

DATE: October 15, 2020

TO: Council Sustainability Committee

FROM: Director of Public Works

SUBJECT: Default Electricity Product Choices from East Bay Community Energy

RECOMMENDATION

That the Council Sustainability Committee (CSC) reviews and comments on this report and provides a recommendation to Council.

SUMMARY

When East Bay Community Energy (EBCE) launched in 2018, Council chose Brilliant 100 (100% carbon free electricity) as the default product for Hayward. The rates for Brilliant 100 will be increased effective January 1, 2021. This report presents options for a new default product and the impacts of each option for the Committee to consider.

Staff is seeking two recommendations from the Committee:

- 1. A ranked preference of possible choices for a default product for the community, to be effective January 1, 2021; and
- 2. A preferred product for Hayward's municipal facilities.

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 Council Sustainability Committee and Council, all of which are available on the City's website².

¹ <u>https://ebce.org/</u>

² https://www.hayward-ca.gov/your-government/departments/utilities-environmental-services/east-bay-community-energy

When EBCE launched in 2018, three electricity products were offered:

- <u>Bright Choice</u> The default for most communities. Cleaner electricity (38% renewable) and 1.5% lower rates than PG&E.
- <u>Brilliant 100</u> 100% carbon free electricity (40% renewable and 60% large hydroelectric) at rates equal to PG&E.
- <u>Renewable 100</u> 100% renewable electricity for one penny per kWh more than PG&E rates.

On March 6, 2018, Council voted to designate Brilliant 100 as the default product for nonresidential customers in Hayward. Council also chose to select Brilliant 100 for all municipal facilities. Non-residential accounts and municipal accounts began receiving EBCE service in June 2018. On May 22, 2018, Council adopted a resolution designating Brilliant 100 as the default electricity product for Hayward's residential customers. Residential accounts began receiving EBCE service in November 2018. Council chose Brilliant 100 as the default because it would help Hayward meet its GHG emissions reduction goals and because Hayward customers would experience no change in the cost of their electricity.

There are approximately 48,000 residential accounts in Hayward, including approximately 14,000 California Alternate Rates for Energy (CARE) customers and 500 Family Electric Rate Assistance (FERA) customers. The CARE and FERA programs offer discounts to income-qualified customers. Also, approximately 4% of customers in the EBCE territory are Medical Baseline customers. They pay special rates due to equipment or heating/cooling needs related to medical conditions. All EBCE customers who were enrolled in CARE, FERA, or Medical Baseline have remained enrolled in these discount programs after the switch to EBCE and they have been enrolled in Bright Choice.

On June 16, 2020³, Council introduced and on June 23, 2020⁴, Council adopted an ordinance amending Hayward's Climate Action Plan and General Plan to include the following goals:

- reduce emissions by 20% below 2005 levels by 2020
- reduce emissions by 30% below 2005 levels by 2025
- reduce emissions by 55% below 2005 levels by 2030
- work with the community to develop a plan that may result in the reduction of community-based GHG emissions to achieve carbon neutrality by 2045.

On July 13, 2020⁵, the Committee received a report outlining the financial challenges experienced by EBCE and the reasons why Brilliant 100 may be discontinued. The report presented the following options for Hayward's default product:

³ <u>https://hayward.legistar.com/LegislationDetail.aspx?ID=4568609&GUID=46FF5863-9294-4217-9119-9631D7A2BB6F&Options=&Search=</u>

⁴ https://hayward.legistar.com/LegislationDetail.aspx?ID=4576651&GUID=4E2F5527-D216-4472-BB79-5D9A37A41AE8&Options=&Search=

⁵ https://hayward.legistar.com/LegislationDetail.aspx?ID=4590667&GUID=656BE636-73B2-4D83-AD63-79E8C5B8B5C2&Options=&Search=

- 1. Change Hayward's default to Bright Choice effective January 1, 2021.
- 2. Keep Hayward's default as Brilliant 100 through the end of 2021 and then choose either Bright Choice or Renewable 100 effective January 1, 2022.
- 3. Change default to Renewable 100 effective January 1, 2021.

The Committee made the following comments:

- Raising rates now would be unpopular and keeping Brilliant 100 or switching to Renewable 100 would both result in higher rates.
- Hayward should try to avoid backsliding on the reductions made in Hayward's GHG emissions.
- Hayward cannot meet its GHG reduction goals without carbon free electricity.
- One option may be to ask EBCE to keep Brilliant 100 & add nuclear to supplement or replace the large hydroelectric power in the mix.
 - If nuclear is added to Brilliant 100, then it is likely the rates could remain unchanged.
 - Nuclear could be added if EBCE accepts PG&E's excess nuclear energy.
 - Nuclear could only be included until Diablo Canyon is decommissioned in 2025.
- Municipal Accounts should be switched from Brilliant 100 to Renewable 100
 - This action is called for in the City's Strategic Roadmap.
 - The annual increase in cost would be approximately \$70,000 per year.
 - The next phase of solar at WPCF will reduce the City's overall electricity costs.

On July 14, 2020⁶, Council discussed Hayward's options for a new default product and made the following comments:

- Default product should not increase Hayward's emissions.
- A rate increase for customers is not desirable.
- Nuclear power may be necessary to maintain a carbon free product and not increase rates.
- Customers could be encouraged to opt up to Renewable 100.
- Council members expressed concerns with including nuclear, but noted that Hayward customers received nuclear power prior to the switch to EBCE.

⁶ <u>https://hayward.legistar.com/LegislationDetail.aspx?ID=4590672&GUID=90E5FCBF-BB73-46C6-9492-7C526C953EBB&Options=&Search=</u>

• Renewable 100 would be the most environmentally friendly option and customers might be willing to pay the premium.

After the July 14 Council meeting, EBCE staff indicated they could explore the possibility of including nuclear among the product options, but only if formally requested to do so. On August 26, 2020, staff sent a letter to EBCE requesting that the Board offer a product that includes nuclear if it would mean that there could be a 100% carbon free product at rate parity with PG&E. The City of Pleasanton submitted a similar letter to EBCE.

On September 14, 2020⁷, the Committee received a report on Hayward's 2018 GHG Inventory showing that overall emissions had been reduced by 21.6% since 2005. The report acknowledged that Hayward's goal of a 20% reduction by 2020 had been reached two years early, due in part to Hayward customers receiving Brilliant 100 electricity. As noted in the report, if Hayward had Bright Choice as the default product in 2018, the reduction would have been 20.6% compared to the 21.6% achieved with Brilliant 100.

DISCUSSION

On September 16, 2020, the EBCE Board discussed options for Brilliant 100 for 2021. The options presented to the Board were:

- 1. Close the Brilliant 100 rate.
- 2. Offer Brilliant 100 at a cost premium above PG&E rates.
- 3. Offer a new product that is at cost parity with PG&E and 100% carbon free including nuclear power to customers in a jurisdiction where Board/Council have voted to accept nuclear allocation.

Regarding option two, EBCE staff noted that the premium for Brilliant 100 may be between 2% and 5%, depending on PG&E's generation rate in 2021 and the size of the large hydro allocation that EBCE might accept from PG&E.

Regarding option three, EBCE staff indicated that on August 27, 2020, PG&E submitted an Advice Letter to the California Public Utilities Commission (CPUC) requesting permission to offer allocations of nuclear and large hydro power in 2021, 2022, and 2023. PG&E requested the CPUC decide by October 31, 2020. PG&E's request did not include the potential size of the nuclear and large hydro power allocations.

Six people spoke in opposition to option three citing concerns about EBCE's reputation as a clean power provider and that nuclear is not clean. Board members representing the cities of Albany, Pleasanton, Livermore, and Newark expressed support for nuclear being an option from which cities may select a default product.

⁷ <u>https://hayward.legistar.com/LegislationDetail.aspx?ID=4640826&GUID=10F65424-CD3A-4E36-BE9E-D66D415B8314&Options=&Search=</u>

On September 25, 2020, EBCE's Executive Committee⁸ discussed Brilliant 100 and the EBCE staff presentation focused on three questions that came up during the September 16 Board meeting. The questions and EBCE staff's responses are as follows:

1. How would a third product be presented in customer mailers such as the Joint Rate Mailer and the Power Content Label?

Staff's Response: The Joint Rate Mailer⁹ and the Power Content Label¹⁰, staff noted that the tables indicating the power mix for each product would be customized for the cities that have selected the third product.

2. What would be the cost for the Agency to pay the premium for a Brilliant 100 product that is 100% carbon-free at cost parity to PG&E and does not include nuclear power?

Staff's Response: Regarding the cost to EBCE if it were to absorb the premium for a Brilliant 100 product that is 100% carbon-free at cost parity to PG&E and does not include nuclear power, staff indicated the cost in 2021 would be approximately \$3 million. Staff also noted that the PCIA is likely to increase in 2021, which would increase this figure.

3. If a third product is approved, what happens if more nuclear is allocated to EBCE than is needed to fulfill the load for this third product?

Staff's Response: Staff estimates the 2021 nuclear allocation available from PGE& could be 1,900 gigawatt hours (GWh). Given that the current load for Brilliant 100 is approximately 903 GWh and 36% must come from renewables, the carbon free content that could be nuclear would be approximately 578 GWh. This means that EBCE would have an excess of approximately 1,300 GWh to sell to a third party.

Six people spoke during public comments and all opposed the idea of EBCE accepting nuclear into the power mix. Some of the speakers noted that EBCE had \$20 million more profit than anticipated in the past year and that EBCE could use this surplus to cover the \$3 million needed to keep Brilliant 100 nuclear free.

There was some support among Board members to bring to the full Board the option of subsidizing Brilliant 100 so that it could be maintained at rate parity with PG&E and not include nuclear power. EBCE staff indicated they would present this option to the Board in October, but noted that this is a decision that may need to be made every year and that depending on Brilliant 100 to meet greenhouse gas reduction goals is not sustainable. Staff

⁸ The Executive Committee of the EBCE Board meets monthly and its members are Alameda County Supervisor Scott Haggerty, Berkeley Mayor Jesse Arreguin, Emeryville Council Member Dianne Martinez, Oakland Council Member Dan Kalb, and the Chair of the Committee is Hayward Council Member Al Mendall.

⁹ EBCE's 2019 Join Rate Mailer is available at <u>https://ebce.org/uploads/jrm-a-1x-2020.pdf</u>

¹⁰ EBCE's Power Content Label is available at <u>https://ebce.org/our-power-mix/</u>

also said that they intend to bifurcate the product decisions for the Board so that on October 21, the Board would decide on the rate increase for Brilliant 100 and that on November 18, the Board would vote on the options or products from which cities could choose.

In summary, staff has identified the options below that may be available for Hayward's default product.

- A. 100% carbon free product with nuclear
- B. Renewable 100
- C. Brilliant 100 with rate increase
- D. Brilliant 100 with subsidy
- E. Bright Choice

The difference in rates are provided below in the Economic Impact section of this report. Staff recommends the Committee indicate a ranking of preferences. A 100% carbon free product with nuclear will only be offered if the EBCE Board approves the product offering at their meeting on October 21, 2020. Also, it is possible that the Brilliant 100 product will be discontinued altogether.

Following are some considerations for each of the options:

- A. 100% carbon free product with nuclear
 - a. **Rates:** Rates would be equal to PG&E rates.
 - b. **Energy Mix:** This product would consist of 35.8% renewables, the minimum required by the state's Renewable Portfolio Standard (RPS), and the remainder (64.2%) would be nuclear.
 - c. **GHG Emissions:** Selection of this product would prevent backsliding on the reductions in GHG emission achieved to date.
 - d. **Certainty:** This product will only be offered if approved by the Board. The Board's vote on this option may not be until November 18, 2020.
 - e. **Other:** Diablo Canyon is scheduled to close in 2025, so nuclear power may be available to EBCE for 2021 through 2024. PG&E's current request is to make nuclear power available through 2023. In 2018, before Hayward customers began receiving EBCE service, their PG&E power included 34% nuclear. In 2019, PG&E's mix included 44% nuclear.
- B. Renewable 100
 - a. **Rates:** Rates would be 8 to 9% more than PG&E rates.
 - b. **Energy Mix:** Renewable 100 is sourced from 50% solar and 50% wind from California.
 - c. **GHG Emissions:** Selection of this product would prevent backsliding on GHG emission reductions.
 - d. **Certainty:** Renewable 100 will continue to be offered for the foreseeable future.

- e. **Other:** This is the default product for the City of Piedmont. If Renewable 100 is chosen as the default for Hayward, CARE, FERA or Medical Baseline could remain with Bright Choice. Approximately 25% of Hayward's residential customers receive CARE, FERA or Medical Baseline discounts. There are likely many more customers that are eligible for CARE/FERA/Medical Baseline, but they may be unaware of the programs and have not subscribed. There are also many residential customers that are just above the income thresholds for CARE and FERA so they do not qualify for the discount, but they may still experience financial challenges. Even for residential and commercial customers who have managed to maintain their income during the pandemic, there may be some who will argue that the general current conditions make this the wrong time to increase rates. Customers would have the opportunity to opt down to Bright Choice, but it is possible that some customers would express their displeasure by opting out of EBCE entirely.
- C. Brilliant 100 with Rate Increase
 - a. **Rates:** Rates would be 2 to 5% more than PG&E rates. The exact percentage may be decided by the Board on October 21, 2020.
 - b. **Energy Mix:** In 2019, Brilliant 100 was 75% renewable and 25% large hydro. As of July 1, 2020, renewables were reduced to match the RPS minimum of 33%. In 2021, the RPS will increase to 35.8%.
 - c. **GHG Emissions:** Selection of this product would prevent backsliding on GHG emission reductions. If offered, the product will continue to be 100% carbon free.
 - d. **Certainty:** The Board may decide to discontinue Brilliant 100 as early as December 31, 2020. EBCE staff has indicated that one option may be for EBCE to offer only two products (Bright Choice and Renewable 100).
- D. Brilliant 100 with Subsidy
 - a. **Rates:** Rates would continue to be equal to PG&E rates.
 - b. **Energy Mix:** In 2021, Brilliant 100 would have 35.8% renewables (the RPS minimum) and the remainder would likely be large hydro.
 - c. **GHG Emissions:** Selection of this product would prevent backsliding on GHG emission reductions. If offered, the product will continue to be 100% carbon free.
 - d. **Certainty:** The Board will discuss this option at their meeting on October 21, 2020.
 - e. **Other:** If the Board votes to continue to offer Brilliant 100 with no nuclear and maintain the rates at parity with PG&E, it is likely they will not allow any new customers to enroll in the product. If this is the case, then Council would need to select a new default product for new customers in Hayward.

- E. Bright Choice
 - a. **Rates:** Rates would be 1% less than PG&E rates.
 - Energy Mix: In 2019, Bright Choice was 85% carbon free (60% renewable, 25% large hydro, 13% unspecified, and 1% nuclear¹¹). As of July 1, 2020, Brilliant 100 is now a minimum of 50.3% carbon free power.
 - c. **GHG Emissions:** Selection of this product would result in an increase in Hayward's GHG emissions.
 - d. **Certainty:** Bright Choice will continue to be offered for the foreseeable future.
 - e. **Other:** This is the default product for most EBCE jurisdictions.

<u>*Recommendation*</u> – Staff recommends that the Committee:

- 1. Recommend to Council a ranking of preferred products for the default product for the Hayward community.
- 2. Recommend to Council that Hayward's municipal accounts be switched to Renewable 100.

ECONOMIC IMPACT

The following cost comparisons were provided by EBCE in the September 16 Board report and reflect total EBCE charges for average customers in three different customer classes.

Table 1. Comparison of EBCE Product Costs

Customer Class	Bright Choice (1% discount)	PG&E	100% Carbon- Free with Nuclear	Brilliant 100 (2% premium)	Brilliant 100 (5% premium)	Renewable 100
Residential	\$44.21	\$44.66	\$44.66	\$45.55	\$46.89	\$48.46
Small Commercial	\$255.85	\$258.43	\$258.43	\$263.60	\$271.35	\$281.13
Large Commercial	\$35,411.02	\$35,768.71	\$35,768.71	\$36,484.08	\$37,557.15	\$38,715.81

FISCAL IMPACT

¹¹ The 1% nuclear identified in the 2019 *Bright Choice* energy supply is due to EBCE's contracts with Asset Controlling Suppliers (ACS), the vast majority of which involve large hydroelectric resources from the Pacific Northwest. Generally, ACS resources are not traceable to a specific individual facility as they manage "fleets" of hydroelectric dams. Since there are also nuclear power plants in the area, a very small percentage (i.e., ~1%) of nuclear power was required to be included by the most recent reporting guidelines. EBCE has not contracted for any unit-specific nuclear resources.

In addition to Brilliant 100 being the default product for the community, the City has approximately 450 municipal accounts enrolled in Brilliant 100. (The City's nine accounts that are part of the RES-BCT¹² arrangement are not enrolled in EBCE.) The City spends approximately \$2.2 million annually on electricity. For the City's accounts that are enrolled in EBCE (Brilliant 100), the City spends approximately \$558,000 per year in generation charges. If the City keeps its accounts enrolled in Brilliant 100 and rates are increased by 3%, annual costs will increase by \$17,000 to approximately \$575,000. If the City's accounts are changed to Renewable 100, then annual costs would increase by approximately \$71,000 to \$629,000. If municipal accounts are changed to Bright Choice, annual costs would be \$552,000. These estimates are based on 2019 expenditures and do not account for annual increases that result from increases in PG&E and EBCE rates.

Approximate Annual Costs	
Current spending on City accounts enrolled in Brilliant 100	\$558,000
If City keeps its accounts enrolled in Brilliant 100	\$575,000
If City's accounts are changed to Renewable 100	\$629,000
If City's accounts are changed to Bright Choice	\$552,000

Staff recommends switching all municipal accounts to Renewable 100. The Phase 2A solar project (600kW) completed in February this year is projected to save the City approximately \$150,000 in energy costs, which will more than offset the \$71,000 premium for Renewable 100. In addition, when the solar on the Library is connected to the grid, staff estimates it will save the City approximately \$30,000 in energy costs. As noted below, the purchase of 100% renewable energy is called for in the City's Strategic Roadmap, which was approved by Council in January this year.

STRATEGIC ROADMAP

This agenda item relates to the Strategic Priority of Combat Climate Change. Specifically, this agenda item relates to the implementation of the following project:

- Project 2: Work with EBCE to transition citywide electricity use to 100% carbon free (beginning in FY21)
- Project 3: Transition electricity use in city operations to 100% renewable energy (beginning in FY22)
- Project 4: Adopt and implement 2030 GHG Goal and Roadmap (beginning in FY21)

SUSTAINABILITY FEATURES

Community choice energy was identified in the City's Climate Action Plan as the program with the greatest potential to reduce community-wide GHG emissions. As noted above,

¹² RES-BCT is the renewable energy self-generation bill credit transfer program. It is a PG&E program that allows excess bill credits from renewable energy generation at the Water Pollution Control Facility to be applied to other City facilities.

Hayward's participation in EBCE has resulted in the 2020 GHG reduction goal being met two years early.

In addition to EBCE's efforts to deliver electricity that is cleaner than PG&E, EBCE is actively implementing its Local Development Business Plan (LDBP), which includes programs for building electrification and \$4.6 million for the development of electric vehicle charging infrastructure throughout Alameda County in 2020-2021. Full implementation of the LDBP is expected to result in the development of approximately 400 megawatts of new renewable energy facilities by 2025, which would result in significant further reductions in GHG emissions.

PUBLIC CONTACT

The EBCE Board discussed the nuclear allocation at several meetings and on April 22, 2020, the Board declined to accept an allocation of nuclear energy attributes from PG&E. There was significant public comment on the nuclear allocation with most speakers in opposition to include nuclear in EBCE's power mix.

The EBCE Board discussed rates during their meetings on May 20, 2020 and June 17, 2020. EBCE facilitated a Public Comment Period from Friday, May 22, 2020 through Sunday, June 7, 2020; hosted two online webinars on Tuesday, June 2 and Wednesday, June 3; and hosted an audio-only meeting on Friday, June 5. There were many public comments on EBCE's budget during the June 17 Board meeting and several people made comments regarding Brilliant 100. All the speakers were in favor of phasing out Brilliant 100. Comments included:

- the use of large hydro-electric power perpetuates environmental racism
- if people want electricity with low GHGs, they should go with Renewable 100
- large hydro is a false solution while renewable energy creates local jobs

During the September 15, 2020, Council meeting, three people spoke against the idea of including nuclear in the power mix for Hayward and/or EBCE. Agreements included:

- Accepting nuclear would tarnish EBCE's reputation as a clean power provider.
- Accepting nuclear power would be a violation of environmental justice principles because waste is often dumped in indigenous communities.
- EBCE should not bail out PG&E by taking their nuclear power.
- Most CCAs not accepting nuclear.
- The current problem is the Power Charge Indifference Adjustment (PCIA). Accepting nuclear takes EBCE out of the fight regarding the PCIA.

During the September 16, 2020, EBCE Board meeting six people spoke against the idea of accepting nuclear.

NEXT STEPS

On October 21, 2010, the EBCE Board will vote on whether to keep Brilliant 100 at a subsidized rate to maintain price parity; or to increase the rate 2-5%; or to end Brilliant 100

entirely. On November 17, 2020, Council will consider Hayward's default product for the community as well as for municipal accounts. On November 18, depending on the outcome of the October meeting, the EBCE Board may be asked to decide whether to accept the nuclear allocation. On December 16, 2020, the EBCE Board could formally accept Hayward's choices. Staff plans to work with EBCE to do significant outreach to Hayward customers prior to the new product taking effect January 1, 2021.

Prepared by: Erik Pearson, Environmental Services Manager

Recommended by: Alex Ameri, Director of Public Works

Approved by:

Vilos

Kelly McAdoo, City Manager