



CITY OF HAYWARD

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Cover Memo

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DATE: July 11, 2016

TO: Council Sustainability Committee

FROM: Director of Utilities and Environmental Services

SUBJECT

East Bay Community Energy - Presentation of Technical Study

RECOMMENDATION

That the Committee reviews and comments on this report.

SUMMARY

The County of Alameda and the cities within the County are exploring the possibility of establishing a community choice aggregation (CCA) program also known as a community choice energy (CCE) program. The purpose of this report is to provide an overview of the technical study that has been prepared by the County to determine the feasibility of establishing a CCE program.

BACKGROUND

In June 2014, the Alameda County Board of Supervisors, allocated \$1.3 million to exploring the possibility of establishing a CCA program, which is being called East Bay Community Energy (EBCE). If established, EBCE would be a joint powers authority (JPA) that aggregates electricity demand within participating Alameda County jurisdictions in order to procure electricity for its customers. Pacific Gas & Electric Company would continue to provide customer billing, transmission, and distribution services.

On June 28, 2016, Council received an overview of the draft joint powers agreement and a brief overview of the technical study. The June 28 report and several other reports provided to Council and the Council Sustainability Committee are available at <http://www.hayward-ca.gov/cce> . Also available on this webpage is the June 29 letter sent to the County with Council's comments on the draft JPA.

DISCUSSION

On July 6, 2016, the County provided a revised draft of the JPA that addresses all three of the concerns identified in the City's June 29 letter. Section 4.2.1 was revised to state that both Directors and alternate Directors must be elected officials. Section 4.13 was revised to include term limits for the Chair and Vice Chair of the Board. The third item in the City's letter requested a change to the provision related to the possible withdrawal of a city prior to program launch may be of particular interest to the Committee. After cities join the JPA in October this year, the Authority will receive bids from potential power

suppliers. In the most recent draft of the JPA, Section 7.3 was revised as shown below:

“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 ~~15~~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 renewable energy than the incumbent utility.”

Regardless of the time allowed to make a decision, Hayward should be prepared to decide whether to remain a member of the JPA once the information related to the three criteria listed above is available. Would the Committee support remaining in the JPA if rates would be higher than PG&E for only a short period of time? Would the Committee recommend remaining in the JPA if EBCE would provide electricity with more GHG emissions or less renewable content than PG&E? What if EBCE is able to provide cleaner electricity than PG&E after the first few years? Staff would appreciate the Committee’s input on these questions.

Voting Shares Voting - Section 4.11.2 previously stated that two or more Directors may request a voting shares vote. The July 6, 2016 version of the JPA has been changed to state that four or more Directors may request a voting shares vote. Hayward’s objection to this change was voiced during a steering committee meeting on July 6 and during a meeting of city attorneys on July 7. If the JPA is not changed back to “two Directors”, staff could raise the issue on August 2, 2016, when the County Board of Supervisors will consider adoption of the JPA.

Technical Study - The County commissioned a Technical Study to determine the feasibility of establishing a CCA in Alameda County. The report (available at <http://www.hayward-ca.gov/cce>) 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 Study includes the following chapters:

Executive Summary

- 1 Introduction
- 2 Economic Study Methodology and Key Inputs
- 3 Cost and Benefit Analysis
- 4 Sensitivity of Results to Key Inputs
- 5 Macroeconomic Impacts
- 6 Other Risks
- 7 Other Issues Investigated
- 8 Conclusions

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 three scenarios

with varying levels of renewable energy:

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. The other 50% would be from large hydroelectric power to further reduce GHG emissions. However, large hydroelectric generation is not considered “renewable” for purposes of meeting the RPS.
3. **Ultra-Low GHG:** EBCE would provide 50% renewable energy in the first year and 80% by the fifth year.

Chapter 3 provides rate comparisons between PG&E and EBCE only for residential customers. No rates or rate comparisons are provided for commercial or industrial customers. Following is a brief summary:

	Scenario 1 Minimum RPS Compliance	Scenario 2 More Aggressive	Scenario 3 Ultra-Low GHG
Renewable Content	33% in 2020 & 50% in 2030	50% from 1 st year	50% from 1 st year & 80% by 5 th year
GHG compared to PG&E	Higher in every year	Higher for 1 st few years	Lower in every year
Anticipated Residential Rate Savings	7%	6.5%	3%

As shown in Figure 16 in the Technical Study, Scenario 1 provides no advantage over PG&E in terms of GHG emissions. Figure 18 in the Technical Study shows that Scenario 2 has higher or almost equivalent GHG emissions compared to PG&E in 2017 through 2024. This leaves Scenario 3 as the one option that provides for significant, near term GHG savings.

Chapter 4 includes a rate sensitivity analysis that shows how rates could be impacted by various factors, which is shown graphically on page twenty-nine. The base case assumes that the Diablo Canyon nuclear power plant will not continue to operate beyond 2025. On June 21, 2016, PG&E confirmed that Diablo Canyon will close by 2025. If Diablo Canyon did relicense, the sensitivity analysis shows that PG&E’s generation costs would increase and EBCE would be at a competitive advantage. The worst case scenario in the sensitivity analysis combines all the negative conditions, including the closing of Diablo Canyon, and shows the EBCE would have higher rates than PG&E starting in 2024.

Perhaps a larger concern with the closure of Diablo Canyon will be the fact that PG&E intends to replace Diablo’s generating capacity, about 2,160 megawatts, with new renewables. PG&E could have as much as 55% renewables by 2031. This means that EBCE will have a greater challenge competing with PG&E in terms of renewable content and meeting the RPS.

The Technical Study concludes that “a CCA in Alameda County appears favorable” in that rates would likely be competitive with PG&E. The report also concludes that providing electricity with fewer GHG emissions than PG&E may be somewhat challenging. Because PG&E sources much of its electricity from large hydroelectric and nuclear generators, the CCA will need to provide large percentages of renewable

and/or hydroelectric in order to outperform PG&E in terms of emissions.

The County established a deadline of June 15 for comments on the technical study. Staff submitted comments asking the County to include rate comparisons for commercial and industrial customers.

Comments from Others - The following entities have submitting written comments (available at <http://www.hayward-ca.gov/cce>) on the Technical Study:

The City of San Leandro has requested changes to the voting Shares Vote. Also, San Leandro has hired a consultant to do a peer review of the Technical Study.

East Bay Clean Power Alliance:

- Not enough local renewable generation is expected
- Most of job creation identified in the economic model is due to customers' bill savings
- The ability to forecast market conditions out to 2030 is questionable

IBEW 1245:

- Future PG&E rates and cost of solar power cannot be substantiated
- Future electric load is not accurate
- The study provides no assurance that EBCE can balance supply and demand
- There is no limitation on use of RECs (and there should be)
- The study does not anticipate sufficient local renewable generation
- A high PCIA should not be a "sensitivity". It should be expected.
- The inputs to the economic and jobs analysis are incorrect.

ECONOMIC IMPACT

As described in Chapter 5 of 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.

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 would likely 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.

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.

Purchasing: Consistent with the City's Environmentally Preferred Purchasing Policy.

EBCE would meet the environmental and economic priorities of its member agencies.

NEXT STEPS

The tentative deadline to join the JPA is October 31, 2016. In September/October, staff will present for Council's consideration an ordinance to join the JPA. The County's goal is to launch EBCE in the spring of 2017. Staff will continue to update the Committee as new information becomes available.

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

Approved by:



Fran David, City Manager