



Staff Report Item 11

TO: East Bay Community Energy Board of Directors

FROM: Nick Chaset, Chief Executive Officer

SUBJECT: **Rate Discount and Power Content Guidelines**

DATE: February 7, 2018

Staff Recommendation

- A. Approve EBCE to offer Phase 1 customers a 2% discount on Bright Choice rate option and no discount on Brilliant 100 rate option
- B. Approve minimum power content guidelines for Bright Choice and Brilliant 100
 - a. Bright Choice: 35% RPS Eligible Renewables, 35% Carbon-free (total of 70% Carbon-free)
 - i. Renewable and Carbon-free power content being set is a minimum threshold which EBCE will seek to beat when procuring energy
 - b. Brilliant 100: 40% RPS Eligible Renewables, 60% Carbon-free (total of 100% Carbon-free)
 - i. Renewable power content being set is a minimum threshold which EBCE will seek to beat when procuring energy
- C. Provide feedback on Energy Product Roadmap, including
 - a. Offering 3rd product at Phase 2 launch focused on funding community benefits
 - b. Offering 100% renewable energy product for large commercial and municipal accounts focused on building new renewable projects for specific large loads in late 2018/early 2019
 - c. Offering 100% Community/Shared renewable energy product in 2019

Background

At the January 17, 2018 EBCE Board of Directors meeting, several rate discount and energy content options were presented, each with an associated review of the cost implications of the particular choice. Input from the Board of Directors was solicited on what priorities EBCE should focus on when considering the trade-offs between rate discount, energy content and surplus. Board comments generally focused on the importance of offering energy products that

are less expensive than PG&E and deliver lower carbon emissions. During this discussion, it was noted that opt-out rates for new CCAs don't have a direct relationship to rate discounts, as both Peninsula Clean Energy and Silicon Valley Clean Energy had opt-out rates below 3% while having rate discounts of 5% and 1% respectively.

Discussion

After the January 17, 2018 Board Meeting, EBCE staff continued to review the financial implications for EBCE of a range of rate discount options and power content scenarios. EBCE staff also considered the direction from the Board that offering a carbon-free energy product at a cost-effective rate would align well with the Climate Action Plans of individual JPA member jurisdictions.

In an effort to balance the need to offer EBCE customers a compelling value proposition, build a strong financial position, support carbon emissions reductions and make investments in community development, EBCE staff has developed the following recommendations for Board approval.

Power Content Recommendation

Bright Choice

Staff recommendation is to set Bright Choice, which is EBCE's planned default energy product for Phase 1, power content at levels that are just slightly better than PG&E's Power Content. The Bright Choice power content proposal is for 35% Renewable and 35% Carbon-free. As a reference, below is PG&E's current power content.

Figure 1 - PG&E Power Content

2016 POWER CONTENT LABEL		
Pacific Gas and Electric Company		
ENERGY RESOURCES	Power Mix	2016 CA Power Mix**
Eligible Renewable	33%	25%
Biomass & biowaste	4%	2%
Geothermal	5%	4%
Eligible hydroelectric	3%	2%
Solar	13%	8%
Wind	8%	9%
Coal	0%	4%
Large Hydroelectric	12%	10%
Natural Gas	17%	37%
Nuclear	24%	9%
Other	0%	0%
Unspecified sources of power*	14%	15%
TOTAL	100%	100%

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.

For specific information about this electricity product, contact: **Pacific Gas and Electric Company**
415-973-0640

For general information about the Power Content Label, please visit: <http://www.energy.ca.gov/pcl/>

For additional questions, please contact the California Energy Commission at: 844-454-2906
psdprogram@energy.ca.gov

PG&E’s updated power content label will not be available until late 2018 - the California Energy Commission published this 2016 Power Content Label in September 2017. PG&E has reported lower carbon content in regulatory filings, but the Power Content Label is the industry standard for assessing power content, and so EBCE staff believes it is the best metric to use as the basis for setting EBCE’s power content. In addition to evaluating PG&E’s power content, EBCE staff also evaluated the financial impact of a number of power content scenarios to determine what is the maximum quantity of renewable and carbon-free energy that can be procured while still ensuring EBCE remains on strong financial footing.

Table 1 - Comparison of Power Content on EBCE Finances

Option	70%	75%	80%	80%
RE	35%	40%	35%	40%
Carbon-free	35%	35%	45%	40%
Surplus (% change) (2019)	n/a	- 3.77%	- 6.60%	- 7.55%

Given the need to balance the priorities of beating PG&E on carbon-free energy and building a strong financial position, EBCE staff recommends focusing on just slightly exceeding PG&E’s level of carbon-free content at launch for Bright Choice. Additionally, in an effort to also offer a cost competitive product that also far exceeds PG&E’s carbon-free content, EBCE staff is recommending a Brilliant 100 product that focuses on delivering carbon-free energy instead of 100% renewable energy, but at a cost that is on par with PG&E.

Brilliant 100

Staff recommendation is to set Brilliant 100, which is EBCE’s planned opt-up energy product for Phase 1, power content to be 100% carbon-free. Within this 100% carbon-free product, the planned ratio of renewable to carbon-free energy is proposed to be a minimum of 40% renewable and 60% carbon-free. Staff’s goal here is to focus on delivering an energy product that offers premium value at a cost competitive rate so that customers who prioritize deep carbon emissions reductions can do so without paying more. EBCE does plan to offer a 100% renewable rate later in 2018, and provides a description of the planned product roadmap later in this memo.

Rate Discount Recommendation

Bright Choice

Staff recommendation is to set Bright Choice, which is EBCE’s planned default energy product for Phase 1, at a 2% discount to the PG&E’s generation rate available to the EBCE customer at the time of phase-in to EBCE service.

To arrive at this level, EBCE analyzed what the impact of a 2% and a 4% rate discount would be on the amount of surplus (or net revenue) that EBCE would expect to generate in 2018 and 2019. EBCE used the proposed power content outlined above as the baseline for this analysis. EBCE also analyzed what the relative savings of these two discount rates would be for three types of customers: residential, small commercial and large commercial.

Table 2 - Rate Discount Comparison

	2018	2019
Rate Discount	2% → 4%	2% → 4%
% in Revenues	3% reduction in revenues	3% reduction in revenues
% in Debt	6% increase in debt requirements	no increase in debt requirements
% in Surplus (Deficit)	50% decrease in surplus	22% decrease in surplus

Table 3 - Customer Savings Comparison

	Estimated Annual Savings	
	2%	4%
Residential	\$12	\$16
Small Commercial	\$56	\$75
Large Commercial	\$19,300	\$25,700

Based on the above assessment, EBCE generates over 20% more surplus revenue after a full operating year (2019) when offering a lower discount while the vast majority of EBCE’s customers (over 550,00 accounts) see no more than a \$20 a year savings difference. Additionally, recent experiences at Bay Area CCAs have shown that the level of discount offered does not result in a major difference in level of opt-out.

Table 4 - Comparison of Discount to Opt-Out for Most Recent Bay Area CCAs to Launch

	Peninsula Clean Energy	Silicon Valley Clean Energy
Discount at Launch	5.00%	1.00%
Opt Out (% of accounts)	2%	2.75%

Brilliant 100

Staff recommendation is to set Brilliant 100, which is EBCE’s planned opt-up energy product for Phase 1, at par with PG&E’s generation rate available to the EBCE customer at the time of phase-in to EBCE service. To arrive at this recommendation, EBCE analyzed the cost to procure the constituent energy products that are being recommended for Brilliant 100 - 40% Renewable and 60% carbon-free energy - and compared them against other power content mixes to assess their impact on EBCEs finances. For the purposes of this analysis, EBCE staff assessed what discount or premium would be needed to ensure Brilliant 100 would have no incremental impact on EBCEs finances - i.e. results in the same margin as Bright Choice.

Table 5 - Comparison of Brilliant 100 Power Content Margin Impacts

	Bright Choice	Brilliant 100		
		40% RE 60% Carbon-free	50% RE 50% Carbon-free	100% RE
Rate at par w/ PG&E (2019)	-	Same margin as Bright Choice	2% lower margin than Bright Choice	18% lower margin than Bright Choice

In setting up a premium product that has the same margin as Bright Choice, EBCE is positioned to support the scaling up of Brilliant 100 to a much higher percentage of customers without an adverse impact on EBCE’s finances.

Energy Product Roadmap Discussion

At Phase 1 launch, EBCE proposes to only offer two products, Bright Choice and Brilliant 100, but over time EBCE staff believes there is significant value to increasing the number of energy product options. EBCE’s proposed product roadmap is outlined in the attached presentation. The underlying goal being to start delivering products that create more local development and support the build-out of new renewable energy projects.

Attachments

- a) Power Content and Rate Discount Presentation



PRODUCT ROADMAP

PRESENTED BY: Nick Chaset

DATE: 02/07/18

EBCE PRIORITIES

JPA Recitals	Action
Offer default and opt-up product	Bright Choice/Brilliant 100
Develop portfolio with lower GHG intensity than PG&E	70% and 100% Carbon-Free at launch with continued progression to lower GHG intensity
Establish portfolio with local renewable resources and uses limited RECs	Local Development Business Plan in-development
Demonstrate economic benefits to the region	
Recognize value of workers	
Deliver programs that support local workforce	
Promote local ownership of renewable resources, especially for low income customers	
Provider cost savings	2% discount/par with PG&E
Be financially sustainable and create positive work environment	discount and power costs project surplus in year 2 of operations

RECOMMENDATIONS OVERVIEW

- Approve **power mix** for *Bright Choice** and *Brilliant 100**

<i>Bright Choice</i>	35% RE + 35% carbon-free	70% clean
<i>Brilliant 100</i>	40% RE + 60% carbon-free	100% clean

- Approve **rate discount** for *Bright Choice* at 2%
- Approve rate for *Brilliant 100* **on par** with PG&E rate
- Review and discuss the future **roadmap** for a third product

** Numbers represent floor requirements. At time of procurement, EBCE will seek to have higher levels of renewable and carbon-free.*

POWER CONTENT



35% RE
+ 35% Carbon-Free
70% Clean



40% RE
+ 60% Carbon-Free
100% Clean

Comparison to PG&E Power Content*:
33% Renewable
+ 36% Carbon-Free
69% Clean

** Each year the CEC publishes every Load Serving Entity's Power Content Label for the prior year's power content. Current PG&E Power Content is for 2016 and was published by the CEC in September 2017. PG&E has forecasted lower GHG levels for 2017 and 2018 due, in major part, to departing CCA loads.*

PG&E POWER CONTENT LABEL

2016 POWER CONTENT LABEL		
Pacific Gas and Electric Company		
ENERGY RESOURCES	Power Mix	2016 CA Power Mix**
Eligible Renewable	33%	25%
Biomass & biowaste	4%	2%
Geothermal	5%	4%
Eligible hydroelectric	3%	2%
Solar	13%	8%
Wind	8%	9%
Coal	0%	4%
Large Hydroelectric	12%	10%
Natural Gas	17%	37%
Nuclear	24%	9%
Other	0%	0%
Unspecified sources of power*	14%	15%
TOTAL	100%	100%
<p>* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.</p>		
<p>** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.</p>		
<p>For specific information about this electricity product, contact:</p>		<p>Pacific Gas and Electric Company</p> <p>415-973-0640</p>
<p>For general information about the Power Content Label, please visit:</p>		<p>http://www.energy.ca.gov/pcl/</p>
<p>For additional questions, please contact the California Energy Commission at:</p>		<p>844-454-2906</p> <p>psdprogram@energy.ca.gov</p>

BRIGHT CHOICE CONTENT OPTIONS vs. SURPLUS

Option	70%	75%	80%	80%
RE	35%	40%	35%	40%
Carbon-free	35%	35%	45%	40%
Surplus (% change) (2019)	n/a	- 3.77%	- 6.60%	- 7.55%

This assessment of power content options focuses on the change in expected surplus (net revenue) at the end of 2019 because this metric measures the impact of different power supply options on EBCE's financial position.

BRILLIANT 100 CONTENT OPTIONS vs. MARGIN

	Bright Choice	Brilliant 100		
		40% RE 60% Carbon-free	50% RE 50% Carbon-free	100% RE
Rate at par w/ PG&E (2019)	-	Same margin as Bright Choice	2% lower margin than Bright Choice	18% lower margin than Bright Choice

This assessment of power content options focuses on margins so that EBCE can determine what the relative impact of different power content options will be on EBCE's finances. The closer margin is to Bright Choice, the lower the impact of more customers choosing to take Brilliant 100 as their energy option will be.

RATE DISCOUNT



2% Discount

No Discount

Additional 12%-14% increase in annual surplus generated by 2% discount compared to higher discount levels. Surplus will allow EBCE to more quickly pay down debt, establish critical financial reserves, and start investing in local development.

IMPACT OF BRIGHT CHOICE DISCOUNT OPTIONS

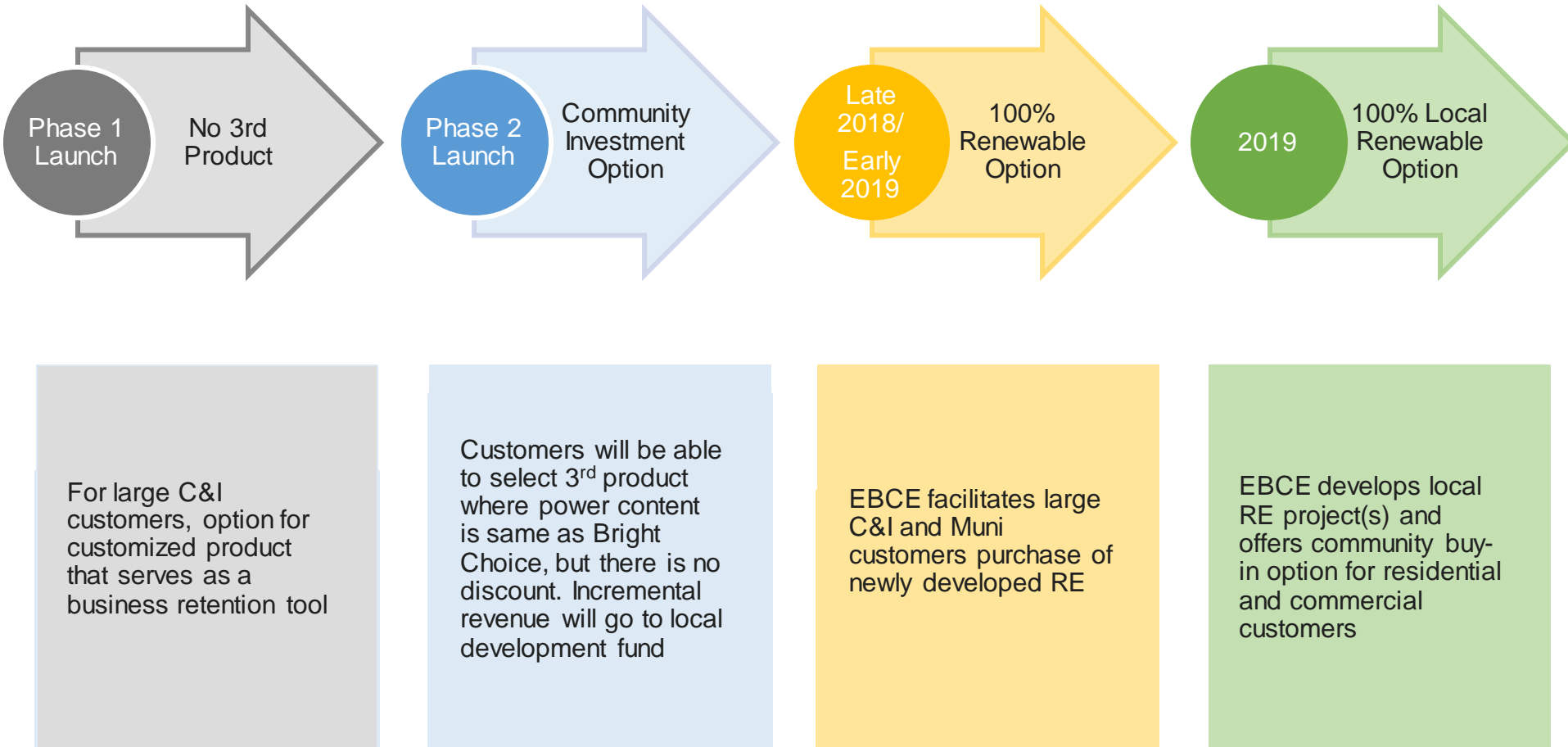
	2018	2019
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	Estimated Annual Savings	
	2%	4%
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DISCOUNT vs. OPT-OUT RATES

	Peninsula Clean Energy	Silicon Valley Clean Energy
Discount at Launch	5.00%	1.00%
Opt Out (% of accounts)	2%	2.75%

PRODUCT ROADMAP



CCA PRODUCTS

Default Product

CCA	MCE Clean Energy	Sonoma Clean Power	CleanPower SF	Peninsula Clean Energy	Silicon Valley Clean Energy	Monterey Bay Clean Energy
Power Mix	56% Renewable 13% Carbon-Free	42% Renewable 49% Carbon-Free	40% Renewable 38% Carbon-Free	58% Renewable 27% Carbon-Free	50% Renewable 50% Carbon-Free	30% Renewable 70% Carbon-Free
Total Carbon-Free	69%	91%	78%	85%	100%	100%
Discount to PG&E (inclusive of PCIA)	-0.6%	-2%	-0.25%	-5%	-1%	0%

Premium Product

CCA	MCE Clean Energy	Sonoma Clean Power	CleanPower SF	Peninsula Clean Energy	Silicon Valley Clean Energy	Monterey Bay Clean Energy
Power Mix	25% Biomass 25% PV 50% Wind	100% Geothermal	100% Wind	100% Wind	80% Hydro 20% PV	30% Renewable 70% Carbon-Free
Premium over PG&E (inclusive of PCIA)	+10%	+23%	+20%	+5%	+7%	0%

REQUEST OF BOARD

- Approve **power mix** for *Bright Choice** and *Brilliant 100**

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