



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

File #: LB 16-105

DATE: November 29, 2016

TO: Mayor and City Council

FROM: Director of Utilities & Environmental Services

SUBJECT

East Bay Community Energy - Introduction of Ordinance to Join Joint Powers Authority

RECOMMENDATION

That Council reviews this report and:

1. Introduces the attached ordinance to join the East Bay Community Energy Authority; and
2. Adopts the attached resolution authorizing the City Manager to execute the Joint Powers Agreement to become a member of the East Bay Community Energy Authority.

ATTACHMENTS

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|-----------------|---|
| Attachment I | Staff Report |
| Attachment II | Draft Ordinance |
| Attachment III | Draft Resolution |
| Attachment IV | EBCE JPA Agreement |
| Attachment V | ESA Community Development Memo dated June 13, 2016 |
| Attachment VI | Op-Ed Article from Pleasanton Weekly dated October 13, 2016 |
| Attachment VII | EBCE Financing Overview |
| Attachment VIII | Memo from Mark Fulmer dated October 11, 2016 |



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SUMMARY

The County of Alameda and the cities within the County have been exploring the possibility of establishing a community choice aggregation (CCA) program, also known as a community choice energy (CCE) program, since June 2014. On October 4, 2016, the Alameda County Board of Supervisors adopted an ordinance creating the East Bay Community Energy Authority, which is a joint powers authority, for the primary purpose of providing electricity with a lower carbon intensity than and rates competitive with Pacific Gas & Electric Company (PG&E). Council held a work session on October 13, 2016 to review updates to the joint powers agreement and technical study prepared by the County.

Staff is now presenting Council with an ordinance and resolution that, if adopted, would allow Hayward to become a member of the East Bay Community Energy Authority. As noted in previous reports, participation in a CCA program has the potential to be the single most significant way for Hayward to reduce its community-wide emissions related to electricity generation and help meet its long term greenhouse gas (GHG) emissions reduction goals identified in the Climate Action Plan.

BACKGROUND

There are currently five operational CCEs in California including Marin Clean Energy, Sonoma Clean Power, CleanPowerSF (San Francisco), Lancaster Choice Energy and Peninsula Clean Energy, with several more throughout the state that are currently under development. Since June 2014, Alameda County has been exploring the possibility of establishing a CCA program. On October 4, 2016, the Alameda County Board of Supervisors approved the JPA that will, upon approval of participating jurisdictions, establish a joint powers authority called East Bay Community Energy (EBCE). EBCE would aggregate electricity demand within participating Alameda County jurisdictions in order to procure electricity for its customers. PG&E would continue to provide customer billing, transmission, and distribution services. Alameda County formed a thirty-nine-member steering committee to guide the study and formation of EBCE. The committee has met monthly since June 2015. Over the last two years, Council and the Council Sustainability Committee have received several reports about CCA and the County's efforts to establish a CCA program for all of Alameda County.

Council Work Session – The most recent report to Council was on October 13, 2016. This report and all previous reports are available at <http://www.hayward-ca.gov/cce>. During the work session, the County's consultant presented the Technical Study that was prepared by the County to determine the feasibility of establishing a CCA in Alameda County. The study addresses the electric load the program would need to serve, the carbon intensity of electricity that could be provided in comparison with that of PG&E, and the rates that would be charged in comparison to PG&E rates. The Renewable Portfolio Standard (RPS), per State law, requires that electricity providers source at least 33% renewable energy by 2020 and at least 50% by 2030. The EBCE Study considered four scenarios:

1. Minimum RPS Compliance: EBCE would meet the minimum 33% RPS requirement in 2020 and the 50% RPS requirement in 2030.
2. Accelerated RPS: EBCE would provide 50% renewable energy starting in the first year. Approximately 25% would be from large hydroelectric power to further reduce GHG emissions. (While it generates very little GHG, large hydroelectric generation is not considered "renewable" for purposes of meeting the RPS because of the impact of dams on fisheries and water flows.) The remaining 25% may be from fossil fuels.
3. Ultra-Low GHG: EBCE would provide 50% renewable energy in the first year and 80% by the fifth year. The remainder may be from fossil fuels.
4. Greater Local Renewable Development Scenario: This scenario is the same as Scenario 2 except that at least 50% of the renewable energy (25% of the total) would be from local sources by 2030.

The Technical Study provided rate savings for each scenario. The Study, an addendum to the Study, and appendices, along with more information about EBCE is available at www.EBCE.org.

Regardless of the scenario ultimately chosen, customers will have the opportunity to “opt up” to a 100% renewable energy for a small increase in the rate.

During the October 13 work session, Council members asked many questions, expressed support for the program and had the following comments:

- EBCE should try to be as aggressive as possible with respect to GHG emissions and low rates.
- EBCE should give preference to local banks when seeking funding.
- Voting structure defined in the JPA is still a concern.
- EBCE should strive for the most renewable energy possible and the most local renewable energy feasible

Council Sustainability Committee – The Council Sustainability Committee has provided input on Hayward’s participation in the formation of EBCE at several meetings, the last of which was on July 11, 2016, when staff presented the technical study prepared by the County.

DISCUSSION

Findings of the Technical/Feasibility Analysis:

Oakland consulting firm, MRW & Associates, hired by Alameda County, prepared an analysis entitled “Technical Study for Community Choice Aggregation Program in Alameda County” that described in detail the potential for successful CCA program in Alameda County. Using electrical load data for the most recent two-year period, along with best professional predictions of future market conditions and energy prices, the analysis projected estimated energy costs to both EBCE and the customer base for a thirteen-year period (2017 – 2030). The Study:

- Quantifies the electric loads that an Alameda County CCA could serve, including residential and commercial customers in the unincorporated county and all cities except the City of Alameda, which has its own electric utility;
- Estimates the costs to start-up and operate the CCA;
- Considers scenarios with differing assumptions concerning the amount of carbon-free power being supplied to the CCA so as to assess the costs and GHG emissions reductions possible with the CCA;
- Includes varying levels of renewable power and an analysis of in-county renewable generation potential;
- Compares the electric rates that could be offered by the CCA to PG&E’s rates;
- Quantitatively explores the rate competitiveness to key input variables, such as the cost of natural gas;
- Explores what programs a CCA might offer with respect to administering customer-side energy efficiency programs;

- Calculates the macroeconomic impact and potential employment benefits of CCA formation in the County.

County staff provided the following summary of the Study's findings:

- Feasibility for a CCA in Alameda County is favorable; current and expected market and regulatory conditions suggest that an Alameda County CCA should be able to offer residents and businesses electric rates that are a cent or more per kilowatt-hour (6 – 7%) less than that available from PG&E under most scenarios. The sensitivity analyses suggest that these results are relatively robust; only when very high amounts of renewable energy are assumed in the CCA portfolio (such as Scenario 3), combined with other negative factors, do PG&E's rates become consistently more favorable than the CCA's rates.
- EBCE could help facilitate the in-County development of greater amounts of renewable generation. The study assumed a relatively conservative amount of local renewable generation for its analysis—about 175 Megawatts (MW) over 10 years— but other studies suggest that the potential is higher. Because the CCA would have a greater interest in developing local solar than PG&E, it is more likely that such development would occur more quickly with a CCA in the County than without it.
- The CCA can also reduce the GHG emissions associated with electricity use in Alameda County, but only under certain circumstances. Because PG&E's supply portfolio has significant carbon-free generation (large hydroelectric and nuclear generation), the CCA must contract for significant amounts of carbon-free power (such as large hydroelectric) beyond the required qualifying renewables in order to actually reduce the County's electric carbon footprint. To meet the GHG reduction goals of participating jurisdictions, EBCE will need to contract with hydroelectric or other carbon-free generators. To meet GHG reduction goals with only State-Compliant Renewable Energy (without large hydroelectric), it would be necessary to implement a plan that lies roughly between Scenario 2 and Scenario 3.
- A CCA can also offer positive economic development and employment benefits to the County. Each Scenario analyzed was found to create hundreds of jobs at the local and/or regional levels, with the proportion of local jobs depending on the degree of direct local renewable energy investment, and the total regional jobs dependent mostly on indirect multiplier effects resulting from reduced electric rates and more money available to individual consumers and businesses. In each case, the larger benefit to area jobs shown by the Study comes not from direct investment in local energy, but from reduced electric rates; residents, and more importantly businesses, can spend and reinvest their bill savings, and thus generate greater economic impacts in the local economy. If electric rates are higher than PG&E, then customers would likely opt out of the CCA and there would be no increase in area jobs.

- The scenario that offers the greatest electric rate reduction, and thus the greatest ability to generate indirect total jobs based on economic multiplier effects, is Scenario 1. It invests the least in renewables overall, and keeps those revenues in the hands of the ratepayers. Scenario 2 is close, but with more renewable investment statewide. Scenarios 3 and 4, by contrast, invest more heavily in renewables, but Scenario 3 invests statewide, while Scenario 4 invests locally; the result is that Scenario 3 generates the fewest jobs locally (although it maximizes renewable energy and GHG reduction), but Scenario 4 generates the most local jobs by a significant margin. Scenarios 3 and 4, however, minimize jobs out of the County and regionally through economic multiplier effects because customer savings are not emphasized in these scenarios.
- The consultant did identify a number of risks to consider, from unfavorable regulatory changes to financial and market risk. The CCA model has successfully operated in various jurisdictions for more than six years, and several new programs have recently launched. Many of the early-phase risks, generally associated with uncertainties of how CCAs would operate in California, (e.g., concerns about financial risk to member jurisdictions) have proven to be mitigable through the work and experience of the existing CCAs. Given the years of operational experience of municipal utilities, CCAs and other load-serving entities, there is no shortage of expertise to help mitigate procurement and market risks. Finally, MRW did conduct multiple sensitivity analyses of the key assumptions that went into the conclusions about the CCA's price competitiveness. MRW modeled, for example, what would happen to CCA electricity rates if renewable energy prices and utility exit fees suddenly rose and if PG&E prices declined. In seventeen of the eighteen cases examined (excluding the "stress scenario"), the CCA program was able to maintain lower rates than PG&E. (Even in the one case where it was negative—low PG&E rates plus high renewable content, the CCA rate was less than \$0.001/kWh more than PG&E.) The model indicated it would take a very unlikely combination of variables (the "stress scenario") for CCA rates to consistently rise higher than PG&E.
- The Technical Study performed an analysis to determine how many jurisdictions in Alameda County would need to participate in order to make EBCE financially viable. The analysis assumed the same fixed costs, including start-up costs, as would be involved if all cities participate. It also assumed the same basic criteria: (a) Pay off complete start-up costs over five years; (b) 120 days of cash on hand (part of start-up); (c) reserve fund set at 15% of the CCA's annual revenue; and (d) must meet PG&E's rates. The analysis demonstrated that the overall total load of all the possible participants is about 7,000,000 MWh per year (with assumed 85% participation rate per City), and then calculated 450,000 MWh per year as the approximate minimum load for which CCA rates would be no higher than PG&E rates. 450,000 MWh per year is approximately 6.5% of the total possible County-wide load. Under this analysis, this equates to the load of about one medium sized city (such as San Leandro or Pleasanton). The County could theoretically operate a CCA on its own, although the addition of at least one City would provide a solid level of financial comfort. If the CCA

were to begin below the minimum size, it would have to either not fully fund the reserve fund, or charge higher rates than PG&E.

In conclusion, a CCA in Alameda County could successfully start-up at about 6.5 – 7% of the total load, and be comfortably viable with JPA signatories representing about 10-15% of all customer load, or about 1,000,000 MWh per year.

A significant risk factor considered in the Study, but not addressed in the County’s summary above was the closure of the Diablo Canyon nuclear power plant. On June 21, 2016, PG&E confirmed that Diablo Canyon will close by 2025. If PG&E did pursue relicensing of Diablo Canyon, the necessary improvements to the facility would be very expensive and would have put EBCE at a competitive advantage in terms of rates. On August 11, 2016, PG&E announced a proposal to increase its investment in energy efficiency, renewables and storage beyond current state mandates to replace the electricity that has been generated by Diablo Canyon. PG&E states that Diablo Canyon will be replaced with GHG-free energy sources. While the state RPS will require 50% renewables by 2030, PG&E intends to achieve 55% by 2031. This means that EBCE will have a greater challenge competing with PG&E in terms of renewable content and meeting the RPS. However, EBCE may be a more attractive option for customers in that it will be governed by local elected officials and has the potential to generate in-County jobs and additional economic activity. Also, it is possible that EBCE may offer more attractive net metering tariffs for customers with solar photovoltaic systems.

The draft and final Technical/Feasibility Study was presented and considered on multiple occasions by the CCA Steering Committee to advise and participate in the County’s initiative. The Committee members and members of the public submitted, both in person and in writing, comments and questions to which the consultant responded, both in the body of the Study and in a memorandum prepared to supplement the final document. At its meeting on July 6, 2016, the Steering Committee determined by consensus to accept the Technical Study and to recommend its advancement to the County Board of Supervisors. On October 4, 2016, the Alameda County Board of Supervisors voted unanimously to accept the findings of the Study.

Agreement to Participate in a Joint Powers Authority / Agency (JPA):

A proposed agreement entitled “East Bay Community Energy Authority - Joint Powers Agreement” was prepared by the Office of the County Counsel and has been reviewed by City Attorneys and the membership of the Steering Committee. The draft is based on similar JPA Agreements for CCA programs in the Bay Area, and it creates a legal and financial separation of the assets and liabilities of the JPA and its member agencies.

The Draft JPA Agreement includes a set of operating principles for the participating members and the roles/responsibilities of each member. The following is a summary of the key provisions in the Agreement:

- a. **Separate Legal Entity.** The JPA Agreement establishes the East Bay Community Energy Authority as a separate legal entity; the County and the member cities

- assume no obligations (except in narrow circumstances provided for in the JPA Agreement) for the debts and liabilities of the Authority.
- b. **Board of Directors.** The Board of Directors of the Authority shall be made up of a representative from each member agency and an alternate director from each member agency, both of whom must be members of the Board of Supervisors or respective city councils.
 - c. **Community Advisory Committee.** The JPA shall establish a community advisory committee consisting of nine members to advise the JPA Board on matters relating to the operation of the Authority. The chairperson of the advisory committee shall be a non-voting member of the Board of Directors, and the vice-chairperson of the advisory committee shall be a non-voting alternate on the Board of Directors.
 - d. **Voting.** The Authority Board of Directors can act by a majority of directors voting in favor of an item. This is defined as a “percentage vote”. If, immediately after an affirmative percentage vote, three (3) or more Directors so request, an Authority action must also be approved by a “voting shares vote,” where each Director’s vote represents that share of the JPA’s overall electrical load represented by the member entity. (For example, if the unincorporated County’s share of the overall load is 9%, the County’s vote would be 9% towards a needed 50.1% majority.). In two circumstances super majority votes are required. A super majority vote is defined as a two-thirds vote for an amendment to the Agreement and a three-quarters vote to amend the voting provisions of the Agreement. Such votes would initially be percentage votes, but could also be subject to a voting shares vote if called for by three or more Directors.
 - e. **Withdrawal.** The JPA agreement provides a process for member entities to withdraw and provides that, in the event of a complete withdrawal of both municipal and all constituent accounts, the member agencies will reimburse the JPA for any stranded costs incurred as a result of serving the withdrawing agency and all of its community’s customers. If a large percentage of a member agency’s customers opt out of the program, but the agency remains a member of the JPA, then the member agency would not be responsible for stranded costs.

Activities and Consulting Services to Support Launch of EBCE

Alameda County is currently undertaking activities to form a Joint Powers Authority Board and create EBCE. To seat a JPA Board and to be able to bring that Board substantive CCA matters on which to act as quickly as possible, County Staff will undertake a number of activities and retain additional consulting expertise in the areas of energy analytics and procurement, marketing, and data management during the latter half of 2016 and early 2017. Following is a comprehensive but not exhaustive list of activities and consulting services that will be procured by the County:

Category 1: Technical, Energy Procurement and Data Management Services – These services include but are not limited to:

- 1) Answer energy market and utility-related questions and serve as an expert resource to city staff and elected City officials as they digest the analysis in the Technical Study and contemplate joining the JPA.
- 2) Finalize desired power supply mix and draft RFP for wholesale energy procurement and CAISO scheduling services
- 3) Recommend customer phasing schedule based on JPA organizational capacity and program economics
- 4) Refine operating budget based on final list of JPA members, number of potential accounts, and load requirements
- 5) Prepare EBCE's Implementation Plan for certification by the CA Public Utilities Commission
- 6) Assist as needed with program financing and size of credit facility based on customer enrollment schedule and projected operating revenues
- 7) Support power supply negotiations and development of power contracts
- 8) Prepare tariff schedule and rate recommendations for two power supply options (e.g. default product at 50% renewable and voluntary product at 100% renewable)
- 9) Design tariffs for ancillary programs such as net energy metering, community solar and/or local feed in tariff
- 10) Address PG&E, CA Public Utility Commission and CA Independent System Operator agreements and registrations including: CAISO paperwork and deposit, PG&E service agreement and security deposit, Bond posting, and required regulatory compliance reporting and customer noticing
- 11) Provide customer data management and customer relationship management services
- 12) Develop and operate customer call center
- 13) Develop integrated resource plan and complete related regulatory reporting

Category 2: Community Outreach, Marketing and Customer Notification: Activities under this contract will include but are not limited to:

- 1) Brand refinements and development of sub-brands and logos for different product offerings
- 2) Develop County-wide, multi-lingual and multi-cultural advertising campaign to raise public awareness of EBCE and its offerings; this will include both paid and earned, print and digital media
- 3) Create multi-functional, multi-lingual website that includes a rate calculator and ability to opt-out of the program
- 4) Develop/update program collateral including FAQs, brochures and presentations
- 5) Develop short informational video for website, social media and use at community meetings
- 6) Handle press outreach - schedule editorial board meetings, draft press releases, op-eds and news articles
- 7) Establish a social media presence on Facebook, Twitter, Next Door, et al
- 8) Conduct stakeholder outreach and participate in community meetings and events

- 9) Work with member cities to support their local outreach efforts including local presentations, newsletter articles, event tabling, etc.
- 10) Meet with key energy/commercial accounts
- 11) Continue regular e-newsletters and info blasts to expanded list-serve
- 12) Participate in call center scripting
- 13) Design content and coordinate mailing of four customer enrollment notifications, timed to align with enrollment schedule

In addition to these key functions, County staff will continue to work with its existing consulting team from the Sequoia Foundation in the areas of program design, project management, and JPA formation and financing. Staff will also work with the JPA Board to identify a Chief Executive Officer and appropriate legal support (general counsel, et al) as the Agency moves into formation and initial staffing. It is anticipated that County staff will remain involved through Phases II and III (i.e., through program launch) and, if needed, for a brief transition period until the new Agency is operational and staffed independently. In conjunction with a committee of city attorney representatives, staff and the Office of the County counsel would select an interim JPA legal counsel this fall who will be available to represent the JPA upon formation.

Other Cities in Alameda County

All cities in Alameda County are currently considering joining EBCE with the exception of the City of Alameda, which has its own electric utility. The other twelve cities are in various stages of considering whether to join or actually joining EBCE. At the time of the writing of this report, the cities of Berkeley and Emeryville had completed first readings of the ordinance and voted to approve the ordinance. The other known city council meeting dates are provided below.

| Name of City | County/Consultants Presentation Date | 1 st Reading of Resolution & Ordinance | 2 nd Reading of Resolution & Ordinance | Status as of November 18, 2016 |
|--------------|--------------------------------------|---|---|----------------------------------|
| Albany | 11/21/16 | 11/7/16 | | Approved 1 st Reading |
| Berkeley | 11/1/16 | 11/1/16 | 11/15/16 | Approved 1 st Reading |
| Emeryville | 10/18/16 | 11/1/16 | 11/15/16 | Approved 1 st Reading |
| Piedmont | 10/17/16 | 11/7/16 | 11/21/16 | Approved 1 st Reading |
| Oakland | 11/1/16 | 11/29/16 | 12/13/16 | |
| San Leandro | 10/17/16 | 11/21/16 | 12/5/16 | |
| Hayward | 10/13/16 | 11/29/16 | 12/6/16 | |
| Union City | 10/25/16 | 11/22/16 | | |
| Newark | 10/27/16 | 11/10/16 | | Not Approved |
| Fremont | 10/11/16 | 11/8/16 | 11/15/16 | Approved 2 nd Reading |
| Dublin | 11/1/16 | 11/15/16 | 12/6/16 | Approved 1 st Reading |
| Pleasanton | 10/4/16 | TBD | TBD | |
| Livermore | 10/10/16 | 11/28/16 | TBD | |

The City of Newark declined to act through lack of a second on a motion and has not set a date to reconsider the item. Newark's staff report highlights the fact that, "Newark's influence in the operation of this Authority will be minimal, considering Newark's weighted vote would be 3.2% (assuming all other public agencies join)." The report also mentions concerns about the tight timeframe to draft and adopt a business plan and that because enrollment is automatic, "residents and businesses may not realize that their energy supplier has changed."

The City of Pleasanton has not advised the County of a date for council action. The City of Pleasanton hired a consultant, ESA Community Development, to evaluate the County's Technical Study. ESA cautioned that the Technical Study does not adequately address several risks related to EBCE's competitiveness with PG&E. Specifically, ESA found that:

- it is possible that EBCE might need to pay more for new renewable energy sources than anticipated;
- the Power Charge Indifference Assessment may be underestimated;
- risks and volatility impacts of hydro resources are not fully analyzed; and
- opt out rates may be higher than anticipated.

ESA's memo is Attachment V to this report. Attachment VI is an opinion piece that appeared in the Pleasanton Weekly after Pleasanton's October 4 council meeting.

In response to the ESA memo, MRW, the authors of the Technical Study, prepared a memo dated October 11, 2016 (Attachment VIII). While acknowledging some aspects of the ESA's analysis and comments, MRW asserts that the risks associated with rates and competitiveness with PG&E were adequately addressed in the Technical Study. The memo also notes that a detailed bill analysis was not part of the scope of work and was not necessary to determine the feasibility of EBCE. The response memo further notes that Marin Clean Energy did not experience significant opt-outs during periods when rates were higher than PG&E's.

ECONOMIC IMPACT

The County's Technical Study concludes that most consumers in Alameda County are likely to experience bill savings ranging from 3 to 7%. The County's consultant asserts that EBCE could remain competitive with PG&E under a variety of scenarios. Furthermore, the consultant has stated that if all the negative "sensitivity cases" were to occur at one time, then EBCE would not be competitive with PG&E but that if this were to happen, it would be for a short time and that EBCE would still be viable. It should be pointed out that while rigorous, the Technical Study's rate projections are, in the end, only projections. Many factors can affect these projections including how PG&E will respond to creation of more CCAs and threats of loss of energy procurement market share. If the consultant's projections do not come to fruition and rates are not competitive with PG&E for an extended period of time, some consumers would likely opt out of EBCE and the JPA which would have an unfavorable impact on economies of scale and EBCE's financials and rates.

As described in the Technical Study, construction of local generation facilities within Alameda County would have very little impact on the County's overall economic activity. The economic

model shows that a much larger impact on the local economy would be caused by the bill savings experienced by individual customers. The report notes that when a household has a lower utility bill, there may be increased spending in other sectors of the local economy. Depending on the scenario selected, projected job creation could range from 731 to 1,322 new jobs. According to the California Economic Development Department, as of April 2016, there were 790,800 jobs in Alameda County. The job creation from EBCE could amount to a 0.09% to 0.17% increase, depending on the scenario implemented. As noted earlier in this report, if electric rates are higher than PG&E's then customers would likely opt out of EBCE and job creation would be reduced.

FISCAL IMPACT

As noted in previous reports, the County is fronting EBCE up to \$3.7 million to cover the costs of the feasibility analysis, planning, and various steps involved in the formation of the program. The County will be reimbursed for these costs within the first three years of the program's launch. Staff anticipates the fiscal impact to Hayward, as a result of joining EBCE, will be in the form of additional staff time. Near term staff impacts may be significant as EBCE and its Board will have many decisions to make and substantial public outreach to do prior to and soon after the program launches in the fall of 2017. Longer term staff impacts will depend on the degree to which the Council would want City staff to participate in EBCE activities and the support requested by Hayward's representative on the EBCE Board. The staff impacts of individual cities have not been considered by the County.

In addition to staff impact, the EBCE program may also cause a reduction in revenue from the City's Utility User Tax (UUT). As homeowners and businesses opt to take advantage of more favorable conditions and install solar photovoltaic, their energy bills would go down, and they will pay less UUT. Also, new energy sources are procured for the East Bay as well as for Peninsula Clean Energy, PG&E's demand for electricity from Russell City Energy Center could decline, which would result in a decrease in natural gas use and a corresponding drop in UUT revenue.

One of the first tasks of the EBCE Board of Directors will be to decide on financing for the early stages of the program when electricity must be purchased before revenues begin to be received. As described in the attached memo (see Attachment VII) the necessary early financing could be in the form of a bridge loan or a line of credit. The amount of pre-revenue credit needed to support the program may require a credit guaranty for approximately the first year. Other CCE programs have had member cities offer letters of credit and EBCE could do the same. It is possible that EBCE may request its member cities to provide letters of credit. If the County does request cities to provide a letter of credit, their memo currently states that this would be a request, not a requirement, of EBCE member cities. If a letter of credit is requested, staff will bring the matter before Council for their consideration.

SUSTAINABILITY FEATURES

The EBCE program is directly in line with General Plan policy NR 4.8, which states, "The City shall assess and, if appropriate, pursue participation in community choice aggregation, or

other similar programs. The City shall seek partnerships with other jurisdictions to minimize start up and administration costs.”

In addition, the program, if successful, may have the following sustainability features or benefits:

Energy: Electricity/natural gas/other fossil fuels.

A primary goal of the EBCE program would be to provide electricity from clean and renewable sources that reduces our reliance on fossil fuels. However, it remains to be clearly determined how much impact the EBCE would have over PG&E.

Air: Air emissions of pollutants.

EBCE would minimize pollutants and has the potential to reduce GHG emissions, helping Hayward to meet its Climate Action goals. However, it remains to be clearly determined how much impact the EBCE would have over PG&E.

ENVIRONMENTAL REVIEW

Staff has determined that this process is statutorily exempt from analysis under the California Environmental Quality Act (CEQA) for the reason that it is not a project. CEQA Guidelines, Section 15378(b)(5), states that a project does not include "Organization or administrative activities of governments that will not result in direct or indirect physical changes in the environment." Forming or joining a CCA presents no foreseeable significant adverse impact to the environment over the existing condition because state regulations such as the Renewable Portfolio Standard (RPS) and Resource Adequacy (RA) requirements apply equally to CCAs as they do to Private Utilities.

PUBLIC CONTACT

As noted above, there have been many public meetings of the County Steering Committee, the City Council Sustainability Committee and the City Council on this topic. The County is planning to launch a robust public education and outreach campaign prior to launch of the program.

In the last few weeks, staff has informed the community of this public hearing, and the City's possible participation in EBCE, via the following channels:

- Email newsletter
- Hayward Chamber of Commerce
- News item on City's homepage
- Nextdoor.com
- Twitter
- Facebook

NEXT STEPS

The second reading of the ordinance is scheduled for December 6, 2016. The County's schedule anticipates the Board of the JPA will meet for the first time in January 2017.

Prepared by: Erik Pearson, Environmental Services Manager

Recommended by: Alex Ameri, Director of Utilities and Environmental Services

Approved by:

Kelly McAdoo, City Manager

ORDINANCE NO. 16-__

AN UNCODIFIED ORDINANCE OF THE CITY COUNCIL OF THE CITY OF HAYWARD
AUTHORIZING PARTICIPATION IN ALAMEDA COUNTY'S COMMUNITY CHOICE
AGGREGATION PROGRAMSECTION I.

WHEREAS, the County of Alameda ("County") has been actively investigating options to provide electricity supply services to constituents within the County with the intent of achieving greater local involvement over the provision of electricity supply services, competitive electric rates, the development of local renewable energy projects, reduced greenhouse gas emissions, and the wider implementation of energy conservation and efficiency projects and programs.

WHEREAS, Assembly Bill 117, codified as Public Utilities Code Section 366.2 (the "Act"), authorizes any California city or county whose governing body so elects, to combine the electricity load of its residents and businesses in a community wide electricity aggregation program known as Community Choice Aggregation ("CCA").

WHEREAS, the Act allows a CCA program to be carried out under a joint powers agreement entered into by entities that each have capacity to implement a CCA program individually. The joint power agreement structure reduces the risks of implementing a CCA program by immunizing the financial assets of participants. To this end, since 2014, the County has been evaluating a potential CCA program for the County and the cities within Alameda County.

WHEREAS, the County Board of Supervisors voted unanimously in June of 2014 to allocate funding to explore the creation of a CCA Program and directed County staff to undertake the steps necessary to evaluate its feasibility. To assist in the evaluation of the CCA program within Alameda County, the County established a Steering Committee, in 2015, that has met monthly, advising the Board of Supervisors on the possibility of creating a CCA Program.

WHEREAS, the Technical Feasibility Study completed in June of 2016 shows that implementing a Community Choice Aggregation program would likely provide multiple benefits to the citizens of Alameda County, including the following:

1. Providing customers a choice of power providers;
2. Increasing local control over energy rates and other energy-related matters;
3. Providing electric rates that are competitive with those provided by the incumbent utility;
4. Reducing greenhouse gas emissions arising from electricity use;
5. Increasing local and regional renewable generation capacity;

6. Increasing energy conservation and efficiency projects and programs;
7. Increasing regional energy self-sufficiency; and
8. Encouraging local economic and employment benefits through energy conservation and efficiency projects.

WHEREAS, representatives from the County and Alameda County cities have developed the East Bay Community Energy Authority Joint Powers Agreement (“Joint Powers Agreement”) (attached hereto as Exhibit A). The Joint Powers Agreement creates the East Bay Community Energy Authority (“Authority”), which will govern and operate the CCA program. The County and the Alameda County cities that elect to participate in the CCA Program shall do so by approving the execution of the Joint Powers Agreement and adopting an ordinance electing to implement a CCA Program, as required by Public Utilities Code Section 366.2(c)(12).

WHEREAS, the Authority will enter into agreements with electric power suppliers and other service providers and, based upon those agreements, the Authority plans to provide electrical power to residents and businesses at rates that are competitive with those of the incumbent utility. Upon the California Public Utilities Commission approving the implementation plan prepared by the Authority, the Authority can provide service to customers within its member jurisdictions. Under Public Utilities Code Section 366.2, customers have the right to opt-out of a CCA program and continue to receive service from the incumbent utility. Customers who wish to continue to receive service from the incumbent utility will be able to do so at any time.

SECTION II.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF HAYWARD DOES ORDAIN AS FOLLOWS:

Based upon all of the above, the City Council of the City of Hayward hereby elects to participate in the Community Choice Aggregation program called the East Bay Community Energy Authority.

SECTION III.

EFFECTIVE DATE. In accordance with the provisions of Section 620 of the City Charter, this ordinance shall become effective 30 days from and after the date of its adoption.

INTRODUCED at a regular meeting of the City Council of the City of Hayward, held the ____ day of ____, 2016, by Council Member _____.

ADOPTED at a regular meeting of the City Council of the City of Hayward, held the ____ day of ____, 2016, by the following votes of members of said City Council.

AYES: COUNCIL MEMBERS:

MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

APPROVED: _____
Mayor of the City of Hayward

DATE: _____

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward

HAYWARD CITY COUNCIL

RESOLUTION NO. 16-___

Introduced by Council Member

RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE THE EAST BAY
COMMUNITY ENERGY JOINT EXERCISE OF POWERS AGREEMENT

WHEREAS, the County of Alameda adopted Ordinance No. on October 4, 2016, creating the East Bay Community Energy (EBCE) program; and

WHEREAS, the Alameda County Board of Supervisors has examined and identified Community Choice Aggregation as a key strategy to meet local clean energy goals and projected greenhouse gas (GHG) reduction targets; and,

WHEREAS, Community Choice Aggregation (CCA) is a mechanism by which local governments assume responsibility for providing electrical power for residential and commercial customers in their jurisdiction in partnership with local commercial energy purveyors and owners of transmission facilities, which in the case of Alameda County is Pacific Gas & Electric Co.; and,

WHEREAS, the City of Hayward General Plan includes policy NR-2.4 (Community Greenhouse Gas Reduction), which states, “The City shall work with the community to reduce community-based GHG emissions by 20% below 2005 baseline levels by 2020, and strive to reduce community emissions by 61.7%and 82.5%by 2040 and 2050, respectively.”; and

WHEREAS, the City of Hayward General Plan includes policy NR-4.8 (Community Choice Aggregation), which states, “The City shall assess and, if appropriate, pursue participation in community choice aggregation, or other similar programs. The City shall seek partnerships with other jurisdictions to minimize start up and administration costs.”; and

WHEREAS in 2015 Alameda County engaged MRW & Associates to prepare a Technical / Feasibility Study (Technical Study for Community Choice Aggregation Program in Alameda County, Draft (MRW & Associates, July 2016); and,

WHEREAS the Technical Study provides information about CCA Program feasibility, including data on energy load for the County and its Cities, projections of energy cost and availability, projections of customer costs, and opportunities for meeting State requirements for Renewable Portfolio Standards (RPS) and GHG Reductions; and the Technical Study also explores the prospects for economic and employment growth through program investments in renewable energy projects and energy efficiency programs; and

WHEREAS the Technical Study finds that total electrical load for the eligible portion of the County (unincorporated area plus all cities except Alameda) is approximately 8,000 gigawatt-hours (GWh) per year, with approximately 25% of that load from the City of Oakland alone, and with the Cities of Oakland, Hayward and Fremont accounting for approximately half of the total load. The Commercial and Residential sectors combined account for about 75% of the total load, with the Industrial and Public Sectors making up the remainder; and

WHEREAS four energy supply scenarios were considered: 1) Minimum Renewable Portfolio Standard (RPS) Compliance: The CCA meets the state-mandated 33% RPS requirement in 2020 and the 50% RPS requirement in 2030; 2) More Aggressive: The CCA's supply portfolio is set at a constant 50% RPS from the first year onward, plus additional amounts of non-RPS compliant large hydro power to reduce Greenhouse gas (GHG) emissions; 3) Ultra-Low GHG: The CCA's supply portfolio is set at 50% RPS in the first year and increases to 80% RPS by the fifth year; and 4) Aggressive Local Renewable Buildout, in which funds for renewable energy would be strongly directed toward local projects to achieve 50% renewable sources in-County by 2030; and

WHEREAS each of these four scenarios was favorable toward reducing energy costs for consumers compared to the incumbent utility (PG&E), with the estimated electric bill reductions (about 6.5% reduction, varying depending upon year of calculation) coming from Scenarios 1, 2 and 4 but with a smaller reduction possible (about 3%) for Scenario 3; and

WHEREAS an economic and employment analysis was conducted which showed that numerous jobs would be both created and supported at both the local and statewide levels, with varying degrees of job creation and distribution depending upon the energy supply scenario chosen for analysis; and that these jobs numbers ranged as high as 2,282 jobs created in Alameda County by 2023, with the average annual earnings for the average job projected at \$102,120; and

WHEREAS the Technical Study performed a sensitivity analysis, and identified several potential conditions that could result in relative increases in cost of CCA service compared to the incumbent utility (PG&E); that these included relicensing of Diablo Canyon Nuclear Facility by PG&E; increased renewable energy costs; increased PG&E exit fees; high natural gas prices; lower PG&E costs; and a combination of all of these; and the analysis suggests that the CCA results are relatively robust against these conditions; and

WHEREAS taken comprehensively, the Technical Study suggests that an Alameda County CCA would be feasible, could operate economically, could provide ratepayers reductions on their electric bills, and could both increase renewable energy and reduce greenhouse gas emissions if the right balance is achieved by a JPA; and

WHEREAS the findings of the Technical Study were accepted by the Alameda County Board of Supervisors at its meeting on October 4, 2016; and

WHEREAS the draft Joint Powers Agreement states that EBCE will seek to:

- a) Provide electricity rates that are lower or competitive with those offered by PG&E for similar products;
- b) Offer differentiated energy options (e.g. 33% or 50% qualified renewable) for default service, and a 100% renewable content option in which customers may “opt-up” and voluntarily participate;
- c) Develop an electric supply portfolio with a lower greenhouse gas (GHG) intensity than PG&E, and one that supports the achievement of the parties’ greenhouse gas reduction goals and the comparable goals of all participating jurisdictions;
- d) Establish an energy portfolio that prioritizes the use and development of local renewable resources and minimizes the use of unbundled renewable energy credits;
- e) Promote an energy portfolio that incorporates energy efficiency and demand response programs and has aggressive reduced consumption goals;
- f) Demonstrate quantifiable economic benefits to the region (e.g. union and prevailing wage jobs, local workforce development, new energy programs, and increased local energy investments);
- g) Recognize the value of workers in existing jobs that support the energy infrastructure of Alameda County and Northern California. The Authority, as a leader in the shift to a clean energy, commits to ensuring it will take steps to minimize any adverse impacts to these workers to ensure a “just transition” to the new clean energy economy;
- h) Deliver clean energy programs and projects using a stable, skilled workforce through such mechanisms as project labor agreements, or other workforce programs that are cost effective, designed to avoid work stoppages, and ensure quality;
- i) Promote personal and community ownership of renewable resources, spurring equitable economic development and increased resilience, especially in low income communities;
- j) Provide and manage lower cost energy supplies in a manner that provides cost savings to low-income households and promotes public health in areas impacted by energy production; and
- k) Create an administering agency that is financially sustainable, responsive to regional priorities, well managed, and a leader in fair and equitable treatment of employees through adopting appropriate best practices employment policies, including, but not limited to, promoting efficient consideration of petitions to unionize, and providing appropriate wages and benefits.

WHEREAS if a municipality is to form a CCA with other municipalities, it must become a part of a Joint Powers Agency (JPA) as required by the legislation that permits CCAs, Assembly Bill 117 (Migden, 2002); and

WHEREAS a draft JPA Agreement has been prepared by the Office of the County Counsel and has been reviewed by City Attorneys and the membership of the Steering Committee over the course of several months; and

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby authorizes the City Manager to execute on behalf of the City of Hayward that certain agreement between the City of Hayward, THE COUNTY OF ALAMEDA, AND OTHER PARTICIPAING CITIES IN Alameda county establishing the CCA JPA in a form approved by the City Attorney.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2016

ADOPTED BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:
MAYOR:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: _____
City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward

East Bay Community Energy Authority

- Joint Powers Agreement –

Effective _____

Among The Following Parties:

EAST BAY COMMUNITY ENERGY AUTHORITY
JOINT POWERS AGREEMENT

This Joint Powers Agreement (“Agreement”), effective as of _____, is made and entered into pursuant to the provisions of Title 1, Division 7, Chapter 5, Article 1 (Section 6500 *et seq.*) of the California Government Code relating to the joint exercise of powers among the parties set forth in Exhibit A (“Parties”). The term “Parties” shall also include an incorporated municipality or county added to this Agreement in accordance with Section 3.1.

RECITALS

1. The Parties are either incorporated municipalities or counties sharing various powers under California law, including but not limited to the power to purchase, supply, and aggregate electricity for themselves and their inhabitants.
2. In 2006, the State Legislature adopted AB 32, the Global Warming Solutions Act, which mandates a reduction in greenhouse gas emissions in 2020 to 1990 levels. The California Air Resources Board is promulgating regulations to implement AB 32 which will require local government to develop programs to reduce greenhouse gas emissions.
3. The purposes for the Initial Participants (as such term is defined in Section 1.1.16 below) entering into this Agreement include securing electrical energy supply for customers in participating jurisdictions, addressing climate change by reducing energy related greenhouse gas emissions, promoting electrical rate price stability, and fostering local economic benefits such as jobs creation, community energy programs and local power development. It is the intent of this Agreement to promote the development and use of a wide range of renewable energy sources and energy efficiency programs, including but not limited to State, regional and local solar and wind energy production.
4. The Parties desire to establish a separate public agency, known as the East Bay Community Energy Authority (“Authority”), under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq.*) (“Act”) in order to collectively study, promote, develop, conduct, operate, and manage energy programs.
5. The Initial Participants have each adopted an ordinance electing to implement through the Authority a Community Choice Aggregation program pursuant to California Public Utilities Code Section 366.2 (“CCA Program”). The first priority of the Authority will be the consideration of those actions necessary to implement the CCA Program.
6. By establishing the Authority, the Parties seek to:
 - (a) Provide electricity rates that are lower or competitive with those offered by PG&E for similar products;

- (b) Offer differentiated energy options (e.g. 33% or 50% qualified renewable) for default service, and a 100% renewable content option in which customers may “opt-up” and voluntarily participate;
- (c) Develop an electric supply portfolio with a lower greenhouse gas (GHG) intensity than PG&E, and one that supports the achievement of the parties’ greenhouse gas reduction goals and the comparable goals of all participating jurisdictions;
- (d) Establish an energy portfolio that prioritizes the use and development of local renewable resources and minimizes the use of unbundled renewable energy credits;
- (e) Promote an energy portfolio that incorporates energy efficiency and demand response programs and has aggressive reduced consumption goals;
- (f) Demonstrate quantifiable economic benefits to the region (e.g. union and prevailing wage jobs, local workforce development, new energy programs, and increased local energy investments);
- (g) Recognize the value of workers in existing jobs that support the energy infrastructure of Alameda County and Northern California. The Authority, as a leader in the shift to a clean energy, commits to ensuring it will take steps to minimize any adverse impacts to these workers to ensure a “just transition” to the new clean energy economy;
- (h) Deliver clean energy programs and projects using a stable, skilled workforce through such mechanisms as project labor agreements, or other workforce programs that are cost effective, designed to avoid work stoppages, and ensure quality;
- (i) Promote personal and community ownership of renewable resources, spurring equitable economic development and increased resilience, especially in low income communities;
- (j) Provide and manage lower cost energy supplies in a manner that provides cost savings to low-income households and promotes public health in areas impacted by energy production; and
- (k) Create an administering agency that is financially sustainable, responsive to regional priorities, well managed, and a leader in fair and equitable treatment of employees through adopting appropriate best practices employment policies, including, but not limited to, promoting efficient consideration of petitions to unionize, and providing appropriate wages and benefits.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions hereinafter set forth, it is agreed by and among the Parties as follows:

ARTICLE 1 CONTRACT DOCUMENTS

1.1 Definitions. Capitalized terms used in the Agreement shall have the meanings specified below, unless the context requires otherwise.

- 1.1.1** “AB 117” means Assembly Bill 117 (Stat. 2002, ch. 838, codified at Public Utilities Code Section 366.2), which created CCA.
- 1.1.2** “Act” means the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq.*)
- 1.1.3** “Agreement” means this Joint Powers Agreement.
- 1.1.4** “Annual Energy Use” has the meaning given in Section 1.1.23.
- 1.1.5** “Authority” means the East Bay Community Energy Authority established pursuant to this Joint Powers Agreement.
- 1.1.6** “Authority Document(s)” means document(s) duly adopted by the Board by resolution or motion implementing the powers, functions and activities of the Authority, including but not limited to the Operating Rules and Regulations, the annual budget, and plans and policies.
- 1.1.7** “Board” means the Board of Directors of the Authority.
- 1.1.8** “Community Choice Aggregation” or “CCA” means an electric service option available to cities and counties pursuant to Public Utilities Code Section 366.2.
- 1.1.9** “CCA Program” means the Authority’s program relating to CCA that is principally described in Sections 2.4 and 5.1.
- 1.1.10** “Days” shall mean calendar days unless otherwise specified by this Agreement.
- 1.1.11** “Director” means a member of the Board of Directors representing a Party, including an alternate Director.
- 1.1.12** “Effective Date” means the date on which this Agreement shall become effective and the East Bay Community Energy Authority shall exist as a separate public agency, as further described in Section 2.1.

- 1.1.13** “Ex Officio Board Member” means a non-voting member of the Board of Directors as described in Section 4.2.2. The Ex Officio Board Member may not serve on the Executive Committee of the Board or participate in closed session meetings of the Board.
- 1.1.14** “Implementation Plan” means the plan generally described in Section 5.1.2 of this Agreement that is required under Public Utilities Code Section 366.2 to be filed with the California Public Utilities Commission for the purpose of describing a proposed CCA Program.
- 1.1.15** “Initial Costs” means all costs incurred by the Authority relating to the establishment and initial operation of the Authority, such as the hiring of a Chief Executive Officer and any administrative staff, any required accounting, administrative, technical and legal services in support of the Authority’s initial formation activities or in support of the negotiation, preparation and approval of power purchase agreements. The Board shall determine the termination date for Initial Costs.
- 1.1.16** “Initial Participants” means, for the purpose of this Agreement the County of Alameda, the Cities of Albany, Berkeley, Emeryville, Oakland, Piedmont, San Leandro, Hayward, Union City, Newark, Fremont, Dublin, Pleasanton and Livermore.
- 1.1.17** “Operating Rules and Regulations” means the rules, regulations, policies, bylaws and procedures governing the operation of the Authority.
- 1.1.18** “Parties” means, collectively, the signatories to this Agreement that have satisfied the conditions in Sections 2.2 or 3.1 such that it is considered a member of the Authority.
- 1.1.19** “Party” means, singularly, a signatory to this Agreement that has satisfied the conditions in Sections 2.2 or 3.1 such that it is considered a member of the Authority.
- 1.1.20** “Percentage Vote” means a vote taken by the Board pursuant to Section 4.12.1 that is based on each Party having one equal vote.
- 1.1.21** “Total Annual Energy” has the meaning given in Section 1.1.23.
- 1.1.22** “Voting Shares Vote” means a vote taken by the Board pursuant to Section 4.12.2 that is based on the voting shares of each Party described in Section 1.1.23 and set forth in Exhibit C to this Agreement. A Voting Shares vote cannot take place on a matter unless the matter first receives an affirmative or tie Percentage Vote in the manner required by Section 4.12.1 and three or more Directors immediately thereafter request such vote.

1.1.23 “Voting Shares Formula” means the weight applied to a Voting Shares Vote and is determined by the following formula:

(Annual Energy Use/Total Annual Energy) multiplied by 100, where (a) “Annual Energy Use” means (i) with respect to the first two years following the Effective Date, the annual electricity usage, expressed in kilowatt hours (“kWh”), within the Party’s respective jurisdiction and (ii) with respect to the period after the second anniversary of the Effective Date, the annual electricity usage, expressed in kWh, of accounts within a Party’s respective jurisdiction that are served by the Authority and (b) “Total Annual Energy” means the sum of all Parties’ Annual Energy Use. The initial values for Annual Energy use are designated in Exhibit B and the initial voting shares are designated in Exhibit C. Both Exhibits B and C shall be adjusted annually as soon as reasonably practicable after January 1, but no later than March 1 of each year subject to the approval of the Board.

1.2 **Documents Included.** This Agreement consists of this document and the following exhibits, all of which are hereby incorporated into this Agreement.

- Exhibit A: List of the Parties
- Exhibit B: Annual Energy Use
- Exhibit C: Voting Shares

1.3 **Revision of Exhibits.** The Parties agree that Exhibits A, B and C to this Agreement describe certain administrative matters that may be revised upon the approval of the Board, without such revision constituting an amendment to this Agreement, as described in Section 8.4. The Authority shall provide written notice to the Parties of the revision of any such exhibit.

ARTICLE 2
FORMATION OF EAST BAY COMMUNITY ENERGY AUTHORITY

2.1 **Effective Date and Term.** This Agreement shall become effective and East Bay Community Energy Authority shall exist as a separate public agency on December 1, 2016, provided that this Agreement is executed on or prior to such date by at least three Initial Participants after the adoption of the ordinances required by Public Utilities Code Section 366.2(c)(12). The Authority shall provide notice to the Parties of the Effective Date. The Authority shall continue to exist, and this Agreement shall be effective, until this Agreement is terminated in accordance with Section 7.3, subject to the rights of the Parties to withdraw from the Authority.

2.2 Initial Participants. Until December 31, 2016, all other Initial Participants may become a Party by executing this Agreement and delivering an executed copy of this Agreement and a copy of the adopted ordinance required by Public Utilities Code Section 366.2(c)(12) to the Authority. Additional conditions, described in Section 3.1, may apply (i) to either an incorporated municipality or county desiring to become a Party that is not an Initial Participant and (ii) to Initial Participants that have not executed and delivered this Agreement within the time period described above.

2.3 Formation. There is formed as of the Effective Date a public agency named the East Bay Community Energy Authority. Pursuant to Sections 6506 and 6507 of the Act, the Authority is a public agency separate from the Parties. The debts, liabilities or obligations of the Authority shall not be debts, liabilities or obligations of the individual Parties unless the governing board of a Party agrees in writing to assume any of the debts, liabilities or obligations of the Authority. A Party who has not agreed to assume an Authority debt, liability or obligation shall not be responsible in any way for such debt, liability or obligation even if a majority of the Parties agree to assume the debt, liability or obligation of the Authority. Notwithstanding Section 8.4 of this Agreement, this Section 2.3 may not be amended unless such amendment is approved by the governing boards of all Parties.

2.4 Purpose. The purpose of this Agreement is to establish an independent public agency in order to exercise powers common to each Party and any other powers granted to the Authority under state law to participate as a group in the CCA Program pursuant to Public Utilities Code Section 366.2(c)(12); to study, promote, develop, conduct, operate, and manage energy and energy-related climate change programs; and, to exercise all other powers necessary and incidental to accomplishing this purpose.

2.5 Powers. The Authority shall have all powers common to the Parties and such additional powers accorded to it by law. The Authority is authorized, in its own name, to exercise all powers and do all acts necessary and proper to carry out the provisions of this Agreement and fulfill its purposes, including, but not limited to, each of the following:

- 2.5.1** to make and enter into contracts, including those relating to the purchase or sale of electrical energy or attributes thereof;
- 2.5.2** to employ agents and employees, including but not limited to a Chief Executive Officer and General Counsel;
- 2.5.3** to acquire, contract, manage, maintain, and operate any buildings, works or improvements, including electric generating facilities;
- 2.5.4** to acquire property by eminent domain, or otherwise, except as limited under Section 6508 of the Act, and to hold or dispose of any property;
- 2.5.5** to lease any property;
- 2.5.6** to sue and be sued in its own name;

- 2.5.7 to incur debts, liabilities, and obligations, including but not limited to loans from private lending sources pursuant to its temporary borrowing powers such as Government Code Section 53850 *et seq.* and authority under the Act;
- 2.5.8 to form subsidiary or independent corporations or entities, if appropriate, to carry out energy supply and energy conservation programs at the lowest possible cost consistent with the Authority's CCA Program implementation plan, risk management policies, or to take advantage of legislative or regulatory changes;
- 2.5.9 to issue revenue bonds and other forms of indebtedness;
- 2.5.10 to apply for, accept, and receive all licenses, permits, grants, loans or other assistance from any federal, state or local public agency;
- 2.5.11 to submit documentation and notices, register, and comply with orders, tariffs and agreements for the establishment and implementation of the CCA Program and other energy programs;
- 2.5.12 to adopt rules, regulations, policies, bylaws and procedures governing the operation of the Authority ("Operating Rules and Regulations");
- 2.5.13 to make and enter into service, energy and any other agreements necessary to plan, implement, operate and administer the CCA Program and other energy programs, including the acquisition of electric power supply and the provision of retail and regulatory support services; and
- 2.5.14 to negotiate project labor agreements, community benefits agreements and collective bargaining agreements with the local building trades council and other interested parties.

2.6 Limitation on Powers. As required by Government Code Section 6509, the power of the Authority is subject to the restrictions upon the manner of exercising power possessed by the City of Emeryville and any other restrictions on exercising the powers of the Authority that may be adopted by the Board.

2.7 Compliance with Local Zoning and Building Laws. Notwithstanding any other provisions of this Agreement or state law, any facilities, buildings or structures located, constructed or caused to be constructed by the Authority within the territory of the Authority shall comply with the General Plan, zoning and building laws of the local jurisdiction within which the facilities, buildings or structures are constructed and comply with the California Environmental Quality Act ("CEQA").

2.8 Compliance with the Brown Act. The Authority and its officers and employees shall comply with the provisions of the Ralph M. Brown Act, Government Code Section 54950 *et seq.*

2.9 Compliance with the Political Reform Act and Government Code Section 1090. The Authority and its officers and employees shall comply with the Political Reform Act (Government Code Section 81000 *et seq.*) and Government Code Section 1090 *et seq.*, and shall adopt a Conflict of Interest Code pursuant to Government Code Section 87300. The Board of Directors may adopt additional conflict of interest regulations in the Operating Rules and Regulations.

ARTICLE 3 **AUTHORITY PARTICIPATION**

3.1 Addition of Parties. Subject to Section 2.2, relating to certain rights of Initial Participants, other incorporated municipalities and counties may become Parties upon (a) the adoption of a resolution by the governing body of such incorporated municipality or county requesting that the incorporated municipality or county, as the case may be, become a member of the Authority, (b) the adoption by an affirmative vote of a majority of all Directors of the entire Board satisfying the requirements described in Section 4.12, of a resolution authorizing membership of the additional incorporated municipality or county, specifying the membership payment, if any, to be made by the additional incorporated municipality or county to reflect its pro rata share of organizational, planning and other pre-existing expenditures, and describing additional conditions, if any, associated with membership, (c) the adoption of an ordinance required by Public Utilities Code Section 366.2(c)(12) and execution of this Agreement and other necessary program agreements by the incorporated municipality or county, (d) payment of the membership fee, if any, and (e) satisfaction of any conditions established by the Board.

3.2 Continuing Participation. The Parties acknowledge that membership in the Authority may change by the addition and/or withdrawal or termination of Parties. The Parties agree to participate with such other Parties as may later be added, as described in Section 3.1. The Parties also agree that the withdrawal or termination of a Party shall not affect this Agreement or the remaining Parties' continuing obligations under this Agreement.

ARTICLE 4 **GOVERNANCE AND INTERNAL ORGANIZATION**

4.1 Board of Directors. The governing body of the Authority shall be a Board of Directors ("Board") consisting of one director for each Party appointed in accordance with Section 4.2.

4.2 Appointment of Directors. The Directors shall be appointed as follows:

4.2.1 The governing body of each Party shall appoint and designate in writing one regular Director who shall be authorized to act for and on behalf of the Party on matters within the powers of the Authority. The governing body of each Party also shall appoint and designate in writing one alternate Director who may vote on matters when the regular Director is absent

from a Board meeting. The person appointed and designated as the regular Director shall be a member of the governing body of the Party. The person appointed and designated as the alternate Director shall also be a member of the governing body of the Party.

- 4.2.2** The Board shall also include one non-voting ex officio member as defined in Section 1.1.13 (“Ex Officio Board Member”). The Chair of the Community Advisory Committee, as described in Section 4.9 below, shall serve as the Ex Officio Board Member. The Vice Chair of the Community Advisory Committee shall serve as an alternate Ex Officio Board Member when the regular Ex Officio Board Member is absent from a Board meeting.
- 4.2.3** The Operating Rules and Regulations, to be developed and approved by the Board in accordance with Section 2.5.12 may include rules regarding Directors, such as meeting attendance requirements. No Party shall be deprived of its right to seat a Director on the Board.

4.3 Terms of Office. Each regular and alternate Director shall serve at the pleasure of the governing body of the Party that the Director represents, and may be removed as Director by such governing body at any time. If at any time a vacancy occurs on the Board, a replacement shall be appointed to fill the position of the previous Director in accordance with the provisions of Section 4.2 within 90 days of the date that such position becomes vacant.

4.4 Quorum. A majority of the Directors of the entire Board shall constitute a quorum, except that less than a quorum may adjourn a meeting from time to time in accordance with law.

4.5 Powers and Function of the Board. The Board shall conduct or authorize to be conducted all business and activities of the Authority, consistent with this Agreement, the Authority Documents, the Operating Rules and Regulations, and applicable law. Board approval shall be required for any of the following actions, which are defined as “Essential Functions”:

- 4.5.1** The issuance of bonds or any other financing even if program revenues are expected to pay for such financing.
- 4.5.2** The hiring of a Chief Executive Officer and General Counsel.
- 4.5.3** The appointment or removal of an officer.
- 4.5.4** The adoption of the Annual Budget.
- 4.5.5** The adoption of an ordinance.
- 4.5.6** The initiation of resolution of claims and litigation where the Authority will be the defendant, plaintiff, petitioner, respondent, cross complainant or cross petitioner, or intervenor; provided, however, that the Chief Executive Officer or General Counsel, on behalf of the Authority, may

intervene in, become party to, or file comments with respect to any proceeding pending at the California Public Utilities Commission, the Federal Energy Regulatory Commission, or any other administrative agency, without approval of the Board. The Board shall adopt Operating Rules and Regulations governing the Chief Executive Officer and General Counsel's exercise of authority under this Section 4.5.6.

4.5.7 The setting of rates for power sold by the Authority and the setting of charges for any other category of service provided by the Authority.

4.5.8 Termination of the CCA Program.

4.6 Executive Committee. The Board shall establish an Executive Committee consisting of a smaller number of Directors. The Board may delegate to the Executive Committee such authority as the Board might otherwise exercise, subject to limitations placed on the Board's authority to delegate certain Essential Functions, as described in Section 4.5 and the Operating Rules and Regulations. The Board may not delegate to the Executive Committee or any other committee its authority under Section 2.5.12 to adopt and amend the Operating Rules and Regulations or its Essential Functions listed in Section 4.5. After the Executive Committee meets or otherwise takes action, it shall, as soon as practicable, make a report of its activities at a meeting of the Board.

4.7 Director Compensation. Directors shall receive a stipend of \$100 per meeting, as adjusted to account for inflation, as provided for in the Authority's Operating Rules and Regulations.

4.8 Commissions, Boards and Committees. The Board may establish any advisory commissions, boards and committees as the Board deems appropriate to assist the Board in carrying out its functions and implementing the CCA Program, other energy programs and the provisions of this Agreement. The Board may establish rules, regulations, policies, bylaws or procedures to govern any such commissions, boards, or committees and shall determine whether members shall be compensated or entitled to reimbursement for expenses.

4.9 Community Advisory Committee. The Board shall establish a Community Advisory Committee consisting of nine members, none of whom may be voting members of the Board. The function of the Community Advisory Committee shall be to advise the Board of Directors on all subjects related to the operation of the CCA Program as set forth in a work plan adopted by the Board of Directors from time to time, with the exception of personnel and litigation decisions. The Community Advisory Committee is advisory only, and shall not have decision-making authority, or receive any delegation of authority from the Board of Directors. The Board shall publicize the opportunity to serve on the Community Advisory Committee, and shall appoint members of the Community Advisory Committee from those individuals expressing interest in serving, and who represent a diverse cross-section of interests, skill sets and geographic regions. Members of the Community Advisory Committee shall serve staggered four-year terms (the first term of three of the members shall be two years, and four years

thereafter), which may be renewed. A member of the Community Advisory Committee may be removed by the Board of Directors by majority vote. The Board of Directors shall determine whether the Community Advisory Committee members will receive a stipend and/or be entitled to reimbursement for expenses.

4.10 Chief Executive Officer. The Board of Directors shall appoint a Chief Executive Officer for the Authority, who shall be responsible for the day-to-day operation and management of the Authority and the CCA Program. The Chief Executive Officer may exercise all powers of the Authority, including the power to hire, discipline and terminate employees as well as the power to approve any agreement, if the expenditure is authorized in the Authority's approved budget, except the powers specifically set forth in Section 4.5 or those powers which by law must be exercised by the Board of Directors. The Board of Directors shall provide procedures and guidelines for the Chief Executive Officer exercising the powers of the Authority in the Operating Rules and Regulations.

4.11 General Counsel. The Board of Directors shall appoint a General Counsel for the Authority, who shall be responsible for providing legal advice to the Board of Directors and overseeing all legal work for the Authority.

4.12 Board Voting.

4.12.1 Percentage Vote. Except when a supermajority vote is expressly required by this Agreement or the Operating Rules and Regulations, action of the Board on all matters shall require an affirmative vote of a majority of all Directors on the entire Board (a "Percentage Vote" as defined in Section 1.1.20). A supermajority vote is required by this Agreement for the matters addressed by Section 8.4. When a supermajority vote is required by this Agreement or the Operating Rules and Regulations, action of the Board shall require an affirmative Percentage Vote of the specified supermajority of all Directors on the entire Board. No action can be taken by the Board without an affirmative Percentage Vote. Notwithstanding the foregoing, in the event of a tie in the Percentage Vote, an action may be approved by an affirmative "Voting Shares Vote," as defined in Section 1.1.22, if three or more Directors immediately request such vote.

4.12.2 Voting Shares Vote. In addition to and immediately after an affirmative percentage vote, three or more Directors may request that, a vote of the voting shares shall be held (a "Voting Shares Vote" as defined in Section 1.1.22). To approve an action by a Voting Shares Vote, the corresponding voting shares (as defined in Section 1.1.23 and Exhibit C) of all Directors voting in the affirmative shall exceed 50% of the voting share of all Directors on the entire Board, or such other higher voting shares percentage expressly required by this Agreement or the Operating Rules

and Regulations. In the event that any one Director has a voting share that equals or exceeds that which is necessary to disapprove the matter being voted on by the Board, at least one other Director shall be required to vote in the negative in order to disapprove such matter. When a voting shares vote is held, action by the Board requires both an affirmative Percentage Vote and an affirmative Voting Shares Vote. Notwithstanding the foregoing, in the event of a tie in the Percentage Vote, an action may be approved on an affirmative Voting Shares Vote. When a supermajority vote is required by this Agreement or the Operating Rules and Regulations, the supermajority vote is subject to the Voting Share Vote provisions of this Section 4.12.2, and the specified supermajority of all Voting Shares is required for approval of the action, if the provision of this Section 4.12.2 are triggered.

4.13 Meetings and Special Meetings of the Board. The Board shall hold at least four regular meetings per year, but the Board may provide for the holding of regular meetings at more frequent intervals. The date, hour and place of each regular meeting shall be fixed by resolution or ordinance of the Board. Regular meetings may be adjourned to another meeting time. Special and Emergency meetings of the Board may be called in accordance with the provisions of California Government Code Section 54956 and 54956.5. Directors may participate in meetings telephonically, with full voting rights, only to the extent permitted by law.

4.14 Officers.

4.14.1 Chair and Vice Chair. At the first meeting held by the Board in each calendar year, the Directors shall elect, from among themselves, a Chair, who shall be the presiding officer of all Board meetings, and a Vice Chair, who shall serve in the absence of the Chair. The Chair and Vice Chair shall hold office for one year and serve no more than two consecutive terms, however, the total number of terms a Director may serve as Chair or Vice Chair is not limited. The office of either the Chair or Vice Chair shall be declared vacant and the Board shall make a new selection if: (a) the person serving dies, resigns, or ceases to be a member of the governing body of the Party that the person represents; (b) the Party that the person represents removes the person as its representative on the Board, or (c) the Party that he or she represents withdraws from the Authority pursuant to the provisions of this Agreement.

4.14.2 Secretary. The Board shall appoint a Secretary, who need not be a member of the Board, who shall be responsible for keeping the minutes of all meetings of the Board and all other official records of the Authority.

4.14.3 Treasurer and Auditor. The Board shall appoint a qualified person to act as the Treasurer and a qualified person to act as the Auditor, neither of whom needs to be a member of the Board. The same person may not simultaneously hold both the office of Treasurer and the office of the Auditor of the Authority. Unless otherwise exempted from such

requirement, the Authority shall cause an independent audit to be made annually by a certified public accountant, or public accountant, in compliance with Section 6505 of the Act. The Treasurer shall act as the depositary of the Authority and have custody of all the money of the Authority, from whatever source, and as such, shall have all of the duties and responsibilities specified in Section 6505.5 of the Act. The Board may require the Treasurer and/or Auditor to file with the Authority an official bond in an amount to be fixed by the Board, and if so requested, the Authority shall pay the cost of premiums associated with the bond. The Treasurer shall report directly to the Board and shall comply with the requirements of treasurers of incorporated municipalities. The Board may transfer the responsibilities of Treasurer to any person or entity as the law may provide at the time.

4.15 Administrative Services Provider. The Board may appoint one or more administrative services providers to serve as the Authority's agent for planning, implementing, operating and administering the CCA Program, and any other program approved by the Board, in accordance with the provisions of an Administrative Services Agreement. The appointed administrative services provider may be one of the Parties. The Administrative Services Agreement shall set forth the terms and conditions by which the appointed administrative services provider shall perform or cause to be performed all tasks necessary for planning, implementing, operating and administering the CCA Program and other approved programs. The Administrative Services Agreement shall set forth the term of the Agreement and the circumstances under which the Administrative Services Agreement may be terminated by the Authority. This section shall not in any way be construed to limit the discretion of the Authority to hire its own employees to administer the CCA Program or any other program.

4.16 Operational Audit. The Authority shall commission an independent agent to conduct and deliver at a public meeting of the Board an evaluation of the performance of the CCA Program relative to goals for renewable energy and carbon reductions. The Authority shall approve a budget for such evaluation and shall hire a firm or individual that has no other direct or indirect business relationship with the Authority. The evaluation shall be conducted at least once every two years.

ARTICLE 5

IMPLEMENTATION ACTION AND AUTHORITY DOCUMENTS

5.1 Implementation of the CCA Program.

5.1.1 Enabling Ordinance. Prior to the execution of this Agreement, each Party shall adopt an ordinance in accordance with Public Utilities Code Section 366.2(c)(12) for the purpose of specifying that the Party intends to implement a CCA Program by and through its participation in the Authority.

5.1.2 Implementation Plan. The Authority shall cause to be prepared an Implementation Plan meeting the requirements of Public Utilities Code Section 366.2 and any applicable Public Utilities Commission regulations as soon after the Effective Date as reasonably practicable. The Implementation Plan shall not be filed with the Public Utilities Commission until it is approved by the Board in the manner provided by Section 4.12.

5.1.3 Termination of CCA Program. Nothing contained in this Article or this Agreement shall be construed to limit the discretion of the Authority to terminate the implementation or operation of the CCA Program at any time in accordance with any applicable requirements of state law.

5.2 Other Authority Documents. The Parties acknowledge and agree that the operations of the Authority will be implemented through various documents duly adopted by the Board through Board resolution or minute action, including but not necessarily limited to the Operating Rules and Regulations, the annual budget, and specified plans and policies defined as the Authority Documents by this Agreement. The Parties agree to abide by and comply with the terms and conditions of all such Authority Documents that may be adopted by the Board, subject to the Parties' right to withdraw from the Authority as described in Article 7.

5.3 Integrated Resource Plan. The Authority shall cause to be prepared an Integrated Resource Plan in accordance with CPUC regulations that will ensure the long-term development and administration of a variety of energy programs that promote local renewable resources, conservation, demand response, and energy efficiency, while maintaining compliance with the State Renewable Portfolio standard and customer rate competitiveness. The Authority shall prioritize the development of energy projects in Alameda and adjacent counties. Principal aspects of its planned operations shall be in a Business Plan as outlined in Section 5.4 of this Agreement.

5.4 Business Plan. The Authority shall cause to be prepared a Business Plan, which will include a roadmap for the development, procurement, and integration of local renewable energy resources as outlined in Section 5.3 of this Agreement. The Business Plan shall include a description of how the CCA Program will contribute to fostering local economic benefits, such as job creation and community energy programs. The Business Plan shall identify opportunities for local power development and how the CCA Program can achieve the goals outlined in Recitals 3 and 6 of this Agreement. The Business Plan shall include specific language detailing employment and labor standards that relate to the execution of the CCA Program as referenced in this Agreement. The Business Plan shall identify clear and transparent marketing practices to be followed by the CCA Program, including the identification of the sources of its electricity and explanation of the various types of electricity procured by the Authority. The Business Plan shall cover the first five (5) years of the operation of the CCA Program. The Business Plan shall be completed by the Authority no later than eight (8) months after the seating of the Authority Board of Directors. Progress on the implementation of the Business Plan shall be subject to annual public review.

5.5 Labor Organization Neutrality. The Authority shall remain neutral in the event its employees, and the employees of its subcontractors, if any, wish to unionize.

5.6 Renewable Portfolio Standards. The Authority shall provide its customers renewable energy primarily from Category 1 eligible renewable resources, as defined under the California RPS and consistent with the goals of the CCA Program. The Authority shall not procure energy from Category 3 eligible renewable resources (unbundled Renewable Energy Credits or RECs) exceeding 50% of the State law requirements, to achieve its renewable portfolio goals. However, for Category 3 RECs associated with generation facilities located within its service jurisdiction, the limitation set forth in the preceding sentence shall not apply.

ARTICLE 6

FINANCIAL PROVISIONS

6.1 Fiscal Year. The Authority's fiscal year shall be 12 months commencing July 1 and ending June 30. The fiscal year may be changed by Board resolution.

6.2 Depository.

6.2.1 All funds of the Authority shall be held in separate accounts in the name of the Authority and not commingled with funds of any Party or any other person or entity.

6.2.2 All funds of the Authority shall be strictly and separately accounted for, and regular reports shall be rendered of all receipts and disbursements, at least quarterly during the fiscal year. The books and records of the Authority shall be open to inspection by the Parties at all reasonable times.

6.2.3 All expenditures shall be made in accordance with the approved budget and upon the approval of any officer so authorized by the Board in accordance with its Operating Rules and Regulations. The Treasurer shall draw checks or warrants or make payments by other means for claims or disbursements not within an applicable budget only upon the prior approval of the Board.

6.3 Budget and Recovery Costs.

6.3.1 Budget. The initial budget shall be approved by the Board. The Board may revise the budget from time to time through an Authority Document as may be reasonably necessary to address contingencies and unexpected expenses. All subsequent budgets of the Authority shall be prepared and approved by the Board in accordance with the Operating Rules and Regulations.

6.3.2 Funding of Initial Costs. The County shall fund the Initial Costs of establishing and implementing the CCA Program. In the event that the

CCA Program becomes operational, these Initial Costs paid by the County and any specified interest shall be included in the customer charges for electric services to the extent permitted by law, and the County shall be reimbursed from the payment of such charges by customers of the Authority. The Authority may establish a reasonable time period over which such costs are recovered. In the event that the CCA Program does not become operational, the County shall not be entitled to any reimbursement of the Initial Costs.

- 6.3.4 Additional Contributions and Advances.** Pursuant to Government Code Section 6504, the Parties may in their sole discretion make financial contributions, loans or advances to the Authority for the purposes of the Authority set forth in this Agreement. The repayment of such contributions, loans or advances will be on the written terms agreed to by the Party making the contribution, loan or advance and the Authority.

ARTICLE 7

WITHDRAWAL AND TERMINATION

7.1 Withdrawal.

- 7.1.1 General Right to Withdraw.** A Party may withdraw its membership in the Authority, effective as of the beginning of the Authority's fiscal year, by giving no less than 180 days advance written notice of its election to do so, which notice shall be given to the Authority and each Party. Withdrawal of a Party shall require an affirmative vote of the Party's governing board.
- 7.1.2 Withdrawal Following Amendment.** Notwithstanding Section 7.1.1, a Party may withdraw its membership in the Authority following an amendment to this Agreement provided that the requirements of this Section 7.1.2 are strictly followed. A Party shall be deemed to have withdrawn its membership in the Authority effective 180 days after the Board approves an amendment to this Agreement if the Director representing such Party has provided notice to the other Directors immediately preceding the Board's vote of the Party's intention to withdraw its membership in the Authority should the amendment be approved by the Board.
- 7.1.3 The Right to Withdraw Prior to Program Launch.** After receiving bids from power suppliers for the CCA Program, the Authority must provide to the Parties a report from the electrical utility consultant retained by the Authority comparing the Authority's total estimated electrical rates, the estimated greenhouse gas emissions rate and the amount of estimated renewable energy to be used with that of the incumbent utility. Within 30 days after receiving this report, through its City Manager or a person expressly authorized by the Party, any Party may immediately withdraw

its membership in the Authority by providing written notice of withdrawal to the Authority if the report determines that any one of the following conditions exists: (1) the Authority is unable to provide total electrical rates, as part of its baseline offering to customers, that are equal to or lower than the incumbent utility, (2) the Authority is unable to provide electricity in a manner that has a lower greenhouse gas emissions rate than the incumbent utility, or (3) the Authority will use less qualified renewable energy than the incumbent utility. Any Party who withdraws from the Authority pursuant to this Section 7.1.3 shall not be entitled to any refund of the Initial Costs it has paid to the Authority prior to the date of withdrawal unless the Authority is later terminated pursuant to Section 7.3. In such event, any Initial Costs not expended by the Authority shall be returned to all Parties, including any Party that has withdrawn pursuant to this section, in proportion to the contribution that each made. Notwithstanding anything to the contrary in this Agreement, any Party who withdraws pursuant to this section shall not be responsible for any liabilities or obligations of the Authority after the date of withdrawal, including without limitation any liability arising from power purchase agreements entered into by the Authority.

7.2 Continuing Liability After Withdrawal; Further Assurances; Refund. A Party that withdraws its membership in the Authority under either Section 7.1.1 or 7.1.2 shall be responsible for paying its fair share of costs incurred by the Authority resulting from the Party's withdrawal, including costs from the resale of power contracts by the Authority to serve the Party's load and any similar costs directly attributable to the Party's withdrawal, such costs being limited to those contracts executed while the withdrawing Party was a member, and administrative costs associated thereto. The Parties agree that such costs shall not constitute a debt of the withdrawing Party, accruing interest, or having a maturity date. The Authority may withhold funds otherwise owing to the Party or may require the Party to deposit sufficient funds with the Authority, as reasonably determined by the Authority, to cover the Party's costs described above. Any amount of the Party's funds held by the Authority for the benefit of the Party that are not required to pay the Party's costs described above shall be returned to the Party. The withdrawing party and the Authority shall execute and deliver all further instruments and documents, and take any further action that may be reasonably necessary, as determined by the Board, to effectuate the orderly withdrawal of such Party from membership in the Authority. A withdrawing party has the right to continue to participate in Board discussions and decisions affecting customers of the CCA Program that reside or do business within the jurisdiction of the Party until the withdrawal's effective date.

7.3 Mutual Termination. This Agreement may be terminated by mutual agreement of all the Parties; provided, however, the foregoing shall not be construed as limiting the rights of a Party to withdraw its membership in the Authority, and thus terminate this Agreement with respect to such withdrawing Party, as described in Section 7.1.

7.4 Disposition of Property upon Termination of Authority. Upon termination of this Agreement as to all Parties, any surplus money or assets in possession of the Authority for use under this Agreement, after payment of all liabilities, costs, expenses, and charges incurred

under this Agreement and under any Authority Documents, shall be returned to the then-existing Parties in proportion to the contributions made by each.

ARTICLE 8

MISCELLANEOUS PROVISIONS

8.1 Dispute Resolution. The Parties and the Authority shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. Before exercising any remedy provided by law, a Party or the Parties and the Authority shall engage in nonbinding mediation in the manner agreed upon by the Party or Parties and the Authority. The Parties agree that each Party may specifically enforce this section 8.1. In the event that nonbinding mediation is not initiated or does not result in the settlement of a dispute within 120 days after the demand for mediation is made, any Party and the Authority may pursue any remedies provided by law.

8.2 Liability of Directors, Officers, and Employees. The Directors, officers, and employees of the Authority shall use ordinary care and reasonable diligence in the exercise of their powers and in the performance of their duties pursuant to this Agreement. No current or former Director, officer, or employee will be responsible for any act or omission by another Director, officer, or employee. The Authority shall defend, indemnify and hold harmless the individual current and former Directors, officers, and employees for any acts or omissions in the scope of their employment or duties in the manner provided by Government Code Section 995 *et seq.* Nothing in this section shall be construed to limit the defenses available under the law, to the Parties, the Authority, or its Directors, officers, or employees.

8.3 Indemnification of Parties. The Authority shall acquire such insurance coverage as the Board deems necessary to protect the interests of the Authority, the Parties and the public. Such insurance coverage shall name the Parties and their respective Board or Council members, officers, agents and employees as additional insureds. The Authority shall defend, indemnify and hold harmless the Parties and each of their respective Board or Council members, officers, agents and employees, from any and all claims, losses, damages, costs, injuries and liabilities of every kind arising directly or indirectly from the conduct, activities, operations, acts, and omissions of the Authority under this Agreement.

8.4 Amendment of this Agreement. This Agreement may be amended in writing by a two-thirds affirmative vote of the entire Board satisfying the requirements described in Section 4.12. Except that, any amendment to the voting provisions in Section 4.12 may only be made by a three-quarters affirmative vote of the entire Board. The Authority shall provide written notice to the Parties at least 30 days in advance of any proposed amendment being considered by the Board. If the proposed amendment is adopted by the Board, the Authority shall provide prompt written notice to all Parties of the effective date of such amendment along with a copy of the amendment.

8.5 Assignment. Except as otherwise expressly provided in this Agreement, the rights and duties of the Parties may not be assigned or delegated without the advance written consent of all of the other Parties, and any attempt to assign or delegate such rights or duties in contravention of this Section 8.5 shall be null and void. This Agreement shall inure to the benefit of, and be binding upon, the successors and assigns of the Parties. This Section 8.5 does not prohibit a Party from entering into an independent agreement with another agency, person, or entity regarding the financing of that Party's contributions to the Authority, or the disposition of proceeds which that Party receives under this Agreement, so long as such independent agreement does not affect, or purport to affect, the rights and duties of the Authority or the Parties under this Agreement.

8.6 Severability. If one or more clauses, sentences, paragraphs or provisions of this Agreement shall be held to be unlawful, invalid or unenforceable, it is hereby agreed by the Parties, that the remainder of the Agreement shall not be affected thereby. Such clauses, sentences, paragraphs or provision shall be deemed reformed so as to be lawful, valid and enforced to the maximum extent possible.

8.7 Further Assurances. Each Party agrees to execute and deliver all further instruments and documents, and take any further action that may be reasonably necessary, to effectuate the purposes and intent of this Agreement.

8.8 Execution by Counterparts. This Agreement may be executed in any number of counterparts, and upon execution by all Parties, each executed counterpart shall have the same force and effect as an original instrument and as if all Parties had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

8.9 Parties to be Served Notice. Any notice authorized or required to be given pursuant to this Agreement shall be validly given if served in writing either personally, by deposit in the United States mail, first class postage prepaid with return receipt requested, or by a recognized courier service. Notices given (a) personally or by courier service shall be conclusively deemed received at the time of delivery and receipt and (b) by mail shall be conclusively deemed given 72 hours after the deposit thereof (excluding Saturdays, Sundays and holidays) if the sender receives the return receipt. All notices shall be addressed to the office of the clerk or secretary of the Authority or Party, as the case may be, or such other person designated in writing by the Authority or Party. In addition, a duplicate copy of all notices provided pursuant to this section shall be provided to the Director and alternate Director for each Party. Notices given to one Party shall be copied to all other Parties. Notices given to the Authority shall be copied to all Parties. All notices required hereunder shall be delivered to:

The County of Alameda

Director, Community Development Agency

224 West Winton Ave.
Hayward, CA 94612

With a copy to:

Office of the County Counsel
1221 Oak Street, Suite 450
Oakland, CA 94612

if to [PARTY No. ____]

Office of the City Clerk

Office of the City Manager/Administrator

Office of the City Attorney

if to [PARTY No. ____]

Office of the City Clerk

Office of the City Manager/Administrator

Office of the City Attorney

ARTICLE 9
SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the East Bay Community Energy Authority.

By: _____

Name: _____

Title: _____

Date: _____

Party: _____

EXHIBIT A

-LIST OF THE PARTIES

(This draft exhibit is based on the assumption that all of the Initial Participants will become Parties. On the Effective Date, this exhibit will be revised to reflect the Parties to this Agreement at that time.)-

-

DRAFT EXHIBIT B

-ANNUAL ENERGY USE

(This draft exhibit is based on the assumption that all of the Initial Participants will become Parties. On the Effective Date, this exhibit will be revised to reflect the Parties to this Agreement at that time.)

This Exhibit B is effective as of _____.

| Party | kWh ([YEAR]*) |
|--------------|----------------------|
|--------------|----------------------|

*Data provided by PG&E

DRAFT EXHIBIT C

- VOTING SHARES

(This draft exhibit is based on the assumption that all of the Initial Participants will become Parties. On the Effective Date, this exhibit will be revised to reflect the Parties to this Agreement at that time.)

This Exhibit C is effective as of _____.

| Party | kWh ([YEAR]*) | Voting Share Section 4.11.2 |
|--------------|----------------------|--|
|--------------|----------------------|--|

Total

*Data provided by PG&E

Memo

date June 13, 2016

to Kathleen Yurchak, City of Pleasanton Director of Operations and Water Utilities

from Jeff Caton, ESA

subject Review of the *Draft Technical Study for Community Choice Aggregation Program in Alameda County* (MRW, June 2016)

Introduction and Summary

On behalf of the City of Pleasanton (City), ESA reviewed the June 2016 *Draft Technical Study for Community Choice Aggregation Program in Alameda County* (Study) by MRW & Associates, and supporting documentation including comments provided by the East Bay Clean Power Alliance, the City of San Leandro, the IBEW Chapter 1245, as well as comments from individuals, such as Mr. Chuck Rosselle. This Memo presents a summary of our findings and observations regarding the risks identified in the Study and their potential impacts to the City; areas not addressed or thoroughly vetted by the Study; alignment of the CCA with the City's energy and climate goals and objectives¹, and the Study's methodologies, underlying assumptions, and conclusions.

Review of the Joint Powers Agreement (JPA) is considered outside the scope of this review. Accordingly, absent our understanding of the underlying terms and conditions of the JPA, we have focused our comments on the overall risks and opportunities of the Community Choice Aggregation (CCA) initiative, and have not assessed the specific risks to the City of Pleasanton in joining the CCA. We assume that the Alameda CCA will be structured via a similar "lockbox" approach used by both Marin Clean Energy (MCE) and Peninsula Clean Energy that, in combination with specific terms and conditions of the power purchase agreements, is used to limit the financial exposure of the public entities participating in those CCA structures. We also assume that the risks are proportionate with the City's share of energy load, which is approximately 530,000 Megawatt hours (Mwh) out of the total of 8.07 million Mwh for the County.

¹ As described in the City of Pleasanton Climate Action Plan (2012) and the City's Energy Efficiency Conservation Strategy (2010).

Our review of the Technical Study leads us to conclude that there is value for Pleasanton in joining a County-wide CCA based on the City's existing energy and climate goals; however, joining the CCA presents risks that should be thoroughly assessed by the Technical Study. We find shortcomings in the Study's rate forecasting and its assessment of hydropower risks (availability and cost) and the risk of high-cost renewables creating a competitive and rate disadvantage for the CCA. Further, we suspect that some of the load forecasting and GHG savings estimates may be overly optimistic. We recommend that the City of Pleasanton be cautious about joining the CCA without further study of rate design, utility exit fees (Power Charge Indifference Assessment, or PCIA), and the cost premium for local (in County) renewable energy projects and the ability of the CCA to finance those projects. We further recommend benchmarking the Alameda CCA against existing Bay Area CCAs to evaluate the strategies and approaches used to provide their customers with a cost competitive and cleaner energy alternative to PG&E power.

Findings

1. Risk Assessment

The Study reviews the key relevant risks to the formation of a CCA; namely the financial risks to CCA members, energy procurement related risks, legislative and regulatory risks, uncertainty around exit fees imposed by PG&E (also known as Power Charge Indifference Adjustments, or PCIA), rates charged by PG&E, and Bonding Risk. The Study accurately highlights the key risks facing the CCA as a financially viable organization: low power prices offered by PG&E, future high renewable prices and costs, and PCIA charges. It should be noted that these risks are identical to those faced by other CCAs, notably MCE, Sonoma Clean Power, Lancaster Choice Energy, CleanPowerSF and Peninsula Clean Energy.

However, we believe that the Study could have provided a more robust assessment of these key risks, and how they impact customer retention and the financial viability of the CCA:

Low PG&E Rates. The study notes "it is critical that wholesale power market and price assumptions are consistent between the CCA and PG&E." While access to energy markets is regionally on an equal footing between a CCA and PG&E, there are significant economies of scale which PG&E can utilize, which a CCA does not necessarily have available. The cost advantage of these economies of scale can be somewhat minimized by a smaller organization through collaborative purchases with other smaller load serving entities. For example municipal utilities in the Bay Area have regularly made long-term purchases of renewable energy at competitive prices by joining in with other municipal utilities or by purchasing a portion of the output of a specific renewable asset, such as a wind farm under development. In Scenario 3 of the Study, low PG&E rates create a competitive and rate disadvantage for the CCA.

High renewable prices and costs. We believe that the Study could develop a more robust analysis of the risks and impacts of high renewable prices and costs. The Study's scenarios focus on two local renewable resources – wind and solar – as supplies for the CCA. Costs for these two sources have declined dramatically over the last decade, and in addition Alameda County does have the potential for repowering (i.e., upgrading with more powerful modern units) its portion of the Altamont Pass wind project.

The Study might be strengthened by additional review of the potential high costs of these sources, either procured from wholesale providers or through local renewable projects. The Study found an average price of \$49/Mwh for solar contracts and \$55/Mwh for wind power contracts paid by municipal utilities in California in 2015. While the Study assumed a 15% premium for projects in Alameda County, it is not clear if this premium sufficiently takes into account the high land values and costs in the Bay Area in general and Alameda County specifically. In a recent example, the City of Palo Alto utilities purchased both renewable power from a utility scale project in Southern California and simultaneously developed opportunities for local renewable generation projects. While the utility scale projects will cost approximately 3.7 cents per kWh, the City will pay 16.5 cents per kWh for local generation projects (Source: City of Palo Alto Utilities website and City Council meeting notes, 2016).

High renewable costs will directly impact the price differential the CCA can offer. In Scenario 2, for example, a renewable cost of 4.5 cents per kWh is roughly 50% of the total generation costs. This price range will likely only be possible by purchasing power from large utility scale solar generation assets located outside of Alameda County. If local generation comprises a larger portion of the renewable mix, these prices cannot be maintained. Additionally, with the rapid development of CCAs within the Bay Area and California, the demand for renewable energy may increase rapidly, at least in the short term, as these CCAs seek to purchase energy from operating renewable assets while developing lower cost long-term assets. Until long-term projects are financed and come on-line, the short term prices for renewable energy may increase, thus significantly impacting the rate estimates contained in the Study.

PCIA Charges. The Power Charge Indifference Assessment (also known as an exit fee) is assessed by PG&E on an annual basis on all customers who do not opt out of the CCA program. The PCIA charges by PG&E represent a significant cost to CCA customers. The PCIA charges and associated Franchise Fee PG&E has assessed its residential customers over the past 8 years are listed below. While these fees increased by 13.4% between 2009 and 2012, they have stabilized in recent years. The underlying study by Peninsula Clean Energy does note that they expect these PCIA charges to increase by 8% in the 2016-2018 period. The methodology used by PG&E for computing these fees is currently under review. Other CCAs have expressed the view that the PCIA is a critical risk for CCAs in maintaining a price differential to PG&E. One CCA Chief Executive expressed concern that PCIA charges could increase at a much faster rate than has historically occurred. Indeed, on June 1, 2016 PG&E proposed a 2017 Vintage PCIA charge of \$0.0286, up from \$0.02323, which would increase the average residential monthly PCIA charges to approximately \$16.00.² Some CCAs are working together in an attempt to manage upcoming risks associated with future PCIA charges. The future Alameda CCA should collaborate with the other CCAs in the Bay Area in ensuring that PCIA charges do not damage the competitive position of the new organization.

² Assuming the average residential consumption of 562 kwh per month (EIA, Average Monthly Residential Consumption, 2014).

TABLE 1: PG&E Residential Exit Fees (per kWh)

| Vintage | PCIA | Franchise Fee (FFS) | Total |
|--------------|------------|---------------------|------------|
| 2009 Vintage | \$ 0.02073 | \$ 0.00064 | \$ 0.02137 |
| 2010 Vintage | \$ 0.02268 | \$ 0.00062 | \$ 0.02330 |
| 2011 Vintage | \$ 0.02342 | \$ 0.00061 | \$ 0.02403 |
| 2012 Vintage | \$ 0.02363 | \$ 0.00061 | \$ 0.02424 |
| 2013 Vintage | \$ 0.02326 | \$ 0.00062 | \$ 0.02388 |
| 2014 Vintage | \$ 0.02323 | \$ 0.00062 | \$ 0.02385 |
| 2015 Vintage | \$ 0.02323 | \$ 0.00062 | \$ 0.02385 |
| 2016 Vintage | \$ 0.02323 | \$ 0.00062 | \$ 0.02385 |

Source: Peninsula Clean Energy Board Meeting, May 26, 2016.

2. Loads and Forecasts

We find the 0.3% load growth assumed in the report to be lower than might be expected. This is a point raised in the IBEW comments. Other municipal utilities often use a 2% growth rate in electrical load in their long range supply planning. However, when considering the opportunity for energy efficiency to reduce loads as outlined in the Study, this relatively shallow load growth estimate is reasonable, unless electrification opportunities begin to drive growth. Such electrification opportunities involve the widespread adoption of electric vehicles as well as the switching out of traditionally natural gas fired residential water heating for efficient electric on-demand water heaters. The impact of electrification with low or zero GHG electricity supplies is likely to be an important component of the Alameda County and City of Pleasanton GHG reduction plans going forward. For other cities in the Bay Area that have developed post-2020 plans to reduce their GHG emissions, the switching over of vehicles and residential water heaters to clean electricity is a key strategy (e.g., City of Richmond Draft Climate Action Plan, 2016; and Palo Alto Climate Action Roadmap, 2016).

3. Power Supply Procurement and Rate Forecasting

Power procurement and rate forecasting are critical components of a successful CCA program. In this section, we review key aspects of these components presented in the Study.

Analysis of Rates and Customer Bills

The Study’s SOW did request an analysis of rates from a scenario analysis and the Study did include such an analysis. But the Study SOW did not request analysis of rates and billing issues from a customer perspective. We believe that additional consideration of the impact of rates on customers is crucial in understanding the risks to the CCA of customers either opting to remain with PG&E or returning to PG&E due to dissatisfaction with the prices offered by the Alameda CCA.

There are many tariff offerings provided by PG&E. It is likely that customers within Alameda County may have as many as 50 unique tariff options. It will be necessary for Alameda CCA to be cognizant of these tariff options in designing their tariffs to ensure that all customers are fairly apportioned costs and benefits. These options include fixed charges (usually in \$/meter per day in the billing period), energy charges (\$/kwh consumed during the billing period on either a flat, tiered, seasonal or time of use basis) and demand charges (\$/kwh of maximum metered demand during the billing period on a seasonal, time of use or connected load basis).

The rates customers are charged include many components. The table below illustrates a typical PG&E residential bill. The key components of the bill are generation charges, distribution charges, conservation incentive adjustments, transmission charges and other costs. The Alameda CCA can impact only the generation charge, which typically represents about 50% of the total charge. This tends to dilute any price advantages that the CCA can gain through energy procurement.

Figure 1: PG&E Residential Rate Breakdown (E-1)

| UNBUNDLING OF TOTAL RATES | |
|---|-----------------|
| Energy Rates by Component (\$ per kWh) | |
| Generation: | \$0.09684 (R) |
| Distribution**: | \$0.08338 (I) |
| Conservation Incentive Adjustment: | |
| Baseline Usage | (\$0.04544) (R) |
| 101% - 130% of Baseline | (\$0.00275) (I) |
| 131% - 200% of Baseline | \$0.05822 (I) |
| 201% - 300% of Baseline | \$0.13633 (I) |
| Over 300% of Baseline | \$0.13633 (I) |
| Transmission* (all usage) | \$0.02144 (I) |
| Transmission Rate Adjustments* (all usage) | \$0.00010 (I) |
| Reliability Services* (all usage) | \$0.00023 |
| Public Purpose Programs (all usage) | \$0.01405 |
| Nuclear Decommissioning (all usage) | \$0.00022 |
| Competition Transition Charges (all usage) | \$0.00338 |
| Energy Cost Recovery Amount (all usage) | (\$0.00002) |
| DWR Bond (all usage) | \$0.00539 |
| New System Generation Charge (all usage)** | \$0.00255 |

Source: Peninsula Clean Energy Board Meeting, May 26, 2016

Efficacy of the Three CCA Scenarios

The Study presents three scenarios for the CCA, with differing assumptions concerning the amount of carbon-free power being supplied to the CCA so as to assess the costs and greenhouse gas (GHG) emissions reductions possible with the CCA.

Scenario 1 (Renewable Compliance) represents a significant cost savings for consumers across the customer classes but with a large increase in GHG emissions over the PG&E supply, assuming an

average hydro year. As a result, its adoption could negatively impact the City's GHG reduction goals, particularly as they are expected to evolve in future updates to the 2012 City of Pleasanton Climate Action Plan. Indeed, the Scenario would result in a County-wide increase of GHG emissions of approximately 10.3 million metric tons of CO₂. Scenario 1 would thus likely engender strong public opposition and significant customer retention problems for the CCA. The economic viability of this Scenario is therefore questionable.

Scenario 2 (Accelerated RPS) presents a significant reduction in GHG emissions, at a lower cost than PG&E (but higher than Scenario 1). This Scenario utilizes purchases of large hydro to provide low-cost supply and increase the GHG-free portion of portfolio. The Scenario presents an approximately 20% generation cost savings, which translates into a 10% savings over PG&E in the year 2030. This price differential is even greater between 2021 and 2026. This is a very ambitious cost saving goal, and is more aggressive than any of the existing CCAs. For comparison, MCE and CleanPowerSF have as a goal parity with PG&E rates, while Sonoma Clean Power and Peninsula Clean Energy are planning for a 5% cost savings over PG&E. While the CCA could achieve the stated costs savings, it would need to rely on out of state hydro purchases at least initially, which might create an unbalanced supply portfolio with delivery risks in the long-term. Based on our work with other CCAs, we believe that Alameda CCA could achieve a price advantage in Scenario 2 over PG&E, but likely at the 5% rate achieved by other similar organizations.

Scenario 3 (80% RPS by 2021) provides a GHG emissions reduction of roughly 75% from the PG&E equivalent with a stated cost below that of PG&E. The Scenario relies on 50% of the non-renewable supply being met through large hydro-resources. This reliance on deriving a large fraction of the energy from out of state hydro resources does create an undiversified supply portfolio with inherent transmission risks. We do not recommend a portfolio that contains such a high portion of out of state hydro resources for energy risk management reasons. Adjusting this scenario to 25% from out of state hydro and 25% from out of state renewable supplies would represent a more balanced approach, but it would also incur higher costs. In addition, the projected cost savings for Scenario 3 do not correspond with the experiences of other CCAs in the Bay Area. For example, Peninsula Clean Energy is expecting to achieve a similar scenario for a portion of its expected customers with a 2% price premium over normal PG&E rates. While this premium is small for residential customers, we believe it is a more likely price comparison for Scenario 3.

Each of the above scenarios, and our comments on them, are based on PG&E "average hydro year." That is, the availability (and therefore cost) of hydro power sources in State is expected to be equal to the long-term average in the State. Certainly, any specific year between 2017 and 2030 could exhibit average, or even above average, precipitation and hydro volumes in the State. However, hydro power generation in the state has dropped from an average of 14% of overall generation to about 8% in recent years (Energy Information Agency website). Because of the overall reduction in in-state hydro generation, in part due to the impacts of climate change, as well as the year-to-year volatility of hydro production, we believe that the use of an "average hydro year" could under represent significant price and availability risks.

Role of Local renewables Development

Local renewable energy development can provide an important long-term source of renewable electricity for the Alameda CCA. The Study uses a 15% price increase over the average costs for renewable energy purchases for a total of 5.6 cents per kWh. As noted above, other Bay Area cities have significantly higher costs for local renewable energy projects. Should actual potential projects carry higher prices, this will serve to limit the ability of the CCA to finance local renewables. The Study anticipates renewable power costs of between 2 cents kwh and 7 cents per kwh across the different scenarios (Figures 14, 17 and 19). The Study's Cost and Benefit Analysis illustrates the

importance of renewable costs and demonstrates how high renewable costs can all but eliminate any price advantage of the CCA over PG&E. As such, these costs represent a significant risk for the Alameda CCA.

Certainly the balance of wholesale renewable power purchases and the development of local renewable energy projects has impacts on the CCA power costs as well as on the economic development of the county. Purchasing renewable power resources from within the State, but outside of Alameda County, can be carried out at a relatively low cost. As mentioned above, local municipal utilities have as recently as May 2016 purchased solar power from large utility scale projects for approximately 4 cents a kWh. However, building local solar and wind generation in the Bay Area is considerably more expensive. For example, the City of Palo Alto's CLEAN (Clean Local Energy Accessible Now) program offers to purchase locally generated solar power at 16.5 cents per kWh for a 20 year term. The Study of the Alameda CCA assumes a 15% premium for renewable energy costs for projects in Alameda County. We are concerned that this premium underestimates the costs of renewable power development. Certainly, areas of eastern Alameda County could serve as sites for solar or wind power but we are unable to verify that a 15% premium is sufficient in estimating the costs of such projects. In a high renewable cost scenario, the development of local renewables within Alameda County will lag, unless the CCA is able to increase its rates to attract developers.

Comments on Sensitivity Analysis

The sensitivity analysis presented in the Study highlights the key risks faced by the Alameda CCA. These risks are: low power prices offered by PG&E, future high renewable prices and costs, and PCIA charges. Of these three risks, we expect that short-term high renewable prices and PCIA charges will have the most significant risks on the Alameda CCA rate structure and balance sheet.

In addition to these key risks, we believe that hydro variability and its impact with energy prices are significant risks that are not fully explored in the Study. These risks are discussed above.

As a result, we recommend that additional modeling work be carried out on these three key risks and their impacts on Alameda CCA's balance sheet and reserve requirements.

4. Alignment of the CCA with the City's Energy and Climate Goals

The City of Pleasanton has long been interested in energy independence. In the City of Pleasanton 2002 Energy Plan, CCA was identified as a potential means of accomplishing that independence. The City first investigated the feasibility of implementing CCA locally in 2005, when it participated in a research study by the California Energy Commission Public Interest Energy Research (PIER), which found "that if the City was willing to finance renewable energy development, 50% renewable energy generation could be achieved at no increased cost to the ratepayers." Also in 2005, the City added an Energy Element to its General Plan, which points to a CCA as a prospective means of gaining more local control over the City's energy supply portfolio and electricity rates, and includes the goal to move toward "a sustainable future that increases renewable energy use, energy conservation, energy efficiency, energy self-sufficiency, and limits energy-related financial burdens in Pleasanton." The City has incorporated this goal, and consideration of CCA, into its 2010 Energy Efficiency and Conservation Strategy (EECS) and its 2012 Climate Action Plan (CAP).

The EECS includes a chapter on Community Choice Aggregation, which specifically recommends monitoring neighboring CCA programs in Marin County and San Francisco and to identify potential models for a successful CCA, and to engage with other East Bay cities to explore the viability of

forming a regional CCA program. This is consistent with our recommendations elsewhere in this memo (See "Recommendations for Further Study").

The CAP sets a city-wide GHG emissions reduction target of 15% below the City's 2005 baseline by 2020. With respect to renewable energy, the CAP includes an objective to increase renewable energy generation. The CAP acknowledges the potential benefits of City participation in a CCA, and includes an Action for additional study to assess whether joining a CCA makes sense for the City. The CAP also includes Actions to expand local solar generation through supportive ordinances and permitting processes, more promotion of existing rebates and financing options, and continued participation in the Solar Cities program, which has been very successful in expanding local rooftop solar PV installations. The CAP also call for forming a community solar cooperative for leveraging economies of scale in solar panel purchasing and installation, and neighborhood solar grids for charging electric vehicles.

The City's 2005 baseline GHG emissions inventory, as presented in the CAP, shows that the electricity used by residential, commercial and industrial buildings in the City represented approximately 155,000 metric tons of carbon dioxide equivalents (MT CO₂e), with the largest contribution (68%) from commercial/industrial use (including direct access customers), followed by residential use (30%) and municipal operations (2%).³ Looking to future years, the CAP predicts an overall 41% increase in emissions from electricity by 2020 under business-as-usual conditions,⁴ to approximately 219,000 MT CO₂e, with the commercial/industrial sector exhibiting the greatest increase (55%). The CAP presents an adjustment for the state RPS⁵ that reduces the 2020 forecast for electricity emissions by 21%, to approximately 173,000 MT CO₂e. CAP measures for local energy efficiency are expected to further reduce annual electricity emissions by approximately 25,000 MT CO₂e, while expansion of local renewable energy is estimated to reduce emissions by approximately 13,000 MT CO₂e, bringing the City's 2020 target for electricity-related emissions down to approximately 135,000 MT CO₂e.

As part of CAP implementation and monitoring, the City is committed to updating its community inventory at least every five years. The first revision, for 2010, showed that total community-wide GHG emissions had decreased overall by approximately 2.9% in the five years since 2005. Table 2 provides a summary of results, including a 20% drop in emissions from commercial/industrial electricity usage, and a 12% drop in emissions from residential electricity usage.⁶ These reductions, achieved by both efficiency improvements and expansion of local rooftop Solar PV systems, exceed the expectations set by the CAP for 2010, and if maintained will enable the City to meet its 2020 target for electricity emissions. The revised inventory also reports a much lower number for Direct Access (DA) electricity based on PG&E data, and notes that DA electricity was likely over-estimated in the 2005 inventory using County-wide DA data provided by the CEC and assuming that Pleasanton's share of DA electricity was proportional to its population ratio with the rest of the County.

In conclusion, participation in the Alameda County CCA is likely to enhance the ability of the City to achieve its Energy and Climate Goals, adding to the demonstrable progress the City is already making toward its energy efficiency, local renewables, and GHG reduction goals.

³ City of Pleasanton Climate Action Plan, 2012.

⁴ Not accounting for California's Renewables Portfolio Standard (PRS) and local measures to increase energy efficiency and expand local renewable generation.

⁵ Assumes 33% carbon-free utility-supplied electricity by 2020.

⁶ City of Pleasanton 2010 GHG Inventory Update; April 19, 2013.

Table 2
2005 and 2010 (Revised) Community Emissions by Sector (CO₂e MT)

| Emission Sector | 2005 | 2010 | % Change |
|---|----------------|----------------------|--------------|
| Transportation (on-road) | 401,550 | 402,419 ⁷ | 0.2% |
| Transportation (off-road) | 25,410 | 25,465 ⁸ | 0.2% |
| Commercial/Industrial Electricity ⁹ | 90,498 | 72,291 | -20.1% |
| Commercial/Industrial Natural Gas | 43,455 | 44,525 | 2.5% |
| Commercial/Industrial – Other fuels ¹⁰ | 3,298 | 16,065 | 387% |
| Residential Electricity | 46,881 | 41,116 | -12.3% |
| Residential Natural Gas | 66,684 | 69,741 | 4.6% |
| Solid Waste Disposal | 38,826 | 21,128 | -45.6% |
| Water and Wastewater Systems ¹¹ | 34,264 | 36,367 | 6.1% |
| Municipal Operations | 5,370 | 4,990 | -7.1% |
| Total | 756,234 | 734,105 | -2.9% |

Recommendations for Further Study

1. Benchmark Alameda CCA Approach Against Existing CCAs.

Over the past 6 years many communities have developed and implemented CCAs. As such, their experiences, strategies, and approaches to providing their customers with a cost competitive and cleaner energy alternative can be instructive. We do note, that such a comparison is NOT included in the Technical Study RFP and therefore was out of scope for the Study. However, we believe that such a comparison could be beneficial for the CCA advisory board as well as the individual municipal participants.

⁷ Estimate based on population and job growth between 2005 and 2010.

⁸ Estimate based on population and job growth between 2005 and 2010.

⁹ Direct Access (DA) electricity was likely over-estimated in 2005 inventory using County-wide DA data provided by the CEC. PG&E's 2010 electricity data shows that DA electricity use in Pleasanton is much smaller, and is negligible relative to overall usage.

¹⁰ High quality stationary source data for 2010 was provided by BAAQMD. This was unavailable for 2005 inventory and it is likely that stationary emissions were underestimated in 2005; however, the 2010 data may include some utility-provided natural gas which would be considered double-counting.

¹¹ Includes power used for upstream water conveyance that occurs beyond the City limits, and indirect process and fugitive emissions from septic tanks and wastewater treatment processes. Note that indirect emissions from electricity used to convey water and wastewater within the City is included in Municipal Operations.

The table below summarizes the existing CCA programs in the Bay Area.

TABLE 3: Summary of Community Choice Aggregation Programs in the Bay Area

| Criterion | Marin Clean Energy (MCE) | Sonoma Clean Power | CleanPower SF | Peninsula Clean Energy |
|--|-----------------------------|--------------------------|---------------------|-------------------------------|
| Launch Year | 2010 | 2014 | 2016 | 2016 |
| RE Content (target at launch) | 25% | 33% | 35% | 50% (Minimum) |
| GHG-free content (target at launch) | 25% | Parity w/PG&E | N/A | 70% incl. 20% L. Hydro |
| RE Content (2015) | 56% | 36% | N/A | N/A |
| GHG-free content (2015) | 66% (including 9% L. Hydro) | 80% (incl. 44% L. Hydro) | N/A | N/A |
| Use of Unbundled RECs | Yes | Yes | No | No |
| Rate savings compared to IOU (at launch) | Parity | 5% below PG&E | Parity | Current goal is 5% below PG&E |
| Primary Power Supplier(s) at Launch | Shell | Constellation & Calpine | Calpine & Iberdrola | Currently out to bid |

Source: Peninsula Clean Energy Board Meeting, April 14, 2016

Some of the key lessons of this comparison include:

- Many CCAs are looking to exceed the equivalent of the state mandated RPS by using hydropower to further reduce GHG emissions while securing low cost supplies. These CCAs are setting forth strategies to provide cleaner power than can be provided by PG&E at lower rates. The option of Alameda CCA purchasing hydro power in order to reduce the GHG emissions from the power supply while gaining a cost advantage is a major element in the Study’s Scenarios 2 and 3.
- Both CleanPower SF and Peninsula Clean Energy do not include the use of unbundled Renewable Energy Credits. The use of these RECs, which involves purchasing of the energy credit without purchasing the associated power, is not considered in the analysis. The purchase of such unbundled REC’s is controversial in some communities.
- None of these CCAs are expected to rapidly build local renewable generation sources, but relied on large producers for their supplies in the short term.

Additionally, each of these CCAs operates on similar goals, which are not explicitly presented or discussed in the Study. The following six goals are the foundation of nearly all CCAs in California. These include:

1. Revenue sufficiency: rates must recover all program expenses, including debt service requirements and reserves.
2. Rate competitiveness: rates must allow the CCA to compete in the marketplace to retain and attract customers in all classes.
3. Rate stability: rates should be stable to reduce volatility of customer bills.
4. Customer understanding: rates should be simple, transparent and easily understood by customers.
5. Equity among customers: rate differences between customers are justified by differences in usage characteristics and cost of service.
6. Efficiency: rates should encourage energy conservation and efficient use of electricity (e.g., off-peak vehicle charging).

2. Develop Rate Design Strategy

One of the key risks of a new CCA is the initial development of its rates. The RFP and the Study do not reference any specific goals or strategies around rate design. The approach to rate design should be included as it drives much of the operational and procurement decisions of the CCA. All similarly situated customers should pay equivalent delivery charges whether taking service from the Alameda CCA or PG&E. The primary basis for rate comparison/competition should be focused on generation charges (energy, demand and related adjustments) and exit fees. Offering a generally similar rate structure would facilitate comparability, ensure alignment with PG&E delivery rates, and ensure smooth service transition without significant bill impacts.

Rates are designed on a forecast "test year" initially, using projects of energy sales and other billing amounts by the proposed rate structure. The total revenue collected from the proposed rates includes all program expenses for the test year including power supply costs, administrative costs, debt servicing and reserves. Rates can be designed in a variety of ways to generate the same total revenue but which can impact customer segments quite differently. While rate design was not part of the SOW of the feasibility report, it is an important consideration for Pleasanton and the other CCA members as they evaluate their participation in the Alameda CCA.

Basic strategies for rate design could include:

- Establish initial generation rates that are a specified percentage below currently applicable PG&E generation rates.
- Evaluate rates annually for possible adjustment.
- Ensure rates remain competitive over time.

Well-designed rates are important for the success of the Alameda CCA and directly impact two key areas of performance:

- **Financial Performance.** Alameda CCA should be entirely funded through the electric rates charged to its customers. The selected rate structure will impact cash flows, capital financing requirements and Peninsula Clean Energy's credit profile among other considerations.
- **Customer Satisfaction.** Customers have the freedom to choose whether or not to participate in Peninsula Clean Energy, and rates are a primary driver of customer

satisfaction. Stable and competitive rates are among the significant benefits that can/will be provided by Alameda CCA.

3. Assess Value and Risks of Hydropower

Scenarios 2 and 3 each rely on a significant portion of the Alameda CCA supply portfolio as being comprised of hydro generation. However, the risks and volatility impacts of hydro resources and the reliance of the CCA in their procurement are not, in our opinion, fully discussed. We recognize that large hydro is not considered renewable in the State of California's rules around Renewable Portfolio Standards (RPS). Hydro is a critical resource to help the CCA reduce its GHG-free content at a relatively low cost, which in turn helps the region, and the City in particular, meet its GHG reduction targets. As can be seen in Table 2 above (Summary of Community Choice Aggregation Programs in the Bay Area) both Sonoma Clean Power and MCE use large hydro for a significant portion of their supplies.

The consideration of purchasing hydro has financial, economic, regulatory and political risks and ramifications. Each of the scenarios in the Study are based on the PG&E "average hydro year" and do not take into account significant volumetric risk of purchasing hydro or the cost impacts. In recent years hydro generation in the state has dropped from an average of 14% of overall generation to about 8% in recent years (Energy Information Agency website).

For portfolio diversification purposes, hydropower can be purchased at very low rates from the Northwest (primarily Oregon and Washington) and imported along transmission lines. Many existing CCAs use hydropower to increase their GHG-free power content. Such power purchases do face transmission risks, since delivery from the Northwest can be interrupted by transmission outages. Availability risk can also occur during droughts in the Northwest. Additionally potential regulation (such as AB 1110 and SB1305) may make such purchases more expensive or limit their availability. The inclusion of hydropower has been an important component of many CCA launch portfolios, as the resource is GHG free and low-cost and serves as an important diversification of the initial supply portfolio. The purchase of hydropower also allows the CCA to have competitive rates and very-low GHG emissions during its initial start-up period, which is attractive to many customer elements and is a strong competitive advantage when customers decide to opt into the new CCA.

Because of the overall reduction in in-state hydro generation, in part due to the impacts of climate change, as well as the year-to-year volatility of hydro production, we believe that that the use of an "average hydro year" could under represent significant price and availability risks. We recommend that the Study undertake additional sensitivity analyses, which take into account hydro supply variability within California and the Northwest, and the impacts of such variability on overall energy prices.

4. Assess Customer Opt-in and Retention

The Study does not assess in detail issues around customer opt-in retention. Rather the Study assumes that 15% of all customers, across all classes, would opt to remain with PG&E. Under Scenario 1 of the Study, the overall 15% opt out of customers is questionable given the negative GHG impacts of this Scenario. Many cities within the CCA territory, especially those looking for higher (e.g., 100%) renewable options, may choose not to participate in a CCA that chooses to implement Scenario 1. Because of this high opt-out rate, the viability of a CCA could be significantly at risk.

Scenario 2 is likely to have a lower opt out rate, given the environmental and cost advantages over PG&E.

Regarding Scenario 3, significant portions of the residential customer base could have a strong interest in high GHG-free electricity and opt-up to 100% renewable. However, we believe that the costs associated with Scenario 3 are overly optimistic, and based on the experiences of other CCAs in the Bay Area, price parity or a slight increase in costs for Scenario 3 over standard PG&E rates are likely. Peninsula Clean Energy will be charging its 100% renewable product customers approximately 2% more than the standard PG&E rate. We also expect that under Scenario 3 conditions, a significant fraction of large commercial and industrial uses, as well as those who are direct access customers, would choose not to participate in the CCA. As a comparison, the Peninsula Clean Energy CCA Feasibility Study (2016) estimated a 25% opt out rate for a similar scenario for customers in the residential and small commercial sectors, and upwards of 50% opt out for large industrial and commercial customers. This level of opting out would significantly change the revenue and risk projections presented in the Study.

Direct access customers may have little incentive to opt into the CCA. However, the City's relatively small number of Direct Access customers (according to 2010 PG&E data), if accurate, means this could have a relatively small effect in Pleasanton. In San Mateo County, approximately 10% of the total load is consumed by direct access customers (Peninsula Clean Energy CCA Technical Study, 2016).

Opinion: Who wants Oakland to control our electric power?

 pleasantonweekly.com/news/2016/10/13/opinion-who-wants-oakland-to-control-our-electric-power

10/13/2016

News

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by [Jeb Bing](#) / Pleasanton Weekly

Windmills on Altamont Pass. (File photo)

Bruce Jensen and Tom Kelly probably regret that their first stop in promoting a county-run electric system to compete with PG&E was at last week's Pleasanton City Council meeting.

They left empty-handed with Mayor Jerry Thorne and council members criticizing almost everything about the plan that would turn over control of electric rates and usage to environmental thought leaders in Oakland, Hayward and Fremont. These three larger cities would have more than a 50% control over the joint powers agreement (JPA) that would run the new power agency.



Called the Community Choice Aggregation (CCA) program, it is designed to enable local jurisdictions like Pleasanton to meet the state's requirement that 33% of all electric power used in a community come from renewable clean energy sources by 2020 and 50% by 2030. The CCA program would procure electricity services with "cleaner and more renewable sources of power" than currently available from PG&E.

Established by the State Assembly in 2002, California has two active CCA programs in Marin and Sonoma counties and in downstate Lancaster. The city/county of San Francisco and San Mateo County are about to launch the program, and several other jurisdictions, including Santa Clara, Santa Cruz, Monterey and San Luis Obispo counties are exploring program possibilities.

But in talking up the program, Jensen and Kelly ran into a barrage of questions and unfavorable comments from the council, supported by a Pleasanton-backed independent study of the program by ESA Community Development.

The study showed risks for residents here to become part of a county-run energy agency, and not just because we are among the 10 of 13 cities in Alameda County that would be bound by what the three larger cities would determine with their majority rule of the JPA. ESA found shortcomings in the CCA's rate forecasting and its assessment of hydro-power availability and costs as well as the high costs of other renewables that would fuel the move away from PG&E's oil and natural gas sources of electricity.

In fact, Kelly, a consultant with the Sequoia Foundation, admitted under questioning by Councilman Arne Olson that the CCA would likely rely solely on wind and solar for the energy that will power Pleasanton customers when the system is fully established. It would not use power from the Diablo Canyon nuclear plant and probably could not find enough hydra-power to meet its needs. That would fit in with his Sequoia Foundation's mission to "hasten the transformation of the power supply to renewable energy sources."

The environmental conservation organization, based in La Jolla, is dedicated to research, public policy interventions and the application of solutions that address the environmental, occupational, demographic and genetic factors that adversely or beneficially affect human health.

Councilman Jerry Pentin noted that CCA plans to be generating 1,000 megawatts of electricity from renewable sources within 14 years, but called that figure misleading. He said there's no open space available to produce that much electricity from solar nor is it likely windmills can ever generate enough power to meet the demands of the Tri-Valley.

Councilwoman Kathy Narum pointed out that we rely on air conditioners during the hot summer months, probably much more than other cities that would be part of a JPA. She's concerned that an Oakland-run consortium would deprive electric customers here of an adequate supply when needed.

Other objections from the council included a provision in the proposed JPA that construction projects would require union labor and that PG&E is well underway to meet the state's clean energy plan and possibly at less costs.

Responding to Alameda County's representative Jensen's request that the Pleasanton council pass an ordinance by early December to join the JPA, the council indicated that won't happen.

"I'm sorry, but I think you have the cart before the horse," Olson said. "Creating a JPA should come after the response to our peer review studies of your plan."

Instead of scheduling a future meeting to consider the JPA bid, Pleasanton city staff plans to make its own independent study of the county's alternative energy plan available to other cities in Alameda County before Jensen and Kelly make more presentations about Community Choice.



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TO: CCE City Staff and City Steering Committee Representatives

FROM: Chris Bazar, Director, Community Development Agency
Bruce Jensen, Senior Planner
Shawn Marshall, CCE Consultant

DATE: November 8, 2016

RE: CCE Financing Requirements and Options

Background

The following is a detailed summary of capital and credit requirements for new Community Choice Energy (CCE) programs that is informed by the experiences of other multi-jurisdictional CCE programs in California. This framework will inform the discussions of the new East Bay Community Energy (EBCE) Board of Directors as it pursues agency working capital and longer term credit arrangements. It should be noted, however, that CCE credit terms/availability are rapidly evolving, and there may be other credit opportunities or structures the EBCE Board may wish to consider.

Financing for new, multi-jurisdictional CCE programs generally falls into three capital categories:

- 1) Seed Capital -- Initial program planning and start-up
- 2) Bridge Financing/Line of Credit -- Program launch/initial power contract(s)
- 3) Working Capital/Term Debt – for longer term EBCE operations, power projects

Seed Capital: Financing for pre-revenue start-up has generally been provided by local governments interested in forming a CCE program. In EBCE's case, the County of Alameda has stepped up to provide \$3.7 million in upfront monies to cover the costs of early planning, technical analytics, and the various tactical steps involved in EBCE formation and program implementation. As discussed in the JPA Agreement, this initial capital investment will be reimbursed to the County within 3 or less years of EBCE program launch and revenue.

Bridge Financing/Line of Credit: New CCE programs (and their JPAs) need to form independent, long-term banking and credit relationship(s) to move from initial start-

up into full operations. A bridge loan or initial line of credit covers pre-revenue, negative cash flow in the early stages of program launch and, most importantly, provides the capital necessary to sign contracts in the wholesale power market. EBCE cannot launch and begin serving customers until those contracts are signed and executed. The amount of early working capital that is needed will be dependent on EBCE's customer phasing plans, early staffing/Agency expenses, and the size and cost of the initial energy contract(s). Lines of credit can range from a low of \$5M to a high of \$20M or more depending on the program size at initial launch.

This debt is usually put in place approximately 6 months prior to program launch, is short-term (e.g., a 1-2 year line of credit), and is often provided by a lender, although it can be municipally or vendor financed as well.

Unless there is some other arrangement agreed to by the JPA Board, the amount of pre-revenue credit needed to support the new program will require a credit guaranty. This credit backing, analogous to a co-sign on a mortgage loan, is usually provided by one or more members of the CCE Agency. The guaranty requirement is released soon after revenues begin flowing (usually within 6-12 months) and the Agency is ready for longer-term debt and larger lines of credit.

Some notes regarding bridge financing/early working capital:

- This type of financing requires a guaranty to cover pre-revenue credit, which will be released when the CCE is generating solid revenues
- This debt will provide the credit backing required for the initial energy supply contract, utility bond and supplier deposits, and early operating expenses.
- This debt can be used to repay initial seed capital once the program is generating revenue
- During the time the CCE is seeking working capital, it will also want to consider other banking services such as deposit accounts, secured account ("lockbox") services and the like. If these services are provided by the lender as a bundled package with the loan, interest rates and terms are generally more favorable.

Longer Term Debt/Term Loans, Etc: Once the program is revenue-positive, fully independent, and operationally more mature, EBCE will want to consider longer-term debt, lines of credit and perhaps bond financing to support an expanded portfolio of energy contracts, local energy programs, and local power development.

Typically, this type of longer-term debt is used to refinance early working capital and, because it is backed by Agency revenues, does not have a credit guaranty requirement. This type of debt is generally offered at a stable, fixed rate that can be repaid over time and may be accompanied by a separate line of credit to serve as backing for power contracts. Existing CCE programs have

found it important to focus on building early program reserves in order to secure better credit terms and receive a credit rating which is required for bond financing.

It should be noted that CCE's can be very large with significant capital requirements, especially as the program matures. It is important to make sure the bank is large enough to finance your program over the long term. Banks need to live within their loan-deposit caps, so it is essential to ensure enough credit capacity for the program's long-term needs.

Underwriting Considerations

When a bank or other lender considers lending to a new CCE program, it will consider a number of factors including the management team: Does the Chairman, CEO, and other management team demonstrate knowledge of the power markets, power procurement, utility functions and energy programs? Does the team have a combination of relevant, seasoned experience and a spirit of innovation and entrepreneurship? Does it have political savvy and a robust regulatory function and marketing program?

The bank will also consider the program's revenue projections and financial modeling, which provides a detailed forecast of program expenses and revenues over a period of years. The knowledge and credibility of the author of the financial pro forma(s) and operating budget is very important. Finally, the bank will also consider the level of community support, number of local government members/ potential customers, and the efficacy of the JPA Board, governance structure and risk management controls in its underwriting process.

What Does this Mean for the Cities?

As noted earlier, Alameda County has committed to providing the upfront monies needed to support most of the pre-revenue expenses to get EBCE to launch. The debt that is contemplated above is that which is needed to support EBCE's initial power supply purchases and longer-term Agency operations.

Credit and financing is one of the first issues that the new EBCE Board will be addressing in the new year. As noted, there are a few ways to fulfill early credit needs, one of which MAY include some level of credit support (via a letter of credit) from member jurisdictions that are willing to participate. This would be a request, *not a requirement*, of EBCE Agency members.

A question has arisen about the disposition of a credit guarantee provided by a member agency if that agency decides to terminate JPA membership and participation. Per the EBCE JPA Agreement, here's how that is addressed:

- 1) The only opportunity for a member jurisdiction to withdraw from EBCE prior to launch of service is if the program can't beat PG&E on generation rates, level of renewables and GHG emissions. No credit will be spent (nor power contract signed) until EBCE has power supply proposals that say with certainty that these minimum thresholds can be met. If those thresholds are met, the member agencies are obligated to move forward. If the thresholds cannot be met, the line of credit will go unused and the County will be "out" its initial seed capital. We do not expect this to happen.

- 2) If a jurisdiction decides to terminate membership and participation after program launch, the status of the credit guarantee will be included with its pro-rata share of residual contact expenses and other carry-over costs associated with its departure. The good news is that the credit guarantee requirements don't remain in place for long (usually a year or less) and it's highly unlikely a city would leave within the first year. The cost and administrative considerations would make departure so soon after program launch difficult for the member agency.

If you have any questions about this information, please feel free to reach out to Bruce Jensen on our team by email or phone. As noted, credit and financing for the new Agency will be one of the early operational elements the EBCE Board will address.



MEMORANDUM

To: Bruce Jensen
Alameda County Planning Department

From: Mark Fulmer

Subject: **Response to Pleasanton Peer Review**

Date: October 11, 2016

Per your request, I have reviewed the June 13, 2016 Memorandum prepared by Jeff Caton of ESA Community Development entitled, “Review of the *Draft Technical Study for a Community Choice Aggregation Program in Alameda County* (Feasibility Study). Overall, most of Mr. Caton’s suggestions and recommendations are worth consideration by the Joint Power Authority (JPA) or CCA management (if the CCA moves forward), but none require revision or expansion of the final Feasibility Study.

In the remainder of this memo, I respond to Mr. Caton’s Findings and Recommendations in the same framework in which he presents them.

Findings

Risk assessment: Mr. Caton suggests that the Feasibility Study should have explored lower PG&E rates, higher renewable prices and costs and greater PCIA risk. While I agree that these are key variables, between the internally-consistent assumption sets used to forecast all three of these variables and the sensitivity cases, I believe that the Feasibility Study is sufficiently robust. With respect to some specific comments, I first note that while PG&E is larger, any “economies of scale of purchasing” are not pronounced. Most of PG&E’s forecasted generation costs are for projects that are in operation and/or under contract and whose costs are known. Thus, even if PG&E can get better deals on wholesale power, the impact would be marginal. Second, the assumed CCA renewable costs are consistent with published sources for contracts of similar sized agencies. Third, we modeled the PCIA from the bottoms-up so as to be consistent with the other elements of the forecast. While the PCIA will likely be more volatile than our forecast (which is accounted for in the sensitivity runs), given how it is calculated, past values and simple extrapolation do not provide meaningful insight into future PCIA trends.

Loads and forecasts: Mr. Caton found that the forecasted load might be on the low side, particularly if there is rapid increase in electrified transportation. If the Alameda CCA comes to fruition, CCA management should monitor transportation electrification trends and account for it in their ongoing procurement and business plans.

Power Supply and Rate Forecasting. First, Mr. Caton notes that Feasibility Study did not include a rates and bills analysis. I believe that the scope of work was correct in omitting this analysis, as it would be too detailed for a

feasibility study. Second, Mr. Caton discussed the three scenarios,¹ recommending that additional sensitivity analysis be conducted with respect to lower PG&E generation rates, higher renewable prices, higher PCIA charges, and hydro variability. Between the four scenarios analyzed, which were requested and specified by the Steering Committee, and the explicit sensitivity modeling conducted around PG&E rates, renewable prices, and PCIA, I believe that additional sensitivity runs are not needed. In addition, while Mr. Caton's observations that hydro output (and prices) could be volatile is true, the Feasibility Study concentrated on long-run averages rather than year-to-year detail. The Feasibility Study notes that even though a scenario shows CCA costs below PG&E's rates on average, there will likely be isolated years (such as during droughts) when this is not the case, and that the CCA management must be prepared for such occasions by (for example) maintain a cash reserve.

Alignment of the CCA with the City's Energy and Climate Goals. No comments.

Recommendations

Mr. Caton makes a number of recommendations for further study. In general, I concur with his recommendations and suggest that they be integrated into the CCA's procurement, implementation, and/or business plans.

Benchmark against other CCAs. I concur that it is wise to learn from, and collaborate with, other CCAs. Such action should be considered by the JPA when formed.

Rate Design Strategy. Mr. Caton notes that that well-designed rates are important for the success of the Alameda CCA. This is true. I note that in the Feasibility Study, we implicitly assume that the rates charged by the CCA would mirror PG&E's generation rates but for an equal percentage decrement. Details beyond that should be included in any implementation and/or business plan(s).

Assess Value and Risks of Hydro. Mr. Caton notes that there are certain risks associated with the acquisition of hydropower. There are risks, of course, with any particular generation resource, including hydropower. I concur that it is a good idea to address them when the CCA's procurement plan is developed. Still, I believe that the higher-level price sensitivity analyses conducted in the Feasibility Study is sufficiently robust to encompass hydropower price risk.

Opt-out/retention. Mr. Caton accurately notes that opt-out and retention can be impacted by CCA Rates relative to those of PG&E: if prices are higher than PG&E's, then greater opt-out could be expected. While this is of course reasonable, I note that there wasn't wholesale opt-out in MCE territory during periods that MCE's prices were greater than PG&E. My point being, that with an opt-out structure (rather than opt-in), it would take more than an isolated period of higher prices to markedly decrease the CCA participation. In addition, CCA rates that exceed PG&E's rates is a cost-management issue, which as noted in the Feasibility Study can be dealt with using good customer communications, a rate reserve fund, and sound procurement practices.

One point of clarification: The Feasibility Study assumes that current direct access (DA) customers remain on DA service. None are assumed to take power from the CCA.

Overall, most of Mr. Caton's recommendations valuable and are worth consideration by CCA management (if the CCA moves forward), but none require revision or expansion of the final Feasibility Study.

¹ As he was reviewing a Draft Feasibility Study that did not include the Scenario 4 Addendum, he did not comment upon Scenario 4.