

PARADISE IRRIGATION DISTRICT

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"Paradise Irrigation District (PID) is dedicated to the business of producing and delivering a safe, dependable supply of quality water in an efficient, cost effective manner with service that meets or exceeds the expectation of our customers."

Please consider how this agenda item relates to our mission.

TO: Board of Directors

FROM: Ed Fortner, District Manager

DATE: September 14, 2018

RE: District Manager's Report

09/19/2018 Board of Directors Meeting

Water Rights

The District met with the Water Board staff on September 7, 2017, to discuss the District's water right applications and permit extension. We will be working with our water rights engineer and environmental engineer to restart this process.

The District is working with the Water Board staff to have our alternative compliance method approved to meet the State standards.

Paula Whealen, from Wagner and Bonsignore, attended the February 2018 Board meeting to introduce herself and give water rights 101 presentation.

The District selected De Novo Group on April 26, 2011, to prepare the EIR for the water right extension. The contract also included the performance of the environmental studies. The total contract was for \$306,430.00, and the District has paid \$204,558.74 on this contract. The majority of the environmental studies have been completed, but due to the amount of time that has passed, additional studies may be necessary. The District has also changed the project because we have decided to go to license on permit 271 instead of asking for an extension. Ed and Kevin will be traveling to Sacramento soon to discuss the water rights activity and requirements with our consultants.

North Lake Boat Launch Land Acquisition

The District purchased 3 acres of land next to boat launch one for \$58,055.26.

The District decided to terminate the grant agreement with the Division of Boating and Waterways. The PID Lake Committee met on 08/12/18 and decided to clear the parking area this Winter and also establish a turn-around near the Boat Launch. District Manager approved procuring quotes for CEQA compliance with Pete Sundall.

Process Water Recycle Project

The District hired Water Works Engineering to work with the Regional Board to get the District's NPDES permit renewed. The District had a kickoff meeting on Nov 8, 2017, with Water Works Engineering and Larry Walker Engineering. The Water Board adopted the 2-year extension of the Time Schedule Order on Dec 8, 2017, for the District's NPDES permit. We had a meeting on February 13 & March 29, 2018, with Larry Walker and Water Works to discuss the preliminary research for the mixing zone study and dilution credit. The District met with the Regional Board on April 26, 2018, to kick off the renewal of the NPDES permit. The meeting was very positive, and the Regional Board is currently reviewing our preliminary data and

communicating with the District on what additional information may be needed to complete the NPDES permit renewal. The PID Water Plant staff is working through sampling protocols related to temperature and has requested the verification monitoring deadline extension to December 31, 2018 (extension from July 31, 2018).

B Reservoir Design Project

The District has been approved for an \$800,000 SRF loan to design the B Reservoir. The District awarded the contract to Water Works Engineering during the May Board Meeting and approved the change order at the September Board meeting. The District had a workshop to approve the preliminary design report. The preliminary design was estimated to be \$11,000,000. We are working with SRF to increase our loan approval amount to cover this estimated cost. During our March 6, 2018 meeting with the county, we discussed the right-of-way issues associated with our A zone pipeline project. The county is looking into the issue to see if they can help us find the rightful owner of the Skyway. The District is going to pursue condemnation of the right-of-way and easement of the Skyway alignment for the pipeline. The District has hired Blackwater Engineering to do a preliminary search of title and to convince the county that they have a prescriptive right-of-way to the pipeline alignment. Jim Passanisi, Bill Taylor, Kevin Phillips and I met with Water works Engineering in Redding on July 24, 2018, to discuss the B Reservoir project. Larry Kram with Blackwater Engineering has done a preliminary investigation, and Butte County does not have the right of way presently. Larry has set up meetings with the County to walk them through the quit claim deed process to acquire right of way. After the County acquires right of way, PID will ask for a utility easement from the County. circulating the CEQA documents for public review per SRF loan requirements. PID Board approved project design and construction. The design is complete, CEQA is near completion. Property acquisition has progressed led by Neil Essila and assisted by Blackwater Consultants.

Spillway Investigation

The District received a letter on May 17, 2017, ordering the District to conduct an extensive evaluation of both spillways. We requested an extension of the timeline from July 15, 2017, to September 1, 2017, to submit a work plan to the Department of Safety of Dams. We met with the Division of Safety of Dams on July 6, 2017. The District submitted our work plan on both spillways on September 7, 2017. The District hired Genterra Engineering to complete the Phase one work plan. They started field work on Nov 6, 2017, and expect the work to continue through February 2018. The District cleared trees and brush below the Magalia Dam before the Nov 1 deadline. The District met with Genterra Engineering on Apr 3, 2018, to discuss the draft Phase one reports for Paradise Spillway and Magalia Spillway. The District has submitted the draft phase one report to DSOD for their review. The draft inundation report should be complete soon. PID staff and Manager met with Genterra to discuss the phase one report August 23, 2018. Magalia Reservoir Sunny Day inundation study is complete and submitted to DSOD. Paradise Lake inundation study is still outstanding.

AMR Project Update

Zenner Meter Interface Units (MIUs) replacement program began in September 2014. Older Datamatic "fireflys" had a significant failure rate, and Datamatic filed for bankruptcy. Zenner MIUs are backward compatible with the Datamatic units. 7,413 of 10,594 MIUs have been replaced to date, total cost \$853,463 including labor, equipment, and material. 3,181 MIUs remain for replacement, total cost \$298,378. The total cost of the conversion project including repeater replacement is ~\$1,197,000. There is an ongoing discussion about cellular technology upgrades and timing. AMR outstanding cost of \$43,650.00 on Board agenda for approval.

Miscellaneous

PID Manager presented to the Town of Paradise Council September 11, 2018, for Manager introduction and to discuss SB 606/AB 1668 water conservation legislation. I attended the PID Lake Committee meeting and attended the Community Relations Committee meeting. Kevin Phillips, Emily LaMoe and I held negotiation meetings with IBEW and Teamsters. I met with Neil Essila and Kevin Phillips to discuss the PID standard front-end contract documents and engineering specifications. PID staff held FEMA tabletop exercise, facilitated by Jim Passinisi on urban wildfire interface response. PID budget meeting held September 15, 2018. Erin West was hired as PID Office Manager and starts September 26, 2018. PID Manager meet and greet was held at Senior Center September 12, 2018. Discussed goat undergrowth removal with Capra. I attended PGE forum on the new policy to shut off power in high fire risk areas.

I attended a meeting on Butte County Community Choice Aggregation (information attached).

County of Butte, California

Community Choice Aggregation Initial Feasibility Study

Prepared for:
County of Butte, the Cities of Chico and Oroville, and
the Town of Paradise

Prepared by:



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July 17, 2018

Mr. Brian Ring County of Butte 25 County Center Drive, Suite 200 Oroville, California 95965

SUBJECT: Draft Final CCA Feasibility Study and Business Plan

Dear Mr. Ring:

Please find attached the Final Community Choice Aggregation Study and Business Plan (Plan) for the County of Butte and the Cities of Chico and Oroville and the Town of Paradise (Participants).

It has been a pleasure working for these Participants and we very much appreciate all the effort this working team has spent on the Plan. We look forward to receiving all stakeholder comments after which we will finalize this Plan.

Very truly yours,

Day & Solbe

Gary Saleba

President/CEO

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Executive Summary

Introduction

This Initial Feasibility and Business Plan ("Plan") evaluates the feasibility of a potential Community Choice Aggregation entity (CCA) for the County of Butte, the Cities of Chico and Oroville, and the Town of Paradise (Participants). This Plan is distinguished from a technical study in that it includes a discussion of governance and operating structure alternatives, whereas a technical study focuses purely on the logistical and financial feasibility of forming a CCA.

Summary of Findings

Based on the assumptions in this study, it is likely that a Butte County CCA will provide rate savings on participant's electric bills. These rate savings are expected to be \$5 million annually where all 4 Participants are included in the CCA. These rate savings will have an economic multiplier effect locally creating 42 additional jobs and \$1.9 million in labor income within Butte County. Rate savings for the 2 Participant CCA are estimated at \$4 million. The uncertainty analysis shows that under a range of reasonable assumptions, a Butte County CCA remains financially feasible.

In addition, the CCA governing board will have local control over power supply choice and local programs that further increase economic development such as investment in energy efficiency or economic development rates. The Participant's CCA could either form a new Joint Powers Authority (JPA) or join an existing JPA. The amount of voting power the Participants will have when joining an existing JPA will vary depending on the JPA organization structure. If forming its own JPA, the Participants will likely have the most voting power and local control. Based on the feasibility analysis and uncertainty results, it is recommended that the Participants continue to pursue a Butte County CCA. The next step would be to incorporate this study's findings into an implementation plan so that the CCA can begin operation after the first quarter of 2020.

CCA Background

CCA legislation has been passed or is being considered in several states. With the passage of California Assembly Bill 117 in 2002, local governments are allowed to form CCAs that offer an alternative electric power option to constituents currently served electric power by investor owned utilities (IOUs). CCAs in California have "opt-out" programs, meaning that customers are automatically placed into CCA service, unless they proactively choose to opt out. Under the CCA model, local governments gain control over their electric power supply and generation sources, while the incumbent IOU continues to provide transmission and distribution service. This gives CCAs the opportunity to reduce retail rates to their constituents, promote local economic development and locally determine power supply fuel mix.

There are currently 18 operating CCAs in California and several more planning to launch in the next two years plus multiple feasibility studies being conducted. The CCAs to date have offered rate discounts on the generation portion of electric utility bills, many have done so an offered a greener mix of power supply compared with the incumbent IOU.

Technical Feasibility Study

The Plan evaluates whether forming a CCA in Butte County could result in retail rate savings while promoting local control and local energy programs, holding low-income customers harmless, and increasing economic development. The feasibility analysis also evaluates other options that a future Butte County CCA may adopt as part of its mission including:

- Increasing the renewable energy content of the power mix to exceed the baseline power mix offered by PG&E. For example, the CCA could purchase long-term renewable contracts or invest in new resource development.
- Delivering power that has a greater share of greenhouse gas (GHG) free resources compared with PG&E. Currently, CCA's accomplish this through hydropower purchases.
- Deliver superior local renewable energy development and energy-efficiency programs. Strategies may include bundling low-income energy efficiency programs with other low-income services, or offering competitive incentives for local renewable resource development or community solar projects.

Once the CCA Participants' goals are refined, adopted, and prioritized, modifications to this Plan may be appropriate.

Feasibility Framework

Financial feasibility is determined by comparing forecast rates for the potential CCA with forecast rates estimated for Pacific Gas & Electric (PG&E). In order to develop forecast CCA rates, load data from PG&E was analyzed and adjusted for participation across rate classes. Using this historic data and forecasts completed by the California Energy Commission, EES Consulting, Inc. (EES) forecasts loads over the study period 2019 through 2030. The load forecast was then used to estimate power supply costs for the CCA. Administrative costs, finance costs, and non-operating costs were also estimated based on loads, customers, and recent CCA experience. Given this information, CCA rates are developed.

PG&E rates are forecast according to current and future resources planned, historic rate changes, among other variables. Retail rate revenue under CCA and under PG&E is compared to determine financial feasibility. A sound financial and operational foundation (such as the development of reserves) for the CCA must be achievable before the other desirable attributes of a CCA can be considered.

Feasibility Results

Based on the assumptions in this study, it is likely that a Butte County CCA will provide rate savings on participant's electric bills. These rate savings are expected to be \$5 million annually where all 4 Participants are included in the CCA and the CCA targets a 2% rate savings for its lowest renewable offering of the 3 different options (lowest cost/lowest renewable, moderate renewables/50%, high mix of renewables/75%) Rate savings of \$4 million (2% of the PG&E bundled rate) can be expected for a CCA with only 2 Participants (Unincorporated Butte County and the City of Chico). Exhibit ES-1 illustrates the rate savings by jurisdiction and rate class for the 4 Participant scenario.

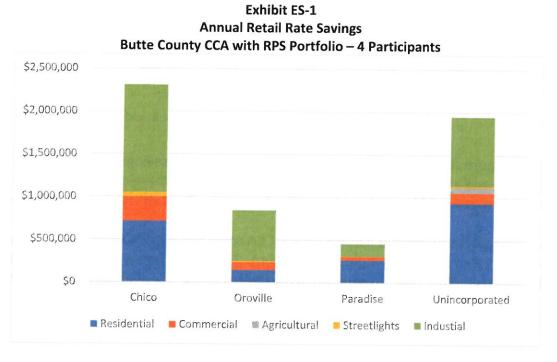


Figure ES-2 shows that PG&E rates are higher compared with the three CCA power supply scenarios modeled: Renewable Portfolio Standard (RPS) CCA Bundled assumes the CCA meet California RPS requirements (currently at 33%); 50% Renewable Bundled assumes the CCA offers power that is 50% renewable; and 75% Renewable Bundled assumes the CCA offers energy that is 75% renewable. The figure illustrates that a Butte County CCA will likely provide retail rate savings even when offering a higher percentage share of renewable energy compared with PG&E.

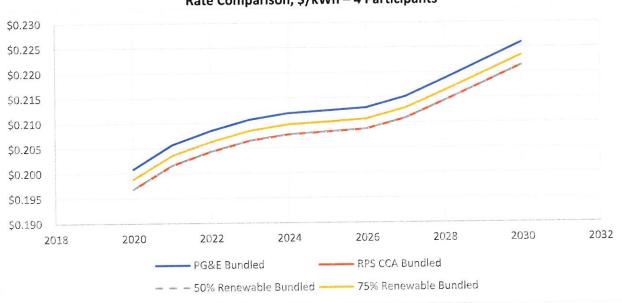
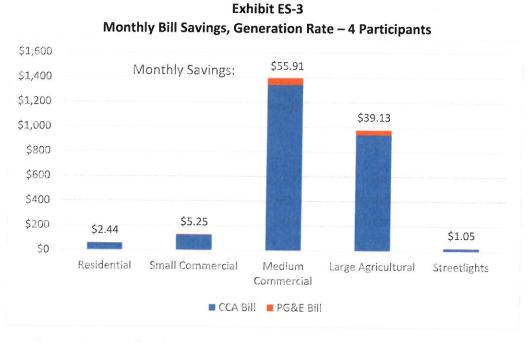


Figure ES-2
Rate Comparison, \$/kWh – 4 Participants

Note that the figure above shows CCA rates that target a 2% rate savings for the RPS and 50% renewable case and a 0.5% savings for the 75% renewable case. These rate savings targets are conservative in that the CCA may be able to offer larger rate discounts while covering expenses.

The feasibility analysis found that a Butte County CCA could result in 2% energy rate savings over PG&E bundled rates (generation plus distribution). The figure below illustrates average bill savings for each customer type. In addition to the classes below, the average industrial customer in Butte County would save 0.0034 cents per kWh, or \$1,200 per month when usage is 310,000 kWh. There will also be savings to local participating municipalities.



Total rate savings estimated for the 4 Participants of the Butte County CCA is \$5 million annually. In the 2 Participants scenario (City of Chico and Unincorporated Butte County), rate savings are estimated at \$4 million annually.

Potential Cost Savings

The potential to reduce retail rates through CCA has been achieved in other jurisdictions based on the following cost savings:

- Incumbent IOUs have signed long-term contracts for power purchases at a time when the cost of power was significantly higher than it is now. These contracts are for both conventional and renewable generation. Note that this study uses conservative assumptions for power supply costs and the forecast PG&E rate meaning that the PG&E generation rate is escalated at a lower rate than what might be expected and that CCA power supply costs are estimated higher than what can be expected.
- CCAs are small publicly-owned companies that operate with low overhead. Compared with large firms like PG&E, CCAs operate efficiently due to the necessity to provide rate discounts or greener power products at lower cost.
- CCAs do not provide returns to shareholders.

Despite CCA customers paying charges to recover IOU long-term power supply contracts, CCAs are still providing rate savings to their participants. Launched in April 2017, Apple Valley Clean Energy continues to provide rates savings over Southern California Edison (SCE). Rates approved by the Town Council in January 2018 ensures customers will receive a minimum of 3% rates savings on the energy portion of their bill for the remainder of the year. Low income (CARE) customers will receive approximately 13% savings. Additionally, customers who have rooftop

solar (net energy metered, NEM) receive more than double the credit for energy produced compared with the SCE rate schedule.

Valley Clean Energy (VCE) launched in June 2018 serving customers in Yolo County. VCE is targeting 2.5% retail rate savings on the generation portion of PG&E bills. This rate discount is for a product that has a greater share of renewable energy compared with PG&E's resource portfolio.

Lastly, in December 2017, Pioneer Community Energy initially set retail rates at a 3% savings from PG&E bundled rates (generation plus PCIA plus franchise fee). On March 1, 2018 PG&E raised its rates and Pioneer's Board unanimously voted to maintain CCA rates as they were set in the December before. Given the PG&E rate hike, Pioneer customers are saving 9% compared with PG&E customers.

Economic Development

Economic development is another priority for many of the CCAs in California. Local economic development is bolstered through retail rate savings as well as through the locally focused programs offered by the CCAs.

One such program is a special economic development rate to encourage manufacturers or other types of large commercial and industrial industries to site new or expanded operations within the CCA service territory. Additional loads would then bring jobs and tax revenue. The type of new load may also have an impact on average power supply costs. New loads that improve the system load factor will reduce power supply costs and these savings can be passed through to the new large load customer in the form of lower rates. Finally, new large loads may have the flexibility to participate in demand response programs further reducing the average cost of power supply.

Other programs include energy efficiency incentives. PG&E offers a wide range of rebates to businesses across different sectors, including agricultural, computing and data services, food services and refrigeration, HVAC, and lighting.¹ While these rebates would still be available to the CCA's customers, the CCA could offer similar rebate programs better targeted to the business sectors of interest to their service area.

Rate Savings Multiplier Impacts

Bill savings are a major source for local economic development. The IMPLAN model used in the Plan shows the economic impact resulting from \$5 million in electric bill savings (the estimated annual rate savings after the 4-participant CCA is in full operation). It is estimated that these

¹https://www.pge.com/en_US/business/save-energy-money/business-solutions-and-rebates/product-rebates/product-rebates.page

savings will create approximately 42 additional jobs in Butte County and over \$1.9 million in labor income.

Local Resource Development

In addition to increased economic activity due to electric bill savings, the Butte County CCA could invest in local renewable projects. These projects can also create job and economic growth within the County and are an option for helping the CCA meet the California renewable portfolio standard. In addition, the Board would retain land use authority where any utility scale solar energy facility would be located.

As an example of the macroeconomic activity caused by local commercial renewable resources, this Plan assumes the installation of 10 crystalline silicon, fixed mount solar systems with nameplate capacities of 1 MW each for a total capacity of 10 MW. Overall, the building of a 10 MW solar project is projected to create \$17.5 million in earnings and \$38 million in output (GDP) in the local economy along with 327 jobs during construction and 3 full-time jobs ongoing. The CCA governing board can consider installing a number of larger local solar projects such as the one described above once reserves are available to fund such projects.

Governance Options

The two most likely options for the Participants are to either form a Joint Powers Authority (JPA) and create a new CCA, or to join an existing CCA/JPA. The amount of voting power the Participants will have when joining an existing JPA will vary.

This plan assumes the Participants would form a stand-alone JPA rather than joining an existing JPA or operating as four single jurisdictions. This governance assumption does not significantly impact the feasibility analysis since operating costs and power supply costs are not expected to be significantly different between the governance structures. Rather, the primary difference in governance structure will be with regard to risk. A JPA can provide a firewall between the CCA and Participants' general funds--financially separating the CCA from other city and county departments.

Operational Structure

In contrast to the governing structures discussed above, the operating structure determines how the CCA will be staffed, managed, and operated. Operation of the CCA will involve a range of day-to-day functions including:

- Marketing and outreach
- Customer service
- Power supply contracts and scheduling
- Billing and data transfer with the IOU / California Independent System Operator (CAISO)

- Regulatory compliance with the California Public Utility Commission (CPUC), California Energy Commission (CEC), and CAISO
- Monitoring regulatory and legislative energy policy relevant to CCA competitiveness

These functions can be fulfilled by internal staff, external consultants, or a mix thereof; and, that mix can change as the CCA becomes fully operational. The choice of how to allocate these functions between internal and external resources through the pre-launch and launch phases is at the discretion of the governing body of the CCA. Existing California CCAs have opted for an organizational structure that, once the CCA is fully operational, is primarily comprised of internal staff with some continued support from consultants once fully operational.

For start-up, the Plan assumes that, under the JPA model, an operating team will be employed consisting of an Interim Executive Director, per the example of other CCAs in California, plus a few other CCA technical staff. This team would then be supported by outside consultants to assist with the management of the CCA until full operations are implemented.

For the longer term, the CCA has two options for after the initial start-up. The first option involves hiring internal staff incrementally to match workloads involved in forming the CCA, managing contracts, and initiating customer outreach/marketing during the pre-operations period (Full Staff Scenario). In option two, the CCA would hire just a few staff internally and contract out the remaining work to consultants (Minimum Staff Scenario). Throughout the rest of this Plan, it is assumed that the CCA will transition to the Full Staff Scenario. This scenario represents the highest cost scenario to maintain a conservative posture for the Plan's financial pro formas. Less costly options may be available to the CCA based on subsequent work to evaluate other staffing and operational options.

A variation on the Minimum Staff Scenario would be for the CCA's governing body to hire a third-party vendor (sometimes referred to as a "third-party turnkey" approach) or to join an existing CCA to operate the CCA with only three to four internal staff from the Participants acting as program managers. The third-party turnkey operational model is distinct in that the third party would provide financing for the CCA. Under the third-party turnkey approach, the governing body would issue a Request for Proposals (RFP) for the requested services to hire the vendor to operate the CCA. In this scenario, governance of the CCA would remain a responsibility of the CCA.

Risks and Uncertainties

The results of this Plan are subject to uncertainties. These uncertainties are evaluated in the Plan's Sensitivity and Risk Analysis section. The table below provides a summary discussion of the key uncertainties of this Plan. In depth discussion and quantification of risks are provided in the body of the Plan.

	Exhibit ES-4						
	Risk	Description	Compari Problem	son of Risks, Mitigation Strate Mitigation Strategy	gies, and Risk Severity Likelihood of Problem	Severity of Problem	Potential to "Break" Butte County CCA
1	PG&E Rates and Surcharges	PG&E's generation rates decrease or its non-bypassable charges increase	Butte County CCA rates exceed PG&E Increased customer opt-out rate	Establish Rate Stabilization Fund Invest in a balanced portfolio to remain agile in power market Emphasize the value of programs, local control, and environmental impact in marketing	High – most operating CCAs in California have undergone short periods of rate competition from the incumbent IOU.	Medium - CCAs have always been able to buffer rate impacts using financial reserves, then adjust power supply to regain rate advantage.	Low – only in the event of very poor contract management by Butte County CCA and unprecedented changes in IOU rates.
2	Regulatory Risks	Energy policy is enacted that compromises CCA competitiveness or independence	 New costs incurred Reduced authority 	 Coordination with CCA community on regulatory involvement Hire lobbyists and regulatory representatives 	Low – existing regulatory precedent makes the likelihood of state policies that severely disadvantage CCAs low.	High – a worst case scenario regulatory legislative decision limiting CCA autonomy or enforcing additional costs could hinder CCA viability.	Low – energy policy severe enough to make Butte County CCA infeasible is very unlikely.
3	Power Supply Costs	Power prices increase at crucial time for Butte County CCA	 Butte County CCA rates exceed PG&E Increased customer opt-out rate 	Long-term contracts Draw on Butte County CCA reserves to stabilize rates through price spike	Low – market prices are unlikely to spike enough to make Butte County CCA financially infeasible prior to CCA launch. From that point on, the CCA can limit its exposure through contract selection.	Medium – a poorly timed price spike combined with poor power supply contract management could require Butte County CCA to dig into reserves or delay launch.	Very low
4	PG&E RPS Share	PG&E's RPS or GHG-free power portfolio grows to match or exceed Butte County CCAs	Increased customer opt-out rate	Increase renewable power portfolio Emphasize rates and local programs in marketing	Medium – PG&E's power portfolio is dynamic and could change rapidly as a result of other CCA departures.	Low – CCA will have capability to increase renewable energy purchases to match or exceed PG&E if the event occurs. In addition, Butte County CCA will promote other benefits of its service to customers.	Very Low – CCA is highly likely to respond effectively if this occurs.
5	Availability of RPS/GHG- Free Power	Unexpectedly high market demand or loss of	Butte County CCA unable to	Shift emphasis to GHG-free or RPS resources depending on availability	Low – power procurement providers report a	Medium – if Butte County CCA were unexpectedly unable to procure enough	Very Low – negligible chance of occurring.

		Comparis	Exhibit ES-4 on of Risks, Mitigation Strate	gies, and Risk Severity		
Risk	Description supply of renewable resources	Problem provide target power products	Mitigation Strategy Secure long-term contracts Invest in local renewable resources	Likelihood of Problem plethora of RPS and GHG-free bids available on the market.	Severity of Problem RPS or GHG-free power, it could emphasize other program strengths to retain customers until new resources came online.	Potential to "Break" Butte County CCA
Financial Risks	Butte County CCA is unable to acquire desired financing or credit	 Slower or delayed program launch Unable to build generation projects 	 Adopt gradual program roll-out Establish Rate Stabilization Fund Minimize overhead costs 	Low – CCAs have become sufficiently established in California that financing is almost certainly available.	Medium – in the event Butte County CCA is limited in financing options, it can adopt a more conservative program design and gradual roll-out.	Very Low
Loads and Customer Participation	Unprecedented opt-out rate reduces competitiveness	Excess power contractsPoor margins	 Increase marketing Reduce overhead Expand to new customer markets Consider merging with existing CCA 	Low – as CCAs have become more common in California, and CCA marketing firms more experienced, opt-out rates have gone lower and lower.	Low – Butte County CCA will have numerous viable options in the event they suffer unexpectedly low participation.	Very Low

Financing Options and Risk

Existing CCAs have funded startup costs in different ways; however, the startup costs have been repaid on an average of 18 to 24 months. The CCA market is rapidly expanding with increasingly proven success. To date, there are more than 18 operational CCAs in California that have demonstrated the ability to generate positive operating results. The early financial institutes were community banks in the CCA service territory, but now a mix of regional and large national banks have shown increased levels of interest. This expanded interest should give the CCA comfort that it will have access to an adequate number of potential financial counterparties.

Most programs that have launched to date and those in development have relied on a sponsoring entity to provide support for obtaining needed funds. This support has come in varied forms which are summarized in Exhibit ES-5.

Exhibit ES-5 Forms of Support				
CCA Name	Pre-Launch Funding Requirement ¹	Funding Sources		
Marin Clean Energy	\$2- \$5 million	Startup loan from the County of Marin, individual investors, and local community bank loan.		
Sonoma Clean Power	\$4 - \$6 million	Loan from Sonoma County Water Authority as well as loans from a local community bank secured by a Sonoma County General Fund guarantee.		
CleanPowerSF	~\$5 million	Appropriations from the Hetch Hetchy reserve (SFPUC).		
Lancaster Choice Energy	~\$2 million	Loan from the City of Lancaster General Fund.		
Peninsula Clean Energy	\$10 - \$12 million	Loans from Barclays County of San Mateo		
Silicon Valley Clean Energy	\$2.7 million	Loans from County of Santa Clara and City members		
Clean Power Alliance	\$41 million	\$10 million loan from Los Angeles County and \$31 million Line of Credit from River City Bank.		
East Bay Clean Energy	\$50 million	Revolving Line of Credit from Barclays.		

¹ Source: Respective entity websites and publicly available information. These funds do not include all funds needed or cover a consistent period.

Start-up financing needs for the CCA are estimated at \$3.1 million. A review of the current options for obtaining funds for the startup costs/initial phases is detailed below:

<u>Collateral Arrangement from Butte County or City</u> – As an alternative to a direct loan a CCA Participant, the Participants could establish an escrow account to backstop a lender's exposure to the CCA. The Participants would agree to deposit funds in an interest-bearing escrow account which the lender could tap should the CCA revenues be insufficient to pay the lender directly.

<u>Revenue Bond Financing</u> – This is not a feasible option at this point given the start-up nature of the CCA and no credit rating.

<u>Direct Loan from Butte County or City</u>—The County or City could loan funds from the General Fund for all or a portion of the pre-launch through Phase 1 needs. The County or City would be secured by the CCA revenues once launched. The County or City would likely assess a risk-appropriate rate for such a loan which is likely higher than the County or City earns for funds otherwise invested. This rate is estimated to be 4.0 percent to 6.0 percent per annum.

After start-up additional funding may be obtained through alternative mechanisms including:

<u>Loan from a Financial Institution without Support</u> – Silicon Valley Clean Energy Authority (SVCEA) was able to use this option to fund ongoing working capital. After members funded a total of \$2.7 million in start-up funds, SVCEA obtained a \$20 million line of credit without collateral.

<u>Vendor Funding</u> – The CCA can pursue arrangements with its power suppliers to eliminate or reduce the need for or size of funding for start-up and operations. This could come in a number of forms such as a "lockbox" approach with a power provider. However, this approach is less transparent and the associated cost may outweigh the benefit of eliminating or reducing the need for a bank facility.

CCA Financing Plan

While there are many options available to the CCA for financing, the initial start-up funding is assumed to be provided via short-term financing. The CCA will recover the principal and interest costs associated with the start-up funding via subsequent retail rates. It is anticipated that the start-up costs will be fully recovered within the first three years of CCA operations. The repayment of start-up costs is based on the cash flow analysis given conservative revenue and expense assumptions made throughout the study. The actual repayment period might be shorter given recent CCA experience where repayment periods average 18 to 24 months.

Phase 1 and Phase 2 of the proposed CCA will require an estimated \$6.1 million in capital. Based on recent information regarding financing options for CCAs, the financial analysis assumes that the Butte County CCA will obtain a loan \$6.1 million with a term of 5 years at a rate of 5.5 percent. While the term of the loan is assumed to be 5 years, the loan is repaid early by 3 years based on the cash flow analysis.