



DATE: July 8, 2019

TO: Council Sustainability Committee

FROM: Director of Public Works

SUBJECT: Possible Renewable Energy Product for Municipal Facilities

RECOMMENDATION

That the Committee reviews and comments on this report and provides direction to staff.

SUMMARY

East Bay Community Energy (EBCE) is considering offering its municipal members electricity from new renewable projects located in California at rates equal to those offered by Pacific Gas and Electric (PG&E). Hayward has the opportunity to provide early input to EBCE and to help shape the details of this program. Staff is seeking the Committee's comments in light of the City's existing goals related to renewable energy.

BACKGROUND

EBCE formed in 2016 as a joint powers authority to provide cleaner, greener energy at lower rates to Alameda County customers. EBCE started providing electricity to commercial and municipal accounts in June 2018 and to residential customers in November 2018. Information about EBCE is available on their website¹. Staff has provided many reports about EBCE to the Committee and Council, all of which are available on the City's website². The most recent report to the Committee, on March 11, 2019, included an update on EBCE's implementation of the Local Development Business Plan (LDBP), which provides a framework for accelerating the development of clean energy assets within Alameda County while providing for local economic benefits.

On December 6 2016³, Council adopted a goal to construct renewable energy facilities on City properties sufficient to achieve zero net energy (ZNE) on a portfolio-wide basis by 2025. The City currently produces enough electricity to satisfy approximately 56% of its

¹ <https://ebce.org/>

² <https://www.hayward-ca.gov/cce>

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=2898726&GUID=0BF9C4E8-2AA8-46A2-83CB-CEFEE8896B2A&Options=&Search=>

electricity needs and approximately 45% of its total energy needs (including both electricity and natural gas). Staff is actively working to identify and develop additional renewable energy projects to reach the ZNE goal by 2025.

On November 13, 2017⁴, the Committee considered a report about a potential product for municipal accounts that would be 100% renewable energy and local for a higher rate. At the time, EBCE estimated that this premium product would cost Hayward an extra \$10,000 to \$15,000 per year. The Committee was in support of the concept, but EBCE staff discontinued its effort to develop the product.

DISCUSSION

EBCE currently offers three products to all its customers:

Bright Choice – This standard service offers cleaner energy and rates that are 1.5% lower than PG&E. It is the default product for most member jurisdictions.

Brilliant 100 – This product is 100% carbon free, but includes electricity from large hydro-electric facilities, which are not considered “renewable” by the State of California. It is offered at rates equal to PG&E. Hayward chose Brilliant 100 as the default product for the community as well as for its municipal facilities.

Renewable 100 – This product is 100% renewable energy sourced from solar and wind power generated in California. The rate is one penny per kWh more than Brilliant 100 or approximately \$4 more per month for the average residential customer.

EBCE is now considering offering its municipal members electricity from new renewable projects located in California at rates equal to those offered by PG&E. The product would be 100% renewable energy at rates equal to Brilliant 100 and PG&E. If EBCE were to offer this product to its member jurisdictions, it would negotiate with new renewable energy facilities for long term power purchase agreements. Participating cities would need to commit to purchasing the power for an extended period of time – possibly 20 years. The primary difference between the current concept and the proposal presented in November 2017 is that the previous proposal had greater emphasis on local energy and identified two specific projects in Alameda County.

Staff seeks Committee direction on the following:

1. Given Hayward’s intent to build additional renewable energy generation capacity on its own facilities and its goal of achieving ZNE by 2025, the City can consider a long-term purchase agreement for renewable energy from EBCE.

⁴ <https://hayward.legistar.com/LegislationDetail.aspx?ID=3209950&GUID=6D01A163-07B6-40ED-8AA0-8E6B2DA98ED3&Options=&Search=>

Recommendation: If the Committee wishes to explore a long-term purchase agreement, staff recommends an agreement for no more than 20% of its electricity needs. While the City is currently producing approximately 56% of its electricity demand, the remaining 24% may be provided by solar projects identified in the Capital Improvement Program.

2. It may be cost-effective for the City to build renewable energy generation capacity at some of its larger properties and less cost-effective on smaller sites. If it is less expensive to purchase renewable energy through EBCE, the City can consider doing so and revisit its ZNE goal.

Recommendation: Staff can re-evaluate the solar potential on various City facilities with consideration for the most appropriate tariff for each facility. If the City purchases 20% of its electricity through EBCE's new 100% renewable product, then the City could modify its 2025 goal.

3. The option of adding solar and possibly battery storage to some facilities so that they may have the ability to operate during a failure or shutdown of the electric grid can be explored.

Recommendation: Existing facilities can be evaluated to determine the feasibility of adding solar PV, and new facilities can be equipped with solar PV and electric vehicle fast charging stations to enable them to operate during a failure or shutdown of the electric grid. Given the expense associated with battery storage, installation of this technology can be pursued only when grant funds are available.

4. The option to replace the City's natural gas equipment with electric to focus on overall greenhouse gas emissions from building energy can be explored.

Recommendation: Given that the City is currently purchasing 100% carbon free electricity, staff can prioritize investment in electric heating and water heating equipment over investment in solar.

5. Regardless of the City's plans, the City can support EBCE's new initiative.

Recommendation: Even if the City only enrolls a few accounts in EBCE's new product, other cities may enroll more accounts, which would help support the program.

ECONOMIC IMPACT

EBCE estimates that to serve all municipal accounts in EBCE's territory, would purchase approximately 135 GWh each year from new renewable energy (wind and solar) facilities. Some of the new renewable energy facilities may be located within Alameda County and may have a positive impact on the local economy.

FISCAL IMPACT

EBCE's municipal renewable product would be offered at the same rate as Brilliant 100, so there would be no change in the electricity rates paid by Hayward. Hayward currently spends approximately \$2.5 million per year on electricity and natural gas.

STRATEGIC INITIATIVES

This agenda item does not directly relate to one of Council's three Strategic Initiatives.

SUSTAINABILITY FEATURES

While the electricity currently purchased through EBCE for City facilities is 100% carbon free, a 100% renewable product would help Hayward reduce its reliance on power from large hydro-electric facilities and would support the development of new renewable energy facilities in California.

PUBLIC CONTACT

There has been no public contact made regarding a possible renewable energy product for municipal facilities.

NEXT STEPS

Upon on direction from the Committee, staff may continue to work with EBCE to develop details of a renewable energy product for municipal accounts

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Approved by:



Kelly McAdoo, City Manager