
Apr	848,716	1,618,281	(478,611)	8,875	(899)	1,996,362	46,954,005	\$0.0425
May	1,053,396	1,632,430	(359,121)	15,342	(234)	2,341,813	54,941,667	\$0.0426
Jun	1,433,791	1,531,017	(27,261)	2,252	271	2,940,070	66,736,934	\$0.0441
Jul	1,672,643	1,788,022	(18,707)	42,351	(1,348)	3,482,961	76,652,048	\$0.0454
Aug	2,059,518	1,838,348	-	76,324	(7,998)	3,966,192	86,939,852	\$0.0456
Sep	2,323,312	1,595,496	-	17,170	2,811	3,938,789	89,175,992	\$0.0442
Oct	1,747,073	1,476,829	(53,934)	35,065	2,244	3,207,277	73,783,331	\$0.0435
Nov	1,409,217	1,207,254	(148,143)	8,463	871	2,477,662	60,019,610	\$0.0413
Dec	1,117,602	1,105,481	(157,937)	16,976	(990)	2,081,132	51,658,086	\$0.0403
TOTAL						\$33,053,178	769,643,294	\$0.0429

Table contains the same monthly estimates for power procurement as Table , but excludes the potential revenue from excess solar generation sales as a more pessimistic scenario.

(Continued)

Table 39 - Power Procurement Costs Excluding Sales of Excess Solar Generation

Month	PPA Contracts	35% Solar Generation	Solar Sales	CAISO DAM	CAISO HASP	Procurement TOTAL	Total kWh	\$/kWh
Jan	\$1,174,185	\$1,192,046	\$-	\$(1,492)	\$333	\$2,365,072	54,018,462	\$0.0438
Feb	1,254,880	1,104,426	-	(1)	(324)	2,358,981	55,589,099	\$0.0424
Mar	1,086,142	1,493,707	-	(1,953)	143	2,578,039	53,174,208	\$0.0485
Apr	848,716	1,618,281	-	8,875	(899)	2,474,973	46,954,005	\$0.0527
May	1,053,396	1,632,430	-	15,342	(234)	2,700,934	54,941,667	\$0.0492
Jun	1,433,791	1,531,017	-	2,252	271	2,967,331	66,736,934	\$0.0445
Jul	1,672,643	1,788,022	-	42,351	(1,348)	3,501,668	76,652,048	\$0.0457
Aug	2,059,518	1,838,348	-	76,324	(7,998)	3,966,192	86,939,852	\$0.0456
Sep	2,323,312	1,595,496	-	17,170	2,811	3,938,789	89,175,992	\$0.0442
Oct	1,747,073	1,476,829	-	35,065	2,244	3,261,211	73,783,331	\$0.0442
Nov	1,409,217	1,207,254	-	8,463	871	2,625,805	60,019,610	\$0.0437
Dec	1,117,602	1,105,481	-	16,976	(990)	2,239,069	51,658,086	\$0.0433
TOTAL						\$34,978,064	769,643,294	\$0.0454

6.5 Task 5: Development of Business Case

6.5.1 Subtask 5a: Development of Projected Customer Statistics

Projected customer statistics were based on data provided by SCE in the *Electricity Use Report for City of Lancaster Year 2012* report, dated March 12, 2013. Data provided in the SCE report included the number and type of accounts, estimated customer peak usage, total annual and monthly customer usage, and load profiles by customer class.

SCE Customer Information

Customer Usage Totals and Usage by Rate Class

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

As contained in the SCE Electricity Use Report and illustrated in Table , the total annual electricity usage for the City customers is approximately 770,000 MWh and there are 55,441 customer accounts. Table shows the total monthly usage for each rate class.

Table 40 - 2012 Account Summary Data for All Customers

Rate Group	Annual KWh	Pct of Total	Non Coincident Peak	Calculated Coincident Peak	Number of Accounts	Pct of Total
AG TOU	23,278,895	3.02%	8,437	5,231	62	0.11%
Domestic Multi Family	14,216,098	1.85%			51	0.09%
Domestic Single Family	375,928,440	48.84%			49,108	88.63%
GS-1	46,167,122	6.00%			4,504	8.13%
GS-2	124,726,085	16.21%	43,578	30,941	1,078	1.95%
PA-1	530,691	0.07%			36	0.06%
PA-2	342,842	0.04%	360	234	7	0.01%
Street Lighting	33,358,425	4.33%			322	0.58%
TC-1	484,123	0.06%			151	0.27%
TOU-8	91,952,022	11.95%	24,240	16,968	29	0.05%
TOU-GS	58,658,550	7.62%	17,399	9,221	63	0.11%
Total	769,643,294	100.00%			55,411	100.00%

Table 41 - 2012 Customer Usage (kWh)

Rate Group	Jan	Feb	Mar	Apr	May	Jun
AG TOU	1,206,960	1,183,188	1,414,389	1,941,300	2,382,351	2,682,658
Domestic Multi Family	1,237,099	1,020,863	1,030,849	864,846	944,937	1,178,181
Domestic Single Family	27,606,027	23,528,853	23,627,153	21,887,533	24,036,231	31,810,406
GS-1	3,462,359	3,284,426	3,356,149	3,169,766	3,441,527	4,053,325

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

Rate Group	Jan	Feb	Mar	Apr	May	Jun
GS-2	9,343,495	8,860,919	9,117,026	8,720,163	9,702,491	11,259,352
PA-1	21,163	20,988	25,978	41,873	35,232	82,309
PA-2	30,508	28,182	30,020	30,364	31,990	28,340
Street Lighting	239,577	5,663,950	3,085,204	194,822	2,799,822	3,025,223
TC-1	41,543	39,271	40,222	39,096	38,347	39,481
TOU-8	6,393,572	7,363,348	7,124,280	6,309,139	7,097,874	7,617,663
TOU-GS	4,436,159	4,595,110	4,322,938	3,755,103	4,430,865	4,959,996
Total	54,018,462	55,589,099	53,174,208	46,954,005	54,941,667	66,736,934

Rate Group	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
AG TOU	2,757,472	2,249,395	2,233,237	2,251,989	1,728,241	1,247,715	23,278,895
Domestic Multi Family	1,399,700	1,540,528	1,663,693	1,340,344	953,170	1,041,888	14,216,098
Domestic Single Family	40,235,656	48,689,723	48,972,648	35,611,642	24,540,972	25,381,596	375,928,440
GS-1	4,419,673	4,748,196	4,888,736	4,471,559	3,478,996	3,392,410	46,167,122
GS-2	11,681,939	12,595,280	12,963,596	11,978,374	9,600,655	8,902,795	124,726,085
PA-1	52,511	79,013	47,506	57,350	47,121	19,647	530,691
PA-2	28,537	32,547	27,073	28,017	19,932	27,332	342,842
Street Lighting	3,022,650	3,082,585	3,037,688	3,112,021	5,853,237	241,646	33,358,425
TC-1	39,602	38,174	39,755	42,864	43,037	42,731	484,123
TOU-8	7,906,307	8,390,743	9,257,374	8,974,854	8,494,016	7,022,852	91,952,022
TOU-GS	5,108,001	5,493,668	6,044,686	5,914,317	5,260,233	4,337,474	58,658,550
Total	76,652,048	86,939,852	89,175,992	73,783,331	60,019,610	51,658,086	769,643,294

Customer Load Profiles by Rate Class

Customer electrical usage varies over the day and typical usage varies by rate classes. The variance in usage is important as the Lancaster CCA will need to purchase different amounts of power throughout

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the day based on total customer usage. The Lancaster CCA cost estimates incorporate the variance in usage down to an hour-by-hour basis for a typical year. Thus, a total of 8,760 time frames (365 days * 24 hours in a day) have been used in the costing estimates.

SCE has provided typical usage for all rate classes as shown. Sample usage by rate classes is shown in the in Figure 18 - Figure 21 below. Peak load can be five times as much demand as the off peak periods. The cost of electricity also increases with increased demand to the point that the cost of procuring energy during peak periods can exceed the amount billed to customers for their usage during that same time.

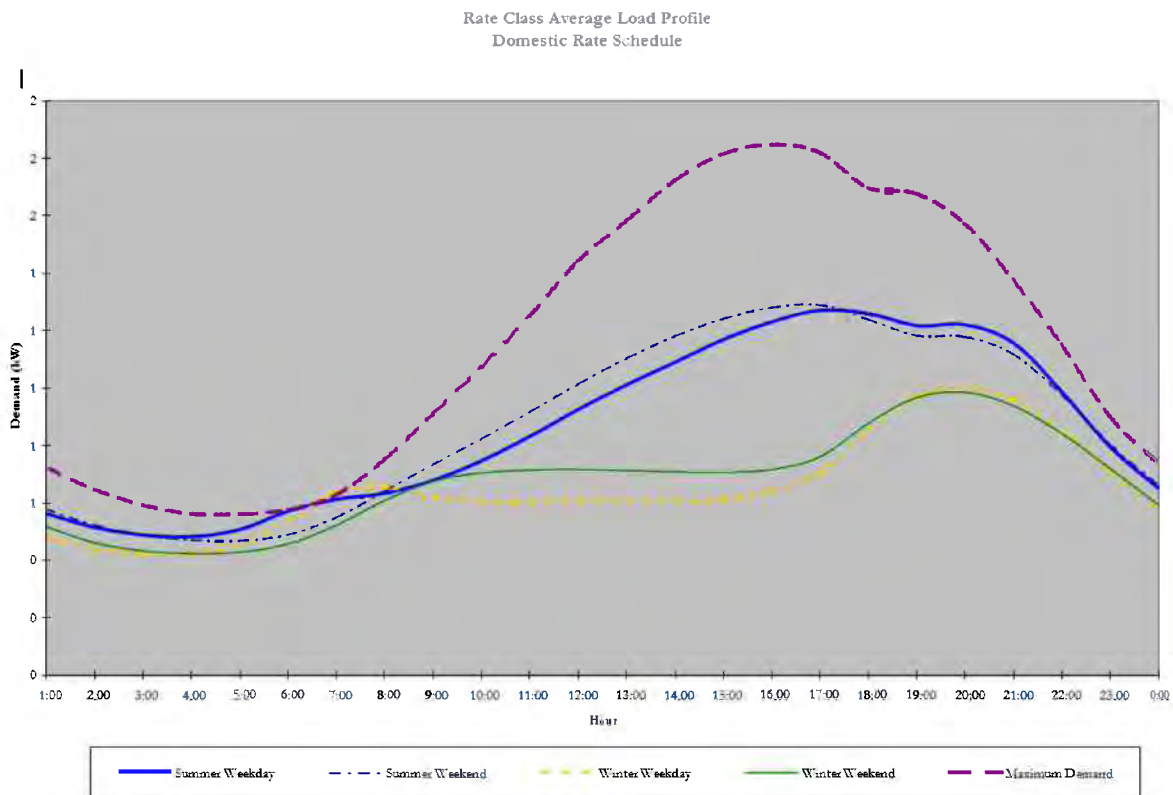


Figure 18: Domestic Load Profile

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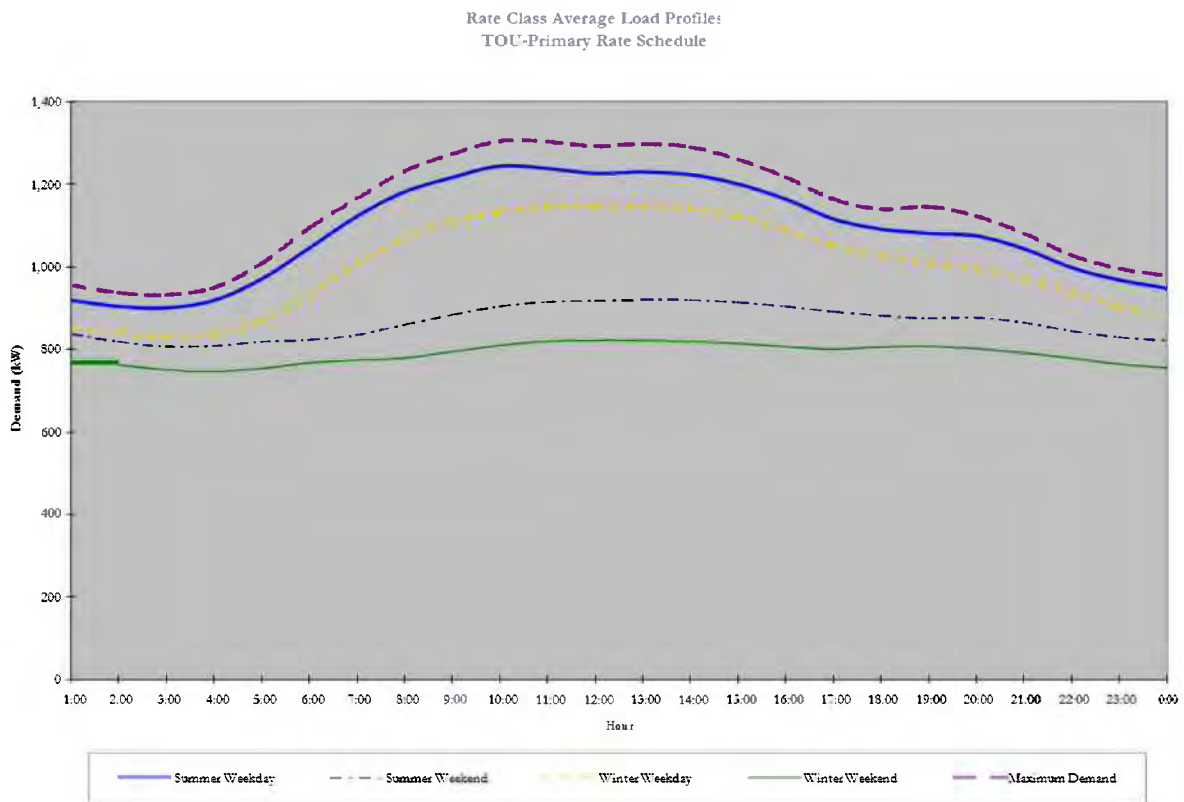


Figure 19: TOU Load Profile

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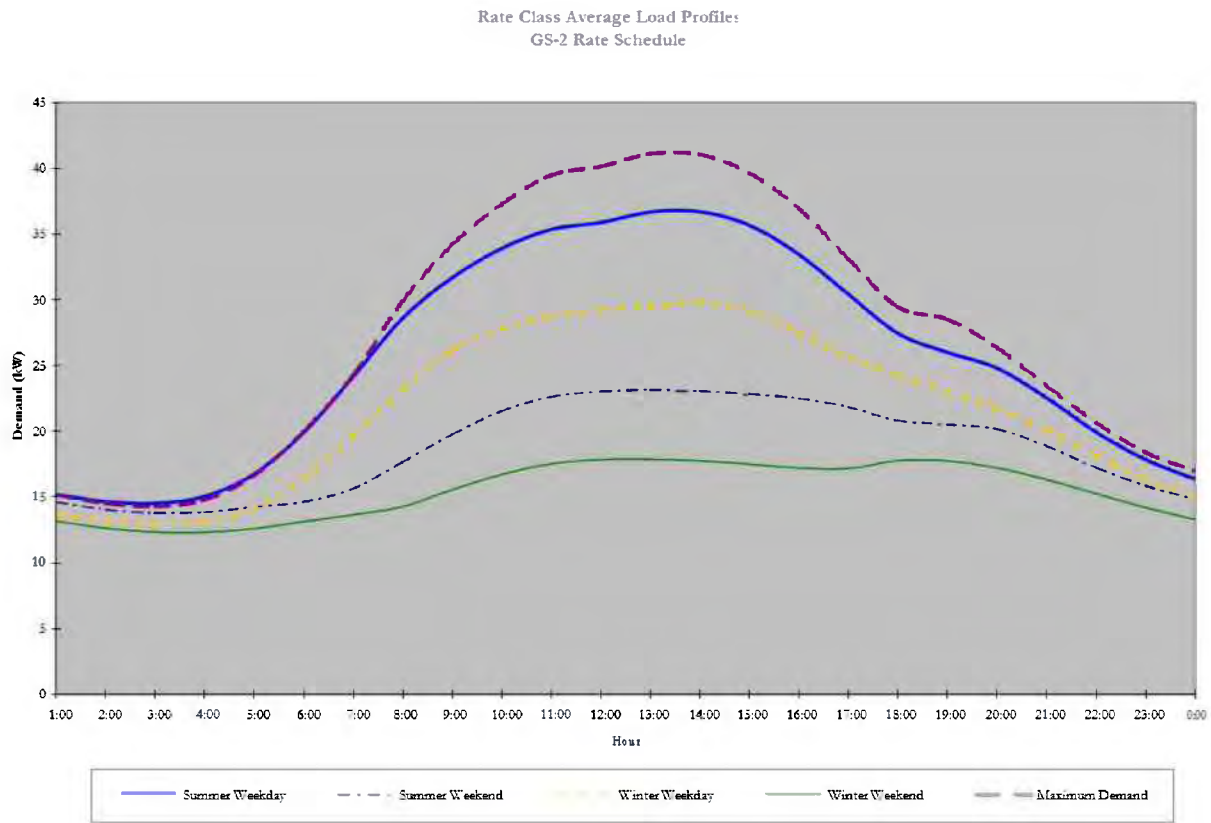


Figure 20: GS-2 Load Profile

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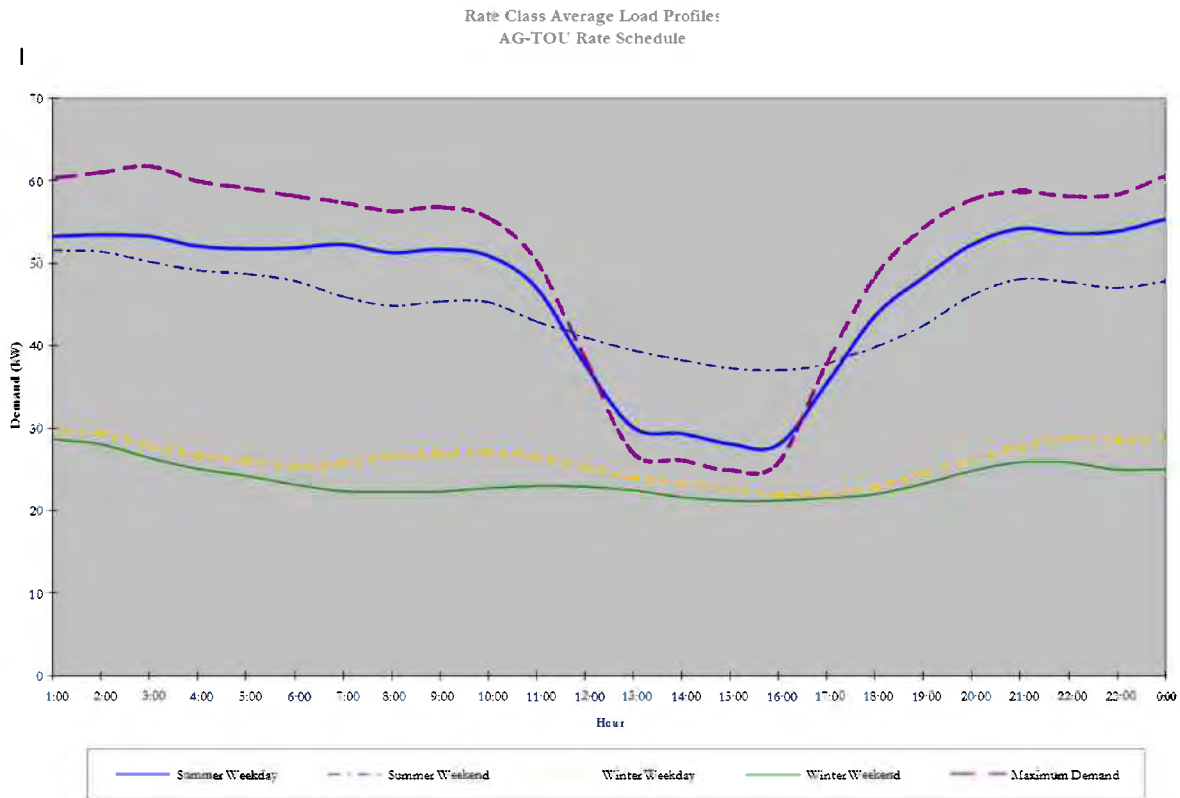


Figure 21: Ag-TOU Load Profile

Estimate SCE Customer Bills by Rate Class

In order to understand whether a Lancaster CCA could economically procure and then sell electricity to constituent customers, the usage and peak information provided by SCE was further analyzed to develop a rate analysis for each rate class of customers. As described in Section 5.3.2, all non-residential customers are transitioning to TOU pricing in 2014. Therefore, this new rate structure formed the basis for the analysis and required segmenting usage into On-Peak, Mid-Peak and Off-Peak usage periods (Reference Figure 22) to align with the applicable pricing.

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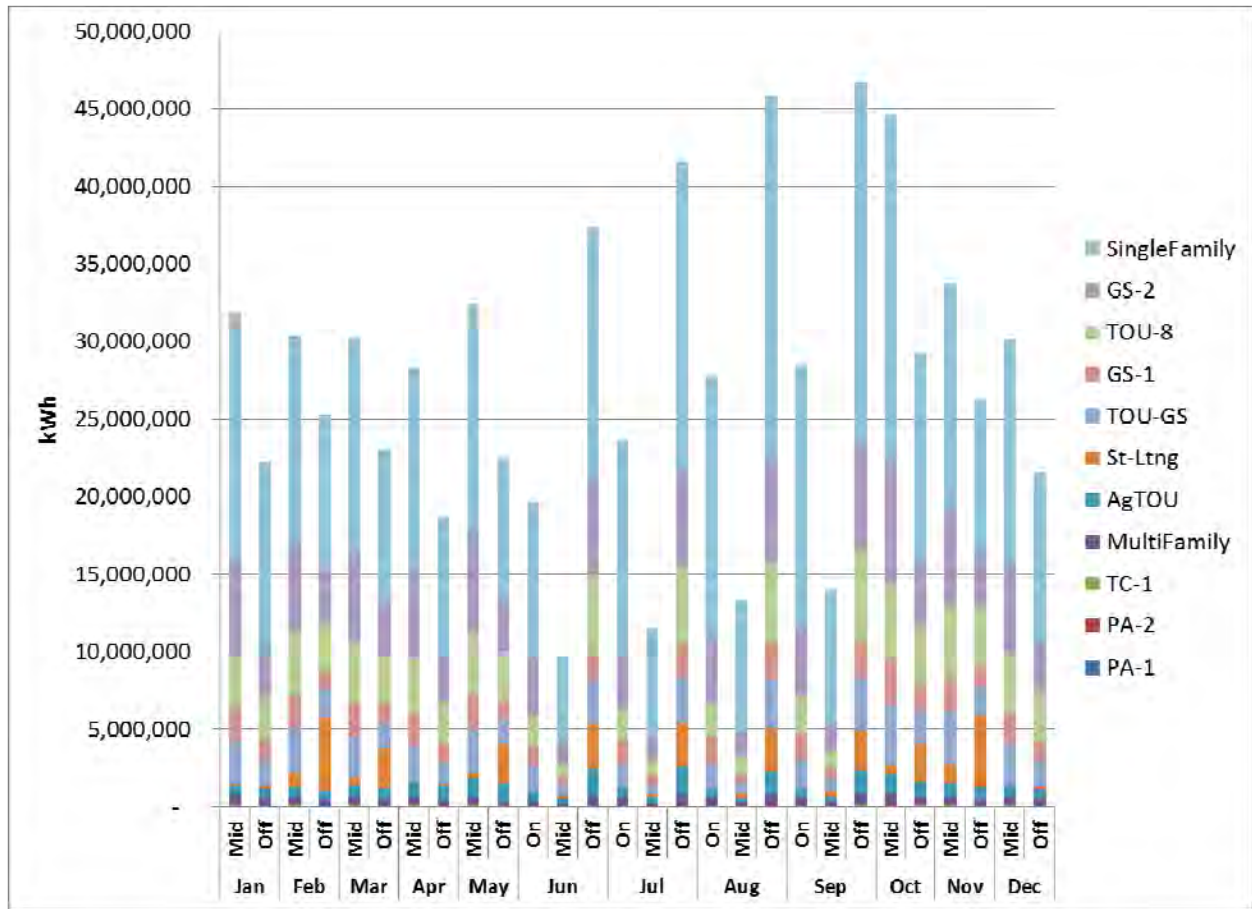


Figure 22: Peak, Mid-Peak and Off-Peak Usage by Rate Class

Figure 23 translates the usage from Figure 22 into Peak, Mid-Peak and Off-Peak Customer Cost by Rate Class utilizing the rate structures described in Section 5.3.

(Continued)

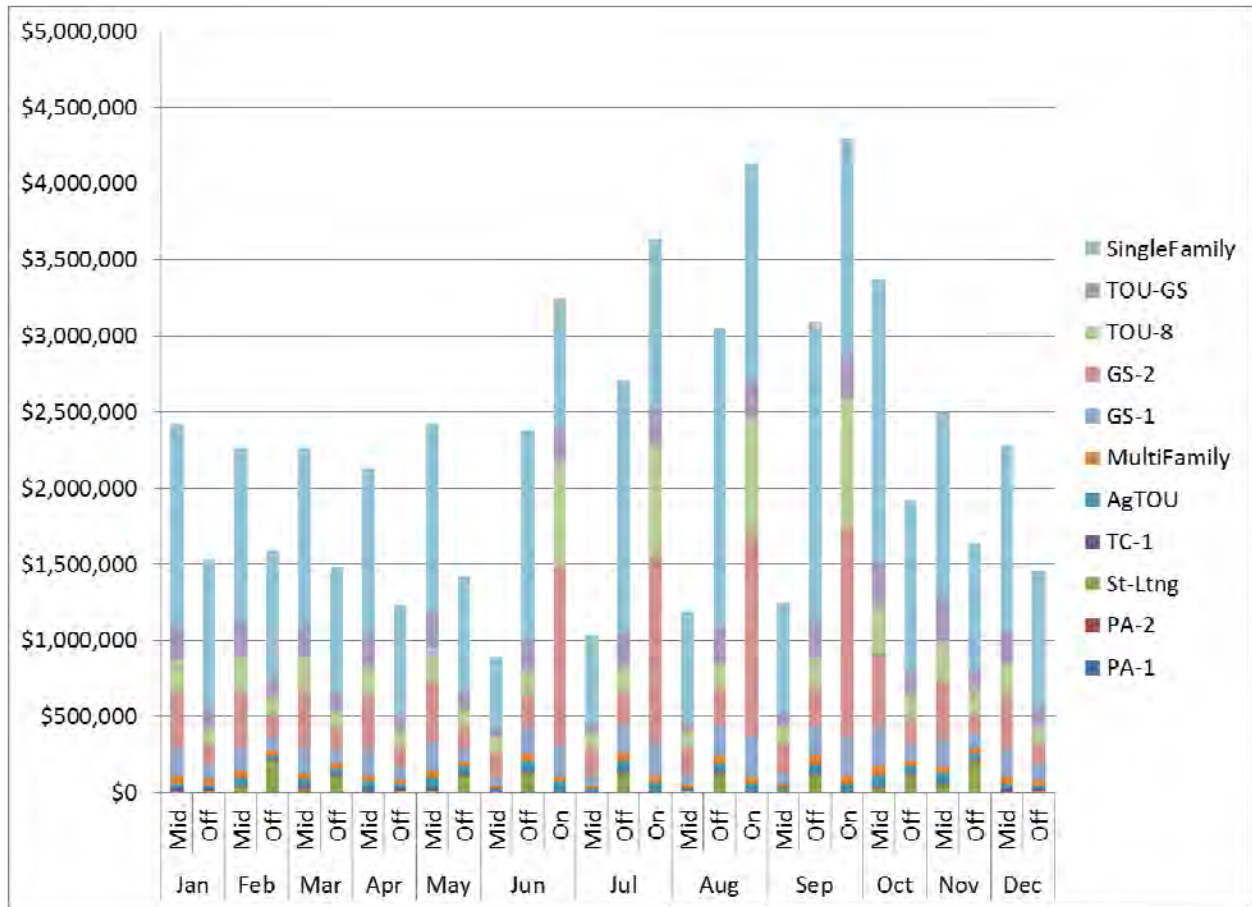


Figure 23: Peak, Mid-Peak and Off-Peak Customer Cost by Rate Class

Table estimates the total monthly Peak, Mid-Peak and Off-Peak charges for each customer class. The total estimated revenue from energy sales of \$62,874,696 exceeds the \$51,553,474 amount for Generation Revenue within the City of Lancaster cited by SCE for 2012. The \$11,321,222 difference is likely attributable to:

- Non-Residential customers not yet utilizing the TOU rates that formed the basis for this estimate;
- Lower revenue and discounts from alternate rate structures selected by customers; and/or
- Non-payment by customers

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Table 42 - Estimated Monthly Bill by Customer Rate Class

Month	PA-1	PA-2	St-Ltng	TC-1	Ag TOU	Multi Family	GS-1	GS-2	TOU-8	TOU-GS	Single Family	Grand Total
Jan												
Mid	\$870	\$1,158	\$2,036	\$19,420	\$35,324	\$57,342	\$176,339	\$371,308	\$200,745	\$226,693	\$1,332,664	\$2,423,899
Off	\$2,366	\$554	\$8,584	\$16,432	\$19,714	\$46,525	\$91,514	\$137,449	\$107,838	\$116,601	\$985,138	\$1,532,714
Feb												
Mid	\$866	\$1,065	\$41,760	\$18,358	\$34,674	\$47,162	\$168,191	\$352,799	\$231,135	\$235,737	\$1,129,113	\$2,260,860
Off	\$2,335	\$515	\$209,323	\$15,533	\$19,294	\$38,549	\$86,024	\$129,910	\$124,235	\$119,985	\$846,370	\$1,592,074
Mar												
Mid	\$1,092	\$1,120	\$19,775	\$18,802	\$41,000	\$48,477	\$171,960	\$361,467	\$224,275	\$221,613	\$1,150,470	\$2,260,051
Off	\$2,809	\$558	\$116,993	\$15,909	\$23,369	\$38,073	\$87,820	\$134,670	\$119,768	\$113,017	\$833,265	\$1,486,251
Apr												
Mid	\$1,738	\$1,153	\$1,044	\$18,276	\$55,394	\$42,299	\$164,694	\$349,721	\$198,378	\$192,936	\$1,102,555	\$2,128,189
Off	\$4,614	\$551	\$7,593	\$15,464	\$32,672	\$30,313	\$80,976	\$126,187	\$106,223	\$97,799	\$735,122	\$1,237,515
May												
Mid	\$1,441	\$1,222	\$11,130	\$17,926	\$67,327	\$48,328	\$183,526	\$398,190	\$223,373	\$230,589	\$1,245,422	\$2,428,476
Off	\$3,967	\$576	\$112,986	\$15,168	\$40,537	\$31,008	\$83,862	\$134,441	\$119,371	\$112,874	\$772,659	\$1,427,451
Jun												
Mid	\$858	\$345	\$8,214	\$4,259	\$16,052	\$16,403	\$53,444	\$163,965	\$100,272	\$66,360	\$457,311	\$887,482
Off	\$1,415	\$638	\$125,894	\$21,295	\$54,670	\$49,869	\$164,727	\$216,604	\$155,012	\$215,396	\$1,376,640	\$2,382,160
On	\$4,940	\$2,349	\$0	\$8,518	\$55,850	\$32,647	\$211,921	\$1,163,906	\$698,072	\$230,908	\$836,851	\$3,245,961
Jul												
Mid	\$540	\$340	\$8,704	\$4,272	\$16,760	\$19,495	\$57,937	\$169,982	\$104,116	\$69,222	\$586,469	\$1,037,836
Off	\$918	\$652	\$125,291	\$21,360	\$56,965	\$55,381	\$178,629	\$224,141	\$161,266	\$221,409	\$1,664,945	\$2,710,956
On	\$3,056	\$2,304	\$0	\$8,544	\$54,602	\$42,643	\$233,493	\$1,213,115	\$720,259	\$237,362	\$1,126,772	\$3,642,149
Aug												
Mid	\$809	\$382	\$14,215	\$4,118	\$13,744	\$21,687	\$61,277	\$180,067	\$110,213	\$73,314	\$712,982	\$1,192,808
Off	\$1,382	\$751	\$122,436	\$20,590	\$46,535	\$60,237	\$188,472	\$240,070	\$171,193	\$236,350	\$1,963,720	\$3,051,736
On	\$4,603	\$2,578	\$0	\$8,236	\$44,207	\$47,419	\$258,969	\$1,330,891	\$764,836	\$260,381	\$1,411,287	\$4,133,407
Sep												

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Month	PA-1	PA-2	St-Ltng	TC-1	Ag TOU	Multi Family	GS-1	GS-2	TOU-8	TOU-GS	Single Family	Grand Total
Mid	\$481	\$316	\$20,875	\$4,289	\$13,630	\$23,350	\$65,713	\$188,562	\$122,318	\$80,723	\$732,834	\$1,253,090
Off	\$826	\$622	\$113,785	\$21,443	\$45,785	\$65,570	\$194,911	\$246,284	\$187,996	\$259,456	\$1,955,276	\$3,091,954
On	\$2,816	\$2,177	\$0	\$8,577	\$45,168	\$50,764	\$261,223	\$1,367,664	\$850,927	\$287,598	\$1,423,633	\$4,300,547
Oct												
Mid	\$2,357	\$1,067	\$27,188	\$20,037	\$64,631	\$68,877	\$240,010	\$495,356	\$281,450	\$308,763	\$1,863,615	\$3,373,352
Off	\$6,414	\$507	\$110,768	\$16,954	\$37,649	\$43,658	\$107,622	\$163,503	\$151,606	\$149,826	\$1,126,339	\$1,914,847
Nov												
Mid	\$1,929	\$767	\$56,569	\$20,118	\$49,778	\$45,869	\$176,190	\$383,011	\$266,464	\$271,497	\$1,221,543	\$2,493,735
Off	\$5,301	\$355	\$202,905	\$17,023	\$28,772	\$34,159	\$92,812	\$140,257	\$143,421	\$135,942	\$838,917	\$1,639,864
Dec												
Mid	\$750	\$1,039	\$2,288	\$19,975	\$36,384	\$48,611	\$168,210	\$345,940	\$219,416	\$218,297	\$1,222,175	\$2,283,086
Off	\$2,427	\$496	\$8,424	\$16,902	\$20,469	\$38,866	\$93,597	\$136,126	\$119,183	\$116,893	\$908,864	\$1,462,247
Total	\$63,920	\$26,160	\$1,478,779	\$417,799	\$1,070,955	\$1,193,584	\$4,104,062	\$10,865,585	\$6,983,362	\$5,107,539	\$31,562,952	\$62,874,696

(Continued)

Based on this calculation, the average customer bill in each rate category is summarized in Table .

Table 43 - Average Annual Customer Usage and Bill for Each Customer Category

Rate Group	Number of Accounts	Annual Usage (kWh)	Average Annual kWh per Customer	Pct of Usage	Annual Retail Revenue	Pct of Revenue	Average Annual Bill
PA-2	7	342,842	48,977	0.04%	\$26,160	0.04%	\$3,737
TC-1	151	484,123	3,206	0.06%	42,249	0.07%	\$280
PA-1	36	530,691	14,741	0.07%	37,130	0.06%	\$1,031
Domestic Multi Family	51	14,216,098	278,747	1.85%	1,207,373	1.93%	\$23,674
AG TOU	62	23,278,895	375,466	3.02%	1,608,750	2.57%	\$25,948
Street Lighting	322	33,358,425	103,598	4.33%	1,475,777	2.36%	\$4,583
GS-1	4,504	46,167,122	10,250	6.00%	4,104,062	6.56%	\$911
TOU-GS	63	58,658,550	931,088	7.62%	5,107,539	8.16%	\$81,072
TOU-8	29	91,952,022	3,170,759	11.95%	6,161,389	9.85%	\$212,462
GS-2	1,078	124,726,085	115,701	16.21%	10,865,585	17.37%	\$10,079
Domestic Single Family	49,108	375,928,440	7,655	48.84%	31,927,602	51.03%	\$650
TOTAL	55,411	769,643,294	13,890	100.00%	\$62,563,617	100.00%	\$1,129

Procurement Cost and Projected Revenue

Looking strictly at the estimated cost of power procurement at \$35M, as shown in Table , and current SCE annual retail energy sales revenue of \$51.5M, there is a potential margin of \$16.5M for a Lancaster CCA to cover operational expenses which are summarized in the next section.

6.5.2 Subtask 5b: Development of Projected CCA Operating Expenses

The CCA operating expenses were estimated in terms of initial setup costs and reoccurring monthly expenses. In the case of services provided by SCE which range from meter reading to customer account management, the current per-transaction charge is known precisely. Costs for other services such as the

(Continued)

cost of the required CAISO schedule coordinator are estimated. Thus in general the cost estimates for SCE services are more accurate than the costs of non-SCE services.

Lancaster CCA Setup and Monthly Cost Calculation Methodology

The methodology described here was used to calculate estimated costs for the Lancaster CCA setup costs and for the on-going monthly costs for operation of the CCA. Cost effective CCA implementation options were assumed, most significantly the use of Open Season enrollment and the use of SCE-managed customer account servicing and billing. The use of Open Season enrollment will significantly reduce costs as Cost Responsibility Surcharges (CRS) of up to 1.5 cents per kWh of electricity will not be incurred.

We believe the use of SCE-managed services to perform account management and billing will likely be the lowest cost option; however the City can also evaluate other service options. In any event, the known SCE costs for account management and billing services provide definitive costs, which eliminates most uncertainty in the per account costs of account management, billing and account notification services.

Key Assumptions

Key assumptions impacting the CCA set-up and monthly costs are documented and explained in this section. Assumptions are parameterized in the CCA Analysis spreadsheets; thus if desired, it is possible to modify the assumptions and recalculate the estimated CCA setup and monthly costs.

Cost effective methods were used to determine initial setup and monthly costs including Open Season enrollment and the use of SCE provided customer account management, customer notifications, meter reading and billing services.

Assumption 1: Open Season Enrollment

An important cost assumption is that the City will initiate CCA implementation under the Open Season option. Using the Open Season option will reduce costs significantly as Cost Responsibility Surcharges (CRS) of up to 1.5 cents per kWh of electricity will not be incurred.

Under Rule 23.2, the City will not include CRS costs if they submit a BNI to SCE during the Open Season which runs from January 1 to February 15. SCE will then rely upon the BNI in making procurement decisions to meet its load and resource adequacy requirements, and enable the coordination of resource planning activities between SCE and the City.

When the City submits the BNI, it will also provide specific detail the forecasted number of customers by rate class to which the CCA intends to offer service. Estimates of the number of customers per rate class will be based on the Account Summary Data in the Electricity Use Report for City of Lancaster Year 2012 report, dated March 12, 2013.

(Continued)

Upon submission of the BNI(s), the Lancaster CCA must meet with SCE to develop a Load Forecast for the CCA for the years (tentatively 2015 and 2016) it will commence service. The Lancaster CCA and SCE must collaborate in developing the load forecast by providing the following information:

- The description of the customer classes or subsets of the customer classes to which the Lancaster CCA intends to offer service;
- A description of the terms and conditions of the CCA service;
- Lancaster CCA rate forecasts for the year the CCA commences service
- SCE estimates of bundled customers who do not qualify for CCA mass enrollment including SCE updates on near-term efforts to promote programs that would increase this category of customers;
- Information either the Lancaster CCA or SCE has received regarding customer intent to opt-out of the CCA program.

Assumption 2: Phased Enrollment

Cost calculations assume that the City will implement the CCA implementation in three (3) phases. The three implementation groups include:

- Municipal buildings including street lighting;
- Commercial and Industrial customers; and
- Residential.

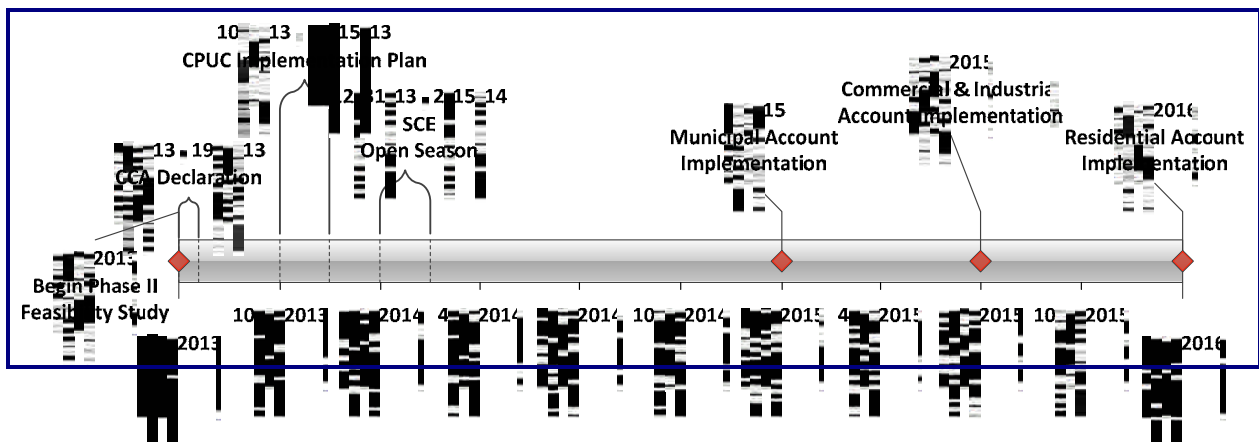


Figure 24: Assumed Implementation Timeline

CCA implementation for the three groups will be staggered by 6 months. Cost calculations assume that the Municipal buildings will begin in January 2015 with Commercial and Industrial customers entering the CCA in July 2015 and Residential customers joining the CCA in January 2016.

Assumption 3: CCA Customer Base Calculations

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The number of potential customers is a key factor in both the CCA setup and monthly cost calculations. Assumptions made in the number of customers, or customer accounts include the size of the customer base and the estimated Opt-Out rate.

Assumption 3a: Existing SCE Customer Base Size

The customer base provided by SCE in Table C, Total of Account Summary Data for Bundled and Direct Access Customers in the *Electricity Use Report for City of Lancaster Year 2012* report, included both bundled and direct access customers. The number of direct access customer accounts is small at less than one-half of one percent.

Although an average Lancaster CCA customer growth rate of 2% was calculated, the 2% rate was NOT applied to the estimated customer base size.

(Continued)

Assumption 3b: Estimated Opt-Out Rate

The estimated Opt-Out rate was calculated at 12% for all customers based on the average Opt-Out rates of the Marin County and Oak Park, Illinois as reported in the NREL Report, *Innovations in Voluntary Renewable Energy Procurement: Methods for Expanding Access and Lowering Cost for Communities, Governments, and Businesses*.

Note that this Opt-Out estimate is more conservative than the default Opt-Out rate established by the CPUC. For planning purposes, the default CPUC Opt-Out rates are:

- Bundled Service Customers - 5% for residential and 20% for non-residential customers.
- Direct Access Customers – 100% for both residential and non-residential customers.

CCA Setup Fees

CCA setup costs include fees for Community Choice Aggregation Service Establishment, required Electronic Data Interchange (EDI) Testing, required Customer Notifications, Mass Enrollment, and Opt-Out charges. Each setup fee, including the amount of the fee, is explained in more detail in the following sections.

CCA Service Establishment Fee

CCA Establishment - This fee covers the cost of establishing a new business relationship with the CCA and includes activities such as processing the CCA Service Agreement (Form 14-768), establishing a CCA account in SCE’s billing and metering systems, and establishing CCA creditworthiness pursuant to Section V of Rule 23.

Per Event (3 events, one for each implementation phase)

CCA Establishment Fee \$ 1,771

Electronic Data Interchange (EDI) Testing Fee

SCE requires that testing of the Electronic Data Interchange communication must be performed prior to the CCA establishing service. The Lancaster CCA must successfully complete the required standard technical testing which demonstrates the CCA is capable of exchanging data with SCE through EDI.

For cost estimation purposes, 10 hours of EDI testing were assumed for each phase.

Per Hour (10 hours for each phase, 30 hours of testing total)

EDI Testing Fee: \$ 99

Customer Notification Fee

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The Lancaster CCA must notify all customers of its intent to establish a CCA. Two separate notifications are required as well as a separate fee, the Standard Output Fee, for SCE to produce the list of customers requiring notification.

The Customer Notification Fees pay for the Lancaster CCA requests to SCE to include a notice informing customers of the CCA program in a separate mailing or in SCE’s billing. The Standard Output Fee as defined in section C.2 of SCE’s Schedule CCA-INFO will be assessed separately to recover the costs associated with the development of a list of service accounts eligible for initial notification activities. A Customer Notification Fee will apply for each Service.

Accounts must receive the two notices during each of the notification periods below. The charges include the Standard Notification Fees and the Standard Output Fees.

Standard Notification Fee

The Standard Notification Fee applies to a CCA that requests SCE to direct mail notification letters to inform customers of the CCA’s program as described in Section H of Rule 23. A Standard Notification Fee will apply for each service account that must receive the two notification letters during each notification period:

- 1) Initial Notification Period, as defined by Rule 23 Section B.23; and
- 2) Follow-Up Notification Period, as defined by Rule 23, Section B.24.

This fee does not include the costs to develop design, or produce the CCA’s customer notices.

Per Service Account

Initial Notification Period: \$ 1.41
Follow-Up Notification Period: \$ 1.41

Standard Output File Fee

The Standard Output File is required for the production of reports, including the report which lists the accounts which require notification. Notification Reports include customer account name, service account, service address, mailing and other data not needed for the Notification Reports.

Per Request (3 requests, one for each phase)

Standard Output File Fee: \$197.82

Mass Enrollment Fee

The Mass Enrollment fee pays for the mass transfer of accounts to the Lancaster CCA Service as described in Section D and Section J of Rule 23. All eligible Lancaster CCA customers that have not opted out of CCA service will be automatically enrolled in the CCA’s program on the customers’ regular meter

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read dates over a one month billing period. The Mass Enrollment Fee is assessed on a per event basis and a per Service Account basis.

Per Event (3 requests, one for each phase)

Mass Enrollment Fee:..... \$ 3,099

(Continued)

Per Event, Per Service Account

Mass Enrollment Fee: \$ 0.14

Opt-Out Requests-Pre Automatic Enrollment Period

Pre automatic enrollment period Opt-Out Request fees apply when a customer elects to opt-out of the Lancaster CCA program prior to the automatic enrollment process. Opt-out requests received after the automatic enrollment date but prior to the end of the 60-day follow-up notification period will be processed as Opt-Out CCASRs (see below). After the end of the follow-up notification period, customers requesting to opt-out will be subject to a Customer Re-Entry CCASR Fee (see below). SCE will provide the customer with written confirmation that the customer’s opt-out request was processed.

Per Service Account

Customer Contact Opt-Out: \$ 0.46

Voice Response Unit (VRU) Opt-Out: \$ 0.52

Internet Opt-Out: \$ 2.07

Community Choice Aggregation Service Request (CCASR) fee

A Community Choice Aggregation Service Request (CCASR) fee is charged when a customer decided to Opt-Out after being automatically enrolled, but prior to the end of the 60 day Follow-Up Notification Period.

Per CCASR

Opt-Out CCASR Fee: \$1.40

- The Connect and Disconnect CCASR fee for when a CCA submits a connect or disconnect CCASR to add or remove a customer from a CCA program is \$0.91.
- The Re-Entry CCASR fee charged to the customer requesting to terminate CCA Service after the Follow-Up Notification Period has ended is \$1.37.
- The New Customer CCASR fee is applicable when a customer establishes new service in CCCA’s service area is \$0.61.
- A cancellation CCASR fee to halt the completion of an initial CCASR issue for the same service account is \$1.31.

Credit Evaluation Rule 23 Community Choice Aggregation

The City appears to have adequate credit worthiness to be able to pass the Rule 23 requirements given we could find no current Standard and Poor’s rating below BBB+ for either the City, the Lancaster Redevelopment agency or the Lancaster Power Authority.

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Per Rule 23, a CCA with a demonstrable current credit rating of Baa2 or higher from Moody’s or BBB or higher from Standard and Poor’s, Fitch or Duff & Phelps, is deemed to be creditworthy unless SCE determines that a material change in the CCA’s creditworthiness has occurred. SCE requires CCAs to complete a credit application including financial information reasonably necessary to establish credit. The creditworthiness evaluation may be conducted by an outside credit analysis agency, determined by SCE, with final credit approval granted by SCE.

Estimated Fees for a Lancaster CCA

The CCA fees described in the prior sections are estimated for the Lancaster CCA in Table - Table below.

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Table 44 - CCA Fee Parameters

Parameters	Value
Number of Implementation Phases	3
Number of hours of EDI testing per phase	10
Number of accounts, Municipal phase	529
Number of accounts, C&I phase	5,036
Number of accounts, Residential phase	43,266
Total Accounts	48,831
Estimated Opt Out % (based on average)	12.0%
Estimated Opt Out % per opt out method	25.0%
% Municipal accounts	1.0%
% C&I Accounts	10.0%
% Residential Accounts	89.0%

Table 45 - CCA Setup Fees

Parameters	Amount
CCA Establishment Fee, per event	\$1,771
EDI Testing Fee, per hour	\$99
CCA Credit Establishment (not needed for Lancaster)	\$157
Standard Output Fee (needed Notification Notices)	\$197.82
Customer Notification, Initial Notification, per account	\$1.41
Customer Notification, Follow-Up Notification, per account	\$1.41
Mass Enrollment Fee, per event	\$3,099
Mass Enrollment Fee, per account	\$0.14

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Parameters	Amount
Customer Contact Opt-Out, per account	\$0.45
Voice Response Unit Opt-Out, per account	\$0.54
Internet Opt-Out, per account	\$2.14
CCASR Opt Out Fee (prior to 60 day Follow Up)	\$1.40

Table 46 - CCA Establishment Fees Detail by Phase

Per Phase Costs	Municipal	C&I	Residential	Totals
CCA Establishment	\$1,771	\$1,771	\$1,771	\$5,313
Standard Output Fee (needed Notification Notices)	198	198	198	593
EDI, Testing each phase	990	990	990	2,970
Customer Notification, Initial Notification	746	7,101	61,005	68,852
Customer Notification, Initial Notification	746	7,101	61,005	68,852
Mass Enrollment Fee per event fee	3,099	3,099	3,099	9,297
Mass Enrollment Fee per account fee	74	705	6,057	6,836
Estimated Opt Out Fees	-	2,426	20,839	23,265
Total	\$7,624	\$23,390	\$154,964	\$185,978

Table 47 - CCA Establishment Fees Summary

Total Cost Setup Cost Calculations	Amount
CCA Establishment, 3 Phases	\$5,313
Standard Output Fee (Needed for the Notification Notices)	593
Estimated EDI Testing charge for 3 phases	2,970
Customer Notification, Initial Notification	68,852

(Continued)

Total Cost Setup Cost Calculations	Amount
Customer Notification, Initial Notification	68,852
Mass Enrollment, per event fee	9,297
Mass Enrollment Fee, per account fee	6,836
Estimated Opt Out Fees	23,265
Total	\$185,978

CCA Monthly Charges

Monthly charges include fees for SCE services including billing, meter data management, account maintenance and Opt-Out fees after the automatic enrollment process begins. Each monthly fee, including the amount of the fee, is explained in more detail below.

Monthly Account Maintenance Fee

This fee will apply on a monthly basis for each service account that is participating in the Lancaster CCA program. This fee covers the incremental costs of performing account maintenance activities for the Lancaster CCA and its customers.

Per Month, Per Service Account..... \$ 1.18

Consolidate Bill-Ready Billing Services

This fee will be applied on a monthly basis for each CCA service account that SCE bills. An additional fee may be assessed for bills that require additional pages to present information on behalf of the CCA. The bill ready charge is 3 cents more for customers receiving bills through the mail than those receiving bills through the Internet. SCE does not allow customers to receive bills both through the mail and through the Internet. For cost estimation purposes, 65% of customers are assumed to have their bills delivered by mail and 35% of customers are assumed to have their bills sent by Internet. An additional page charge was assumed to be levied every other month, or 6 times per year.

Per Month, Per Service Account

Bill By Mail: \$0.29

Bill By Internet: \$0.26

Additional Page Charge: \$0.21 per page

(Continued)

Meter Data Management, Meter Data Posting

The monthly Meter Data Posting fee covers the cost of posting meter usage data for each CCA service account to a computer server on a monthly basis for access by the Lancaster CCA.

Per Month, Per Service Account

Meter Data Posting Fee: \$0.08

Meter Data Management, Unscheduled Meter Data Reads

The Unscheduled Meter Read fee applies to CCA requests for SCE to read or validate usage of a customer’s meter on other than the regularly scheduled read date, in accordance with Special Condition 1 (see Special Condition 5 for Zone information). Unscheduled meter reads are typically done when the account owner changes a physical address due to a business relocation or residential move.

Per SCE, Unscheduled Meter Read fees vary by zip code, and the Lancaster CCA will cover 3 zip codes. In the cost estimation, costs are calculated over an average of the costs for the three zip codes. Unscheduled meter read charges also vary depending on whether a cumulative meter or an Interval Data Read Recorder meter is installed at the customer site. Since IDR meters include Advanced Meter Infrastructure (AMI) meters also known as smart meters, the percentage of IDR meters is assumed to be 99%, with just 1% of customers assumed to still be using the older cumulative meters.

Per Meter, Per Unscheduled Meter Read

Unscheduled Meter Read Fee for IDR Meter:

Zone 1	\$ 6.43
Zone 2	\$11.94
Zone 3	\$15.20
Zone 4	\$18.28
Zone 5	\$23.72

Unscheduled Meter Read Fee for Cumulative Meter:

Zone 1	\$ 5.02
Zone 2	\$10.53
Zone 3	\$13.79
Zone 4	\$16.87
Zone 5	\$22.31

(Continued)

In SCE’s Schedule CCA-SF list of Service Fees, some zip codes listed have lower meter data read rates than zip codes not listed which are assumed to be in Zone 3. One Lancaster zip code was listed, and was in zone 1. The other Lancaster zip codes were not listed and thus per SCE’s rule are assumed to be in zone 3. Note that with AMI meters, the meter read schedule might not actually be dependent on the physical location of the meter. Since the most common reason for an unscheduled meter read is a customer moving, the average residential turnover (18.7%) rate was used to estimate the number of unscheduled meter reads. One unscheduled meter read was assumed to be required for each residential move. Commercial and Industrial customer yearly turnover rate was estimated at 2% annually.

Population density/residential turnover rate by zip code:

- Zone 1: 93534, 39,341, 26.35%
- Zone 3: 93535, 72,000, 21.38%
- Zone 3: 93536, 70,918, 19.51%

Residential turnover rate references:

- <http://www.century21.com/real-estate-information/93534-lancaster-ca/LZ93534>
- <http://www.century21.com/real-estate-information/93535-lancaster-ca/LZ93535>
- <http://www.century21.com/real-estate-information/93536-lancaster-ca/LZ93536>

Community Choice Aggregation Service Request (CCASR) fees

Community Choice Aggregation Service Request (CCASR) fees are charged for various CCA-related activities including adding and removing customers from the CCA, and cancelling CCASRs. Notification/confirmation of the CCASR status to the customer and CCA is included as part of the CCASR service.

CCASR Connect/Disconnect Fee

This fee applies when a CCA submits a connect or disconnect CCASR to add or remove a customer from a CCA program.

Per CCASR

CCASR Fee \$1.06

CCASR CCA Service Termination Fee

This fee will be charged to the customer requesting to terminate CCA Service after the Follow-Up Notification Period has ended.

Per CCASR

Customer Re-Entry Fee \$1.54

(Continued)

CCASR CCA New Customer Fee

This fee will apply when a customer establishes new service in the Lancaster CCA service area as described in Section K.2 of Rule 23. This fee will apply whether a customer moves into the Lancaster CCA service area or relocates within the CCA service area. If the CCA requests that SCE issue customer notifications, a separate Customer Notification Fee would also apply.

Per CCASR

New Customer Fee \$0.73

CCASR Cancellation Fee

This fee will apply whenever a CCASR is required to halt the completion of an initial CCASR issued for the same service account.

Per CCASR

CCASR Cancellation Fee \$1.47

Miscellaneous Customer Notification Fee

This fee applies when SCE provides additional required CCA customer notifications in accordance with Rule 23 Section L.1(b) or other SCE tariffs. For cost estimation, miscellaneous customer notifications were assumed to be needed 3 times per year.

Per Event, Per Service Account

Miscellaneous Customer Notification Fee: \$0.45

Monthly Charge Summary

The monthly charges described in the prior sections are estimated for the Lancaster CCA in Table - Table .

Table 48 - CCA Parameters for Monthly Charges

Parameters	Value
Lancaster Total Population, 2010 Census	156,633
Estimated % of customer with mail bills	65.0%
Estimated % of customer with Internet bills	35.0%
Est. number additional bill pages, avg. per month	0.50
Est. number Residential connect/disconnects avg. per month	703.4
Est. number non-Residential connect/disconnects avg. per month	9.3

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(Continued)

Parameters	Value
Est. number of reqs to terminate CCA service, per month	10.0
Est. number of new service requests, monthly	86.7
Est. number of cancelled requests, per month	20.0
Est. number of unscheduled IDR meter reads, per month	801.3
Est. number of unscheduled cumulative meter reads, per month	8.1
Est. number of misc. customer notifications, per month	0.25

Table 49 - CCA Monthly Charge Cost Parameters

Cost Parameters	Amount
Monthly Maintenance Fee, each account	\$1.18
Billing charge, each Mail bill	\$0.28
Billing charge, each Internet bill	\$0.25
Bill, each additional page charge	\$0.16
Meter Data Posting charge, each account	\$0.08
Connect/disconnect charge, per account	\$1.06
Terminate CCA service fee (SCE re-entry fee)	\$1.54
New customer service fee	\$0.73
Cancelled request fee	\$1.47
Misc. Customer Notification Fee	\$0.45

Table 50 - CCA Monthly Charges Summary by Phase

Monthly Charges by Rate Category	Municipal	C&I	Residential	Totals
Monthly Act. Maintenance Fee	\$624	\$5,942	\$51,054	\$57,621
Billing charge, mailed bills	96	917	7,874	8,887

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(Continued)

Monthly Charges by Rate Category	Municipal	C&I	Residential	Totals
Billing charge, Internet bills	46	441	3,786	4,273
Billing charge additional pages	42	403	3,461	3,906
Meter Data Posting	42	403	3,461	3,906
Est. Monthly IDL Unscheduled meter read fees	116	1,100	9,448	10,663
Est. Monthly Cumulative Unscheduled meter read fees	1	10	85	96
Est. Terminate CCA service fee	0	-	-	0
Est. New customer service fee	1	7	56	63
Est. Cancelled request fee	0	3	26	29
Est. Misc. Customer Notification Fee	60	567	4,867	5,493
Total	\$1,029	\$9,791	\$84,119	\$94,939

(Continued)

Table 51 - CCA Monthly Charges Summary

Total Monthly Cost Calculations	Amount
Monthly Act. Maintenance Fee	\$57,621
Billing charge, mailed bills	8,887
Billing charge, Internet bills	4,273
Billing charge additional pages	3,906
Meter Data Posting	3,906
Est. Monthly IDL Unscheduled meter read fees	10,663
Est. Monthly Cumulative Unscheduled meter read fees	96
Est. Terminate CCA service fee	0
Est. New customer service fee	63
Est. Cancelled request fee	29
Est. Misc. Customer Notification Fee	5,493
Total	\$94,939

Community Choice Aggregation Cost Responsibility Surcharge

If Open Season enrollment is selected, the Community Choice Aggregation Cost Responsibility Surcharge (CCA-CRS) will NOT be applicable to customers for the Lancaster CCA. The CCA-CRS is applicable to Community Choice Aggregation Service (CCA Service) customers, within a CCA’s jurisdiction, who purchase electric power from that CCA. The CCA-CRS recovers costs of power purchase commitments that become stranded as a result of the CCA initiating service. Such costs include DWR bond and power purchase contracts, utility power purchase commitments and balances in power purchase accounts.

California Alternate Rates for Energy, defined herein as CARE, and medical baseline eligible CCA customers are treated in a similar manner to Direct Access customers with respect to CRS. Thus, CARE and medical baseline eligible CCA Service Customers are exempt from the DWRBC, the PCIA-URG, and the PCIA-DWR.

Pursuant to Senate Bill (SB) 423 (California Public Utilities Code Section 395.5), qualified nonprofit charitable organizations eligible to enter into an agreement for Direct Access service with an Electric

(Continued)

Service Provider, defined herein as ESP, to receive electric commodity service free of charge from the ESP will be subject to the provisions and applicable charges under this Schedule and as described in Rule 22.2.

CRS Rates

Although, we do not anticipate the Lancaster CCA will be subject to the CRS charge, for completeness CRS rates are provided for CCA's beginning service through 2012. Rates for 2013 and later may reflect changes. As can be seen from Table , costs range from a high of approximately one and a half cents per kilowatt hour (kWh) for domestic customers to a low of approximately 0.5 per kWh.

(Continued)

Table 52 - 2012 Vintage - Non-Continuous (\$/kWh)

Rate Group	BC	CTC	PCIA	Total
Domestic [1]	\$0.00493	\$0.00124	\$0.00869	\$0.01486
GS-1 [2]	\$0.00493	\$0.00105	\$0.00742	\$0.01340
TC-1 [3]	\$0.00493	\$0.00054	\$0.00383	\$0.00930
GS-2 [4]	\$0.00493	\$0.00097	\$0.00682	\$0.01272
TOU-GS [5]	\$0.00493	\$0.00087	\$0.00614	\$0.01194
TOU-8-Sec [6]	\$0.00493	\$0.00078	\$0.00546	\$0.01117
TOU-8-Pri [6]	\$0.00493	\$0.00070	\$0.00490	\$0.01053
TOU-8-Sub [6]	\$0.00493	\$0.00057	\$0.00400	\$0.00950
PA-1 [7]	\$0.00493	\$0.00089	\$0.00624	\$0.01206
PA-2 [8]	\$0.00493	\$0.00081	\$0.00571	\$0.01145
AG-TOU [9]	\$0.00493	\$0.00075	\$0.00525	\$0.01093
TOU-PA-5 [10]	\$0.00493	\$0.00059	\$0.00412	\$0.00964
St. Lighting [11]	\$0.00493	\$0.00001	\$0.00009	\$0.00503

1 Includes Schedules D, D-APS, D-APS-E, D-CARE, DE, D-FERA, DM, DMS-1, DMS-2, DMS-3, DS, TOU-D-1, TOU-D-2, TOU-D-T, and TOU-D-TEV, and TOU-EV-1.

2 Includes Schedules GS-1, GS-APS, GS-APS-E, TOU-EV-3, and TOU-GS-1.

3 Includes Schedules TC-1 and WTR.

4 Includes Schedules GS-2, GS-APS, GS-APS-E, and TOU-EV-4.

5 Includes Schedules TOU-GS-3, and TOU-GS-3-SOP.

6 Includes Schedules TOU-8, RTP-2, TOU-BIP, TOU-8-RBU, and S.

7 Includes Schedule PA-1.

8. Includes Schedule PA-2.

9 Includes Schedules TOU-PA, AP-I, PA-RTP, TOU-PA-ICE, and TOU-PA-SOP.

(Continued)

10 Includes Schedule TOU-PA-5.

11 Includes Schedules AL-2, DWL, LS-1, LS-2, LS-3, and OL-1.

Special Conditions

1. California Alternate Rates for Energy (CARE) and medical baseline eligible CCA customers are treated in a similar manner to Direct Access customers with respect to CRS. Thus, CARE and medical baseline eligible CCA Service Customers are exempt from the DWRBC, the PCIA-URG, and the PCIA-DWR.
2. Continuous DA customers who “opt-in” to CCA shall retain their continuous DA status and remain exempt from the DWRBC, the PCIA-URG, and the PCIA-DWR components contained in this Schedule.
3. The DA-CRS undercollection (DA-CRS-UC) provisions of schedule DA-CRS are applicable to Bundled Service and CCA Service customers, including Transitional Bundled Service (TBS) customers served concurrently under Schedule PC--TBS, who as past Direct Access Customers are responsible for payment of the DA-CRS-UC.

(Continued)

Reference sites:

- Schedule CCA-CRS: Community Choice Aggregation Cost Responsibility Surcharge: <https://www.sce.com/NR/sc3/tm2/pdf/ce272.pdf>
- Schedule CCA-INFO: Community Choice Aggregation-Information Fees: <https://www.sce.com/NR/sc3/tm2/pdf/CE274.pdf>
- Schedule CCA-SF: Community Choice Aggregation Service Fees: <https://www.sce.com/NR/sc3/tm2/pdf/ce277.pdf>
- Schedule CC-DSF: Customer Choice - Discretionary Service Fees: <https://www.sce.com/NR/sc3/tm2/pdf/ce150-12.pdf>
- Rule 23.2 CCA Open Season: https://www.sce.com/wps/wcm/connect/96fec959-3af9-4fe1-a770-3ba0bec398c0/Rule_23-2.pdf?MOD=AJPERES

Rate Group	Total Annual kWh	CRS Savings
Domestic	391,021,313	\$58,106
GS-1	46,284,423	6,202
TC-1	485,526	45
GS-2	125,042,546	15,905
TOU-GS	58,822,661	7,023
TOU-8-Sec	-	-
TOU-8-Pri	-	-
TOU-8-Sub	92,214,999	8,760
PA-1	531,441	64
PA-2	343,849	39
AG-TOU	11,660,576	1,275
TOU-PA-5	11,660,576	1,124
St. Lighting	33,560,709	1,688
Total	771,628,619	\$100,232

(Continued)

6.5.3 Subtask 5c: Development of Projected Revenues

Referencing Section 0 *Estimate SCE Customer Bills by Rate Class* CCA energy sales revenue would be approximately \$51.5M with current rate structures and up to \$62M with forecasted TOU rates for non-residential customers. Assuming that Lancaster CCA rates would be designed with similar retail energy sales targets, projected revenues can be conservatively estimated at \$53M for the Section 0 Projected Financial Operating Results analysis.

(Continued)

CCA Operations – Outsourcing to an Electricity Service Provider

During this initial CCA feasibility analysis, the City contacted Noble Americas Energy Solutions to explore potential outsourcing of operations to an ESP. Noble Solutions is providing services to Marin Energy Authority Board and the City was able to obtain some information on the pricing for the agreement with the Marin Clean Energy (MCE) CCA. Services provided by Noble Energy Solutions include:

- Processing (CCASRs) customer service requests, administering customer enrollments and departures from the program and maintaining a current database of customers enrolled in the program;
- Coordinating the issuance of monthly bills through the distribution utility’s billing process, including bill calculation and tracking customer payments;
- Electronic exchange of usage, billing, and payments data with the distribution utility and MCE;
- Issuance of late payment and/or “return to bundled service” notices;
- Administration of customer deposits in accordance with MCE credit policies; and
- Operating a call center to respond to MCE customer inquiries during regular business hours

Fees for providing these services include:

- \$1.75 monthly meter fee;
- Potential monthly volumetric charge of \$0.45/MWh (conservatively included in estimate); and
- Back office services approximately \$1.5 mil/year

It is expected that the City would develop a Request for Proposal to provide these services. However, the Noble Americas Energy Solutions information related to the MCE agreement provides a basis for operational expense estimation.

6.5.4 Subtask 5e: Development of Projected Financial Operating Results

The fees, costs and revenues detailed in the prior sections are summarized in the simple cash flow shown in Table - Table 56. These tables reflect the estimates 12% opt-out of potential CCA constituent customers

(Continued)

Table 53 - Estimated Cash Flow – Consultant Fees & SCE Fees

Year	Phase / Month	Consultant Fees	SCE Establishment Fees	SCE Monthly Fees
2013	Ph I	\$137,800	\$-	\$-
2013-14	Ph II	977,600	-	-
2015	Jan	100,000	7,624	991
	Feb	100,000	-	991
	Mar	100,000	-	991
	Apr	100,000	-	991
	May	100,000	-	991
	Jun	100,000	-	991
	Jul	100,000	23,390	10,424
	Aug	100,000	-	10,424
	Sep	100,000	-	10,424
	Oct	100,000	-	10,424
	Nov	100,000	-	10,424
	Dec	100,000	-	10,424
2016	Jan	100,000	154,964	91,465
	Feb	100,000	-	91,465
	Mar	100,000	-	91,465
	Apr	100,000	-	91,465
	May	100,000	-	91,465
	Jun	100,000	-	91,465
	Jul	100,000	-	91,465

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(Continued)

Year	Phase / Month	Consultant Fees	SCE Establishment Fees	SCE Monthly Fees
	Aug	100,000	-	91,465
	Sep	100,000	-	91,465
	Oct	100,000	-	91,465
	Nov	100,000	-	91,465
	Dec	100,000	-	91,465
Total		\$3,515,400	\$185,978	\$1,166,072

(Continued)

Table 54 - Estimated Cash Flow – Power Procurement & ESP Fees

Year	Phase / Month	Power Procurement	ESP Account Fee	ESP IT Systems	ESP Volumetric Charge
2015	Jan	\$73,547	\$1,048	\$125,000	\$731
	Feb	317,801	1,048	125,000	3,157
	Mar	211,694	1,048	125,000	2,103
	Apr	104,449	1,048	125,000	1,037
	May	242,929	1,048	125,000	2,413
	Jun	268,189	1,048	125,000	2,664
	Jul	1,428,613	9,754	125,000	14,190
	Aug	1,493,759	9,754	125,000	14,837
	Sep	1,566,385	9,754	125,000	15,559
	Oct	1,498,738	9,754	125,000	14,887
	Nov	1,418,666	9,754	125,000	14,091
	Dec	1,015,073	9,754	125,000	10,083
2016	Jan	2,162,403	85,459	130,000	21,479
	Feb	2,254,331	85,459	130,000	22,392
	Mar	2,145,323	85,459	130,000	21,309
	Apr	1,884,470	85,459	130,000	18,718
	May	2,219,535	85,459	130,000	22,046
	Jun	2,692,813	85,459	130,000	26,747
	Jul	3,088,508	85,459	130,000	30,678
	Aug	3,496,310	85,459	130,000	34,729
	Sep	3,585,127	85,459	130,000	35,611
	Oct	3,585,127	85,459	130,000	29,520

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(Continued)

Year	Phase / Month	Power Procurement	ESP Account Fee	ESP IT Systems	ESP Volumetric Charge
	Nov	2,435,052	85,459	130,000	24,187
	Dec	2,068,509	85,459	130,000	20,546
Total		\$41,257,350	\$1,090,313	\$3,060,000	\$403,715

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(Continued)

Table 55 - Estimated Cash Flow – Lancaster Administration, Bond & Contingency

Year	Phase/ Month	Lancaster Admin	Bond / Insurance	Subtotal	Contingency	Expense Total
2013	Ph I	\$-	\$-	\$137,800	\$13,780	\$151,580
2013-14	Ph II	-	100,000	1,077,600	107,760	1,185,360
2015	Jan	30,000	-	338,940	33,894	372,834
	Feb	30,000	-	577,997	57,800	635,797
	Mar	30,000	-	470,835	47,084	517,919
	Apr	30,000	-	362,526	36,253	398,778
	May	30,000	-	502,381	50,238	552,619
	Jun	30,000	-	527,892	52,789	580,681
	Jul	50,000	-	1,761,371	176,137	1,937,508
	Aug	50,000	-	1,803,774	180,377	1,984,151
	Sep	50,000	-	1,877,122	187,712	2,064,834
	Oct	50,000	-	1,808,802	180,880	1,989,682
	Nov	50,000	-	1,727,935	172,793	1,900,728
	Dec	50,000	-	1,320,333	132,033	1,452,366
2016	Jan	120,000	-	2,865,771	286,577	3,152,348
	Feb	120,000	-	2,803,647	280,365	3,084,012
	Mar	120,000	-	2,693,556	269,356	2,962,911
	Apr	120,000	-	2,430,112	243,011	2,673,123
	May	120,000	-	2,768,505	276,851	3,045,356
	Jun	120,000	-	3,246,485	324,648	3,571,133
	Jul	120,000	-	3,646,109	364,611	4,010,720

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(Continued)

Year	Phase/ Month	Lancaster Admin	Bond / Insurance	Subtotal	Contingency	Expense Total
	Aug	120,000	-	4,057,963	405,796	4,463,759
	Sep	120,000	-	4,147,661	414,766	4,562,427
	Oct	120,000	-	4,141,570	414,157	4,555,727
	Nov	120,000	-	2,986,163	298,616	3,284,779
	Dec	120,000	-	2,615,980	261,598	2,877,578
Total		\$1,920,000	\$100,000	\$52,698,829	\$5,269,883	\$57,968,712

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(Continued)

Table 56 - Estimated Cash Flow – Expense, Contingency, Revenue and Cash Flow

Year	Phase / Month	Expense Total	Revenue	Cash Flow	Cumulative Cash Flow
2013	Ph I	\$151,580	\$-	\$(151,580)	\$(151,580)
2013-14	Ph II	1,185,360	-	(1,185,360)	(1,336,940)
2015	Jan	372,834	86,619	(286,215)	(1,623,155)
	Feb	635,797	324,747	(311,049)	(1,934,204)
	Mar	517,919	223,035	(294,884)	(2,229,088)
	Apr	398,778	122,303	(276,475)	(2,505,563)
	May	552,619	261,077	(291,542)	(2,797,106)
	Jun	580,681	406,984	(173,698)	(2,970,803)
	Jul	1,937,508	3,371,486	1,433,979	(1,536,825)
	Aug	1,984,151	3,569,697	1,585,545	48,720
	Sep	2,064,834	3,753,552	1,688,718	1,737,438
	Oct	1,989,682	1,943,857	(45,825)	1,691,613
	Nov	1,900,728	1,782,080	(118,649)	1,572,964
	Dec	1,452,366	1,337,449	(114,918)	1,458,046
2016	Jan	3,152,348	3,500,144	347,797	1,805,843
	Feb	3,084,012	3,435,643	351,631	2,157,474
	Mar	2,962,911	3,330,109	367,198	2,524,672
	Apr	2,673,123	2,983,617	310,494	2,835,166
	May	3,045,356	3,437,761	392,405	3,227,571
	Jun	3,571,133	5,712,631	2,141,497	5,369,068
	Jul	4,010,720	6,483,246	2,472,526	7,841,594
	Aug	4,463,759	7,323,825	2,860,066	10,701,660

(Continued)

Year	Phase / Month	Expense Total	Revenue	Cash Flow	Cumulative Cash Flow
	Sep	4,562,427	7,538,031	2,975,604	13,677,264
	Oct	4,555,727	4,705,589	149,862	13,827,126
	Nov	3,284,779	3,687,471	402,692	14,229,818
	Dec	2,877,578	3,312,297	434,720	14,664,538
Total		\$57,968,712	\$72,633,250	\$14,664,538	

6.5.5 Subtask 5d: Integration of 20-Year Capital Improvement Plan (CIP)

6.6 Task 6: Development Summary Report

A presentation package has also been prepared to present summary findings of the Initial CCA Feasibility Study.

Conclusions and Next Steps

After completion of the Initial Feasibility Analysis, the margin between CCA expenses and potential revenue from retail energy sales indicates a positive cash flow. This margin is highly contingent on the volatility of energy procurement costs and generating similar retail energy sales revenue to what SCE currently reports. The intent of the Phase I was to conduct an initial CCA feasibility analysis and determine whether additional steps to explore CCA were warranted. Next steps would be facilitated by the City’s filing of a CCA Declaration¹¹ to obtain more specific information from SCE. During this initial feasibility analysis, the City indicated confidentiality and discretion in the Willdan/EnerNex exploration of a Lancaster CCA.

Phase II of this analysis was described as an optional component in the original Willdan/EnerNex proposal *Preparation of a Preliminary Feasibility Study for the City of Lancaster, California to Explore Becoming a Community Choice Aggregator and Implementation Steps*. If conducted, Phase II will conduct the next steps towards CCA exploration and potentially implementation:

¹¹ CCA Declaration Form 14-770: https://www.sce.com/wps/wcm/connect/0ca1b19b-a7f9-423a-b86c-68e4b2e970c5/081015_CCADeclaration_Form14770.pdf?MOD=AJPERES

City of Lancaster, California

Initial Feasibility Report Community Choice Aggregation

(Continued)

1. File Required Documents with CPUC, SCE and CAISO
2. Refine Load Forecasts and Generation Output & Develop Power Procurement Strategy
3. Finalize Implementation Strategy, Rates and Rollout
4. Establish Operational Processes and Systems
5. SCE Open Season
6. Phased Implementation & Enrollment
7. Operationalization

Each of these steps would be followed by a “stage gate” to solicit review and approval by the City prior to proceeding on to the next step.

1.1.1 Reference Documentation

1.1.1.1 Legal precedent for establishing CCA within the State - Deliverable 3

1. CCA National Overview: http://en.wikipedia.org/wiki/Community_Choice_Aggregation

1.1.1.1.1 State of California

1. Assembly Bill 1890, Chapter 856: http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_0101-0150/ab_117_cfa_20020625_115107_sen_comm.html
 - a. Authorizes retail competition within investor-owned utility (IOU) service areas (direct access).
 - b. Authorizes marketers, public agencies, cities, counties, and special districts to offer electric service to customers aggregated on a voluntary basis, provided that each customer in their jurisdiction agrees to participate by a positive written declaration (community aggregation).
2. Assembly Bill 1X Chapter 4: http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_0001-0050/abx1_1_bill_20010201_chaptered.pdf
 - a. Suspends the right of retail customers of IOUs to acquire electric power service from non-IOU providers until the Department of Water Resources (DWR) no longer supplies power to IOU customers.
 - b. Pursuant to AB 1X, the CPUC has suspended direct access as of September 20, 2001.
3. Assembly Bill 80 (April, 2002): http://leginfo.ca.gov/pub/01-02/bill/asm/ab_0051-0100/ab_80_cfa_20020610_173118_sen_comm.html
 - a. Establishes an exemption from the direct access suspension which would authorize two cities (Cerritos and San Marcos) in SCE's service area to act as community aggregators and provide direct access service to their residents.
4. Assembly Bill 1169 (July, 2003): ftp://leginfo.ca.gov/pub/03-04/bill/asm/ab_1151-1200/ab_1169_cfa_20030706_170501_sen_comm.html
5. Modifies the statute enacted by AB 80 to limit its application to one city (Cerritos), to permit Cerritos to offer direct access service to specified school facilities outside its jurisdiction, and to provide that the statute doesn't require Cerritos to rely solely on output of the Magnolia power plant.
6. Assembly Bill No. 117 Chapter 838: http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_0101-0150/ab_117_bill_20020924_chaptered.html
 - a. Amends Sections 218.3, 366, 394, and 394.25 and added Sections 331.1, 366.2, and 381.1 to the Public Utilities Code thereby establishing the CCA option.
 - b. PDF copy of the bill: http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_0101-0150/ab_117_bill_20020924_chaptered.html
7. Senate Bill No. 695, Chapter 337 (October 2009): http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0651-0700/sb_695_bill_20091011_chaptered.pdf

- a. Allows New Non-Residential Customers to Take Direct Access Service from an Electric Service Provider.
8. California Proposition 16 (2010)
- a. DEFEATED constitutional amendment that would have required a two-thirds vote of the electorate before a public agency could utilize public funds for electric service.
http://en.wikipedia.org/wiki/California_Proposition_16_%282010%29

1.1.1.1.2 CPUC CCA information:

1. http://www.cpuc.ca.gov/PUC/energy/Retail+Electric+Markets+and+Finance/070430_ccaggregation.htm
 - a. CPUC Proceeding R0310003 (click Documents, Rulings & Decision tabs at the top of the page to obtain additional information):
http://delaps1.cpuc.ca.gov/CPUCProceedingLookup/f?p=401:56:361552825589001::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R0310003
 - b. CPUC Phase 1 Decision Implementing Portions of AB 117 Concerning Community Choice Aggregation (December 2004):
http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/42389.htm
 - c. CPUC Phase 2 Decision on Community Choice Aggregation (December, 2005):
http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/52127.htm
 - d. Reports to the Legislature - Issues and Progress on the Implementation Of Community Choice Aggregation:
 - i. January, 2011: <http://www.cpuc.ca.gov/NR/rdonlyres/81BE8AA1-D87C-4EC4-9EB6-866F1072E119/0/CCAReporthetheLegislatureJanuary312011.pdf>
 - ii. April, 2011: <http://www.cpuc.ca.gov/NR/rdonlyres/1E92D348-82A6-4D8C-A8F8-5498E34FE574/0/CCASecondQuarterReportMay9th.pdf>
 - iii. July, 2011: <http://www.cpuc.ca.gov/NR/rdonlyres/E6DECC07-7F83-4A74-BB36-5F230A4FBCCA/0/CCAThirdQuarterReport8311.pdf>
 - iv. October, 2011: http://www.cpuc.ca.gov/NR/rdonlyres/3F8C54CF-C051-45FA-A7B1-EAAF9CD13775/0/CCAFourthQuarterLegislativeReportFINAL11311_v3.pdf

1.1.1.1.3 SCE CCA Information:

https://www.sce.com/wps/portal/home/partners/partnerships/community-choice-aggregation!/ut/p/b1/rZRBb4lwFMe_ijt4bFoKQjliZhQ1LKLLIAsppWCNFATm5rcfqIvZQZDMnvqa13_f-XfQg-uoSfpUcS0FKmk-zr2dF8hY2tiL5FNhiZB9nA2HylzjFwXVwmbKgHdGRY67zfHaDSZviF7vFgoyFYXyFlaloqQDj-gBz0my6zcwk3BuM9SWXJZ-lz20XXeRxnNS8nzokdl2DtyGaZ5cVvdiqyok5PkU4ryBNg2FYwDGsc5v3RSH5LRmle8EPEIYiKEGzMiVdfDAVAi3QSaxgmgPloAphRrLMAsMMi1xYYeGhANX38RNSS0ID4jaoHchtmZpAmHm6oS424IKxUub2gMg2GqYAOExFCBppgVGpNEQlswMXhIGUVBm6D2bEG9s-D0gdsRu8PBsyob1nb7LuG6kw-

[ba3aNP1QfMlyLoPZsQb2z4PSBb-F_VDu97ix5T8gums11lzgOoAFB6mB_TBL_Ep2-rJcfyIJwaw!!/dl4/d5/L2dBISEvZ0FBIS9nQSEh/#/accordionGrp1-1/accordionGrp1-2](https://www.sce.com/wps/wcm/connect/12fd9ce1-990a-4966-a373-6421acac44df/0901_CCAHandbookChapter1.pdf?MOD=AJPERES)

1. CCA Handbook:

- Chapter 1: Welcome, Preface, & CCA Overview:
https://www.sce.com/wps/wcm/connect/12fd9ce1-990a-4966-a373-6421acac44df/0901_CCAHandbookChapter1.pdf?MOD=AJPERES
- Chapter 2: Open Season: https://www.sce.com/wps/wcm/connect/42a21e07-74a5-457e-830b-b93806b11909/0901_CCAHandbookChapter2.pdf?MOD=AJPERES
- Chapter 3: Establishing Community Choice Aggregation Service:
https://www.sce.com/wps/wcm/connect/ce1863d2-c736-40e5-93a6-8d6441fed246/0901_CCAHandbookChapter3.pdf?MOD=AJPERES
- Chapter 4: Enrollment - Completing SCE's Forms:
https://www.sce.com/wps/wcm/connect/20b01359-c305-42f4-9a1d-f0e433a62440/0901_CCAHandbookChapter4.pdf?MOD=AJPERES
- Chapter 5: Setting Up Electronic Communications & Compliance Testing:
https://www.sce.com/wps/wcm/connect/e944d669-aa5e-42d5-800a-6110a8b2300e/0901_CCAHandbookChapter5.pdf?MOD=AJPERES
- Chapter 6: CCASRs & Customer Notifications:
https://www.sce.com/wps/wcm/connect/ad6ca6f5-f7aa-4ecf-8614-a3100b971131/0901_CCAHandbookChapter6.pdf?MOD=AJPERES
- Chapter 7: Metering Under CCA: https://www.sce.com/wps/wcm/connect/95ad62a9-2878-4914-810f-e94731292c3e/0901_CCAHandbookChapter7.pdf?MOD=AJPERES
- Chapter 8: Information Guides for Electronic Transactions:
https://www.sce.com/wps/wcm/connect/633448c7-684c-4a72-98cf-ee502a7ec5eb/0901_CCAHandbookChapter8.pdf?MOD=AJPERES
- Chapter 9: Billing Under CCA: https://www.sce.com/wps/wcm/connect/7f1385ae-2543-4746-94e8-f48e4b73fb28/0901_CCAHandbookChapter9.pdf?MOD=AJPERES
- Chapter 10: Payments and Remittances in CCA:
https://www.sce.com/wps/wcm/connect/1d60d54c-6ae4-4c36-b677-be6afeefaab9/0901_CCAHandbookChapter10.pdf?MOD=AJPERES
- Chapter 11: Terminating CCA Service – Voluntary or Involuntary:
https://www.sce.com/wps/wcm/connect/e0a9981e-59ec-442f-a027-e0256834e047/0901_CCAHandbookChapter11.pdf?MOD=AJPERES
- Chapter 12: Load Profiling & Distribution Loss Factors:
https://www.sce.com/wps/wcm/connect/aafc5b5f-e0c6-4313-8273-52d7b85c6fbc/0901_CCAHandbookChapter12.pdf?MOD=AJPERES
- Chapter 13: Usage Data Reconciliation:
https://www.sce.com/wps/wcm/connect/42c1a10c-a5e6-4220-a201-b88fb3f94dd1/0901_CCAHandbookChapter13.pdf?MOD=AJPERES

- Chapter 14: Special Conditions: https://www.sce.com/wps/wcm/connect/8dacdbd9-b277-48e4-917d-b1e1e04ba81c/0901_CCAHandbookChapter14.pdf?MOD=AJPERES
 - Chapter 15: Service Fees and Non-Energy Billing: https://www.sce.com/wps/wcm/connect/ccaa58a9-8850-4c34-978a-79efed3392d2/0901_CCAHandbookChapter15.pdf?MOD=AJPERES
 - Chapter 16: Resolving Disputes: https://www.sce.com/wps/wcm/connect/5fdffb64-95c6-4ac2-817c-c33a387bbd28/0901_CCAHandbookChapter16.pdf?MOD=AJPERES
 - Chapter 17: Post-Enrollment Opt-Out, Re-Entry, and Switching Exemptions: https://www.sce.com/wps/wcm/connect/a242f54d-bdb3-4bf1-857d-ab7c2646908e/0901_CCAHandbookChapter17.pdf?MOD=AJPERES
2. CCA Forms:
- CCA Non-Disclosure Form 14-769: https://www.sce.com/wps/wcm/connect/263fcd18-3072-4ad6-ac6d-b5baa11e5835/081015_CCANDA_Form14769.pdf?MOD=AJPERES
 - Employees of the City, Willdan and EnerNex have filed NDAs with SCE in order to review the data provided by SCE for this phase of the feasibility analysis
 - CCA Declaration Form 14-770: https://www.sce.com/wps/wcm/connect/0ca1b19b-a7f9-423a-b86c-68e4b2e970c5/081015_CCADeclaration_Form14770.pdf?MOD=AJPERES
3. Rule 23 Community Choice Aggregation: <https://www.sce.com/wps/wcm/connect/025f1cca-08b1-4614-85cf-7558d877082a/Rule23.pdf?MOD=AJPERES>
4. Rule 23.2 CCA Open Season: https://www.sce.com/wps/wcm/connect/96fec959-3af9-4fe1-a770-3ba0bec398c0/Rule_23-2.pdf?MOD=AJPERES
5. SCE Tariff Books:
- Rule 23: Community Choice Aggregation: <https://www.sce.com/NR/sc3/tm2/pdf/Rule23.pdf>
 - Rule 23.2: Community Choice Aggregation (CCA) Open Season: https://www.sce.com/NR/sc3/tm2/pdf/Rule_23-2.pdf
 - Schedule CCA-CRS: Community Choice Aggregation Cost Responsibility Surcharge: <https://www.sce.com/NR/sc3/tm2/pdf/ce272.pdf>
 - Schedule CCA-INFO: Community Choice Aggregation-Information Fees: <https://www.sce.com/NR/sc3/tm2/pdf/CE274.pdf>
 - Schedule CCA-SF: Community Choice Aggregation Service Fees: <https://www.sce.com/NR/sc3/tm2/pdf/ce277.pdf>
 - Schedule CC-DSF: Customer Choice - Discretionary Service Fees: <https://www.sce.com/NR/sc3/tm2/pdf/ce150-12.pdf>
6. Schedule CCA-INFO: Community Choice Aggregation-Information Fees: <https://www.sce.com/NR/sc3/tm2/pdf/CE274.pdf>
7. Schedule CCA-CRS Community Choice Aggregation Cost Responsibility Surcharge: <https://www.sce.com/NR/sc3/tm2/pdf/ce272.pdf>

8. Schedule CCA-SF Community Choice Aggregation Service Fees:
<https://www.sce.com/NR/sc3/tm2/pdf/ce277.pdf>
 9. Schedule CC-DSF Customer Choice - Discretionary Service Fees:
<https://www.sce.com/NR/sc3/tm2/pdf/ce150-12.pdf>
 10. SCE Community Choice Aggregation (CCA) Service Agreement:
<http://www.cpuc.ca.gov/NR/rdonlyres/3A178D97-B77E-4594-9BE8-3075E0FCDEA/0/SCECCAUtilityServiceAgreement.pdf>
- 1.1.1.1.4 Reference documentation regarding benchmarking existing CCA efforts within the State - Deliverable 4
 - 1.1.1.1.5 Currently Active CCA's
 1. Marin Energy Authority: <http://www.marinenergyauthority.org/>
 - a. Joint Powers Agreement:
http://www.marinenergyauthority.org/PDF/Final_Marin_Energy_Authority_JPA_Agreement_As_Amended_7.5.12_Rev.10.4.12.pdf
 - i. City of Belvedere
 - ii. Town of Corte Madera
 - iii. Town of Fairfax
 - iv. City of Larkspur
 - v. City of Mill Valley
 - vi. City of Novato
 - vii. City of Richmond
 - viii. Town of Ross
 - ix. Town of San Anselmo
 - x. City of San Rafael
 - xi. City of Sausalito
 - xii. Town of Tiburon
 - xiii. County of Marin
 - b. Ordinances: <http://www.marinenergyauthority.org/PDF/Ordinances.pdf>
 - c. Operating Rules & Regulations:
http://www.marinenergyauthority.org/PDF/Operating_Rules_Regulations%20As%20Amended.pdf
 - d. Marin Clean Energy Briefing Booklet (December 2010):
http://www.marinenergyauthority.org/PDF/Briefing_Booklet_trimmed.pdf
 - e. 2012 Integrated Resource Plan:
http://www.marinenergyauthority.org/PDF/2012_Integrated_Resource_Plan.pdf

- f. Renewable Portfolio Standard (August 2010):
http://www.marinenergyauthority.org/PDF/RPS_Reporting_Review_8.27.10.pdf
 - g. MCE Implementation Plan (October 2012):
http://www.marinenergyauthority.org/PDF/Implementation_Plan_w-Resolution_&_JPA_Revised_1.22.13.pdf
 - h. Certification from the California Public Utilities Commission (September 2012):
http://www.marinenergyauthority.org/PDF/MEA_Certification_Letter_10.2.12.pdf
 - i. Customer facing Marin Clean Energy: <https://marincleanenergy.info/>
2. Community Aggregation Cerritos
- a. While not a CCA, Assembly Bill 80 allowed the City of Cerritos to act as an Electricity Service Provider (ESP) which became a template for the subsequent AB 117 establishing CCA.
 - b. CPUC Decision 10-01-012 Determining The City of Cerritos' Rights Under Assembly Bill 80: http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/112848.PDF
 - c. Cerritos Magnolia Power Plant – Electric Provider:
http://www.cerritos.us/NEWS_INFO/green_cerritos/current_green_efforts/energy_efficiency.php
 - d. Cerritos Magnolia Power Project:
http://www.cerritos.us/GOVERNMENT/city_organization/departments/water_and_power/magnolia_power_project.php

1.1.1.1.6 Potential CCAs

- 1. CleanPowerSF (<http://cleanpowersf.org/>) - program to launch mid-2013
 - a. Technical & Economic Feasibility: <http://cleanpowersf.org/documents/ges/>
 - i. Tasks 1 & 2: theoretical, technical, and economic potential for renewable energy resource development in the City and County of San Francisco:
http://cleanpowersf.org/wp-content/uploads/2010/05/GES_Draft_Report_Tasks1-2_20090811.pdf
 - ii. Task 3: levelized costs of renewable energy resources located beyond the jurisdictional boundaries of the City and County of San Francisco:
http://cleanpowersf.org/wp-content/uploads/2010/05/GES_Draft_Report_Task3_20090902.pdf
 - iii. Task 4: cost of electricity associated with various portfolio options that could be utilized to serve the customer load of CleanPowerSF:
http://cleanpowersf.org/wp-content/uploads/2010/05/GES_Draft_Report_Task4_20091109.pdf
 - iv. Task 5: recommendations based on the previous reports about improving program success for CleanPowerSF: http://cleanpowersf.org/wp-content/uploads/2010/05/GES_Draft_Report_Task5_2009####.pdf
 - b. Energy Services Study: http://cleanpowersf.org/wp-content/uploads/2010/05/RWBeck_EnergyServicesStudy.pdf

- c. Program Risk Assessment: http://cleanpowersf.org/wp-content/uploads/2010/05/Navigant_RiskAssessment_July2009.pdf
- d. Implementation Plan: http://cleanpowersf.org/wp-content/uploads/2010/05/CleanPowerSF_ImplementationPlan_March2010.pdf
- e. CPUC Implementation Plan certification:
 - i. February 2010: <http://www.cpuc.ca.gov/NR/rdonlyres/574C113F-6942-4950-9AA9-30B7B66CCD7A/0/MEACertificationLetter.pdf>
 - ii. January 2012: <http://www.cpuc.ca.gov/NR/rdonlyres/8E08C961-E534-46D8-AB4A-058BA93499B0/0/MEACertificationLetter.pdf>
 - iii. October 2012: http://www.cpuc.ca.gov/NR/rdonlyres/05212C9F-3BFF-4448-B653-3264F62503F5/0/MEA_ImplementationPlan.pdf
 - iv. January 2013: http://www.cpuc.ca.gov/NR/rdonlyres/940BA5F1-3399-40F8-85A7-9240D297B0A2/0/MEA_ImplementationPlan_2013.pdf
- f. CPUC Confirmation of CCA Registration: <http://www.cpuc.ca.gov/NR/rdonlyres/F8D060DE-2A98-4C31-B1DF-BC44D9FD697E/0/MEARegistrationletter.pdf>
- g. Ordinances of the City and County of San Francisco.
 - i. No. 86-04 directs the San Francisco Public Utilities Commission (SFPU) and San Francisco Environment (SFE) to develop a Draft Implementation Plan and then a Draft Request for Proposals: <http://cleanpowersf.org/wp-content/uploads/2010/05/Ordinance86-04.pdf>
 - ii. No. 146-07 adopts the CCA governance structuring and asks San Francisco's Local Agency Formation Commission to monitor the program's implementation: <http://cleanpowersf.org/wp-content/uploads/2010/05/Ordinance146-07.pdf>
 - iii. No. 147-07 adopts a CCA Draft Implementation Plan, Program Description and Bond Revenue Plan: <http://cleanpowersf.org/wp-content/uploads/2010/05/Ordinance147-07.pdf>

1.1.1.1.7 Explored or Exploring CCA (have not filed documents with CPUC)

1. City of Victorville: <http://www.ci.victorville.ca.us/site/popup.aspx?id=2768>
2. San Diego Energy District Foundation: <http://www.sandiegoenergydistrict.org/index.html>
3. City of Davis: <http://city-council.cityofdavis.org/Media/Default/Documents/PDF/CityCouncil/CouncilMeetings/Agendas/20121023/Package/09-FY12-13-City-Energy-Assessment-Study.pdf>
4. City of Chula Vista:
 - a. Ordinance agenda statement: <http://www.ci.chula-vista.ca.us/Events/Council3.pdf>
 - b. Deal set to end power fight between Chula Vista, SDG&E: http://www.utsandiego.com/uniontrib/20041012/news_1m12sdge.html
5. City of San Jose (2011): http://www3.sanjoseca.gov/clerk/Agenda/20111004/20111004_0701.pdf

6. East Bay Municipal Utility District (EBMUD):
7. City of Berkeley: <http://www.ci.berkeley.ca.us/communitychoice/>
 - a. Base Case Feasibility Evaluation (2005):
[http://www.ci.berkeley.ca.us/uploadedFiles/Planning_and_Development/Level 3 - Energy and Sustainable Development/Base%20Case%20Feasibility%20Evaluation,%20Berkeley.pdf](http://www.ci.berkeley.ca.us/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Base%20Case%20Feasibility%20Evaluation,%20Berkeley.pdf)
 - b. City of Albany (2012):
www.albanyca.org/Modules/ShowDocument.aspx?documentid=22194

1.1.1.1.8 Suspended CCA's

1. San Joaquin Valley Power Authority – First active CCA in California with service commencing in May, 2010: <http://www.communitychoice.info/>
 - a. Memorandum of Understanding: http://www.communitychoice.info/_pdf/PA_MOU.pdf
 - b. Joint Powers Agreement: http://www.communitychoice.info/_pdf/PA_JPA.pdf
 - c. Implementation Plan (February 2009):
http://www.communitychoice.info/_pdf/Impl%20Plan%203-19-09.pdf
 - d. Implementation Plan Appendices (February 2009):
http://www.communitychoice.info/_pdf/appendices.pdf
 - e. Certification from the California Public Utilities Commission (April 2007):
http://www.communitychoice.info/_pdf/PA_IP_CPU_Certification.pdf
 - f. Resolution No. 07-06, Commitment to Local Renewable Generation Projects and to Improving Local Air Quality: http://www.communitychoice.info/_pdf/PA_resolution_07-06.pdf
 - g. Power Services Agreement between San Joaquin Valley Power Authority and Kings River Conservation District (October 2007):
http://www.communitychoice.info/_pdf/PA_PSA.pdf
 - h. Outreach Materials: <http://www.communitychoice.info/outreach/>

1.1.1.1.9 CCA Research

1. Public Interest Energy Research (PIER) Program - Community Choice Aggregation Pilot Project - http://www.energy.ca.gov/pier/project_reports/CEC-500-2008-091.html
 - a. Assisted twelve California communities in their investigation of Community Choice Aggregation (CCA) feasibility:
 - i. Berkeley:
 - ii. Beverly Hills: <http://www.beverlyhills.org/cbhfiles/storage/files/filebank/2572--GP-TBR-Chp-3-3-3-4-3-5.pdf>
 - iii. Emeryville
 - iv. Los Angeles County
 - v. Marin County

- vi. Oakland
 - vii. Pleasanton
 - viii. Richmond
 - ix. San Diego County
 - x. San Marcos
 - xi. Vallejo
 - xii. West Hollywood
- b. Independent peer review of Navigant Consulting’s Community Choice Aggregation Feasibility Studies:
[http://www.ci.berkeley.ca.us/uploadedFiles/Planning_and_Development/Level_3 -
_Energy_and_Sustainable_Development/Independent%20Peer%20Review,%20Berkeley
,%20Emeryville,%20Oakland%20and%20Marin.pdf](http://www.ci.berkeley.ca.us/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Independent%20Peer%20Review,%20Berkeley,%20Emeryville,%20Oakland%20and%20Marin.pdf)
- c. Final Report: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091.PDF>
- d. Appendix A: Roadmap for Renewable Energy Development Procurement, publication # CEC-500-2008-091-APA: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APA.PDF>
- e. Appendix B: Project Reports on California Public Utilities Commission Decisions on Community Choice Aggregation, publication # CEC-500-2008-091-APB: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APB.PDF>
- f. Appendix C: Sample Data Request Letters from Local Governments to Investor-Owned Utilities, publication # CEC-500-2008-091-APC: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APC.PDF>
- g. Appendix D: Key Assumptions Used in the Base Case Feasibility Reports, publication # CEC-500-2008-091-APD: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APD.PDF>
- h. Appendix E: Community Choice Aggregation Implementation Plan Template, publication # CEC-500-2008-091-APE: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APE.PDF>
- i. Appendix F: Community Choice Aggregation Fact Sheet, publication # CEC-500-2006-082. Published August 2006, republished April 2009: <http://www.energy.ca.gov/2006publications/CEC-500-2006-082/CEC-500-2006-082.PDF>
- j. Appendix G: Community Choice Aggregation Guidebook, publication # CEC-500-2009-003: <http://www.energy.ca.gov/2009publications/CEC-500-2009-003/CEC-500-2009-003.PDF>
- k. Appendix H: Berkeley, Emeryville, Oakland Business Plan, publication # CEC-500-2008-091-APH: <http://www.energy.ca.gov/2008publications/CEC-500-2008-091/CEC-500-2008-091-APH.PDF>

2. Local Government Commission (LGC) CCA information: <http://www.lgc.org/cca/>
 - a. CCA Fact Sheet: http://www.lgc.org/cca/docs/cca_energy_factsheet.pdf
 - b. Final report on CPUC CCA Process (December 21, 2005):
http://www.lgc.org/cca/docs/cpuc_cca_process_final_report.pdf
 - c. CCA Implementation Plan Template: <http://www.lgc.org/cca/docs/cca.zip>
3. Community Choice Aggregation In California by Katherine Faulkner (2010):
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