Staff Report Item 12

TO: East Bay Community Energy Board of Directors

FROM: Annie Henderson, VP Marketing and Account Services
Dan Lieberman, Senior Manager

SUBJECT: Amendments to Net Energy Metered (NEM) Policy for Solar Customers

DATE: February 20, 2019

Recommendations

A. Approve an amendment to the Net Energy Metering (NEM) policy, revert EBCE's policy and tariff to original surplus payment calculations for new NEM customers.

B. Update the Electric Schedule NEM – Net Energy Metering Service to include an annual review in May of the financial outcomes of "existing" NEM accounts (interconnected before June 2018) that have 1) made payment to EBCE in the prior 12 months and 2) held a balance of at least $100 in April. Assess whether these accounts would have had better financial outcomes on PG&E service, and if so, issue a credit or check for the difference.

RECOMMENDATION 1

Background

At its February 21, 2018 meeting, the EBCE Board adopted an initial NEM policy, and also directed staff to amend that policy, as necessary, after finalization of Local Development Business Plan (LDBP). Staff brought an amended policy to the board on December 5, 2018, that included:

- Amendments to EBCE's NEM policy with program details and added a NEM tariff
- Amendments to the policy to start enrollment of existing PG&E NEM customers in April 2019 and bi-monthly enrollment batches

EBCE set its initial surplus credit payment calculation for new NEM accounts as "The greater of retail capped at $2,500 or the PG&E NSC". In the wake of adopting that policy, EBCE staff realized that customers who would generate just over $2,500 of retail credit will be prevented from monetizing those marginal kilowatt-hours (kWhs) just above the $2,500 threshold. For that reason, EBCE staff recommended revising the policy to read "Retail value up to $2,500 plus the PG&E NSC rate for each additional unit above $2,500."

However, after the December board approval, staff realized that the marginal benefit of the revised payment calculation afforded to a very small number of impacted customers was greatly out-weighed by the cost to update back-end systems to support implementation of the new calculation.

Analysis

EBCE staff looked at the population of existing NEM customers as a proxy for a future population of new NEM customers to 1) identify the potential scale of impacted customers, and 2) compare the financial impacts of the original policy to an updated payment calculation, as well as to the PG&E payment calculation. The potential scale of impacted customers is very small, as indicated in **Table 1**. There is only a fraction of a percent of NEM customers that generate enough surplus to receive over $2,500 at retail rates. As shown in **Table 2**, the original EBCE NEM payment calculation is better than the PG&E payment calculation regarding the amount of payout for surplus generation.

Table 1

	% of EBCE NEM Customers	**% of All EBCE Customers**
EBCE NEM Surplus Exporters Over $2,500	0.17%	0.01%
EBCE NEM Surplus Exporters	9.65%	0.47%
Total EBCE NEM Customers	100%	4.87%

Table 2

Policy	**EBCE Original**	**EBCE Updated**	**PG&E**
Calculation	Greater of retail up to $2,500 or NSC	Retail up to $2,500, then NSC	NSC*
Total Payment	$578,502.76	$623,113.38	$416,839.15
Average Payment	$221.06	$238.10	$159.28

*Net Surplus Compensation

RECOMMENDATION 2

Background

EBCE is aware of a scenario that will result in NEM customers being worse off financially on EBCE service than on PG&E bundled service. There are three conditions necessary to create this scenario:

- Customers must be "existing NEM", meaning that that had a NEM system already installed when EBCE launched.
- The customer must have at least one month when they pay EBCE for net consumption in given a year.
- The customer must retain at least $100 of generation credit in their EBCE account in April.

EBCE analysis forecasts that about 30 accounts will fall into this category based on past performance. That population of accounts may vary from year to year, based on consumption and production performance.

Analysis

When NEM customers are on PG&E bundled service, they do not pay for electric generation service on a monthly basis; they pay for any net deficit of generation annually during true up. That means that whether the PG&E customer is a net generator or net consumer in a given month, that outcome is placed in a ledger that is trued-up annually. At annual true-up, PG&E converts any residual kWh balance to a wholesale rate called Net Surplus Compensation (NSC) for payout to the customer or charges the customer a retail rate for any deficit.

NEM customers on EBCE service have their generation charges balanced monthly. In a month when the customer generates surplus, EBCE credits their account at the retail generation rate and that balance is carried over as a dollar denomination to the next month. In a month when a customer is a net consumer, any credits on their account are drawn down. If there are insufficient reserve credits, then the customer is charged for the net deficit in that month at a retail rate. Each April, any EBCE NEM account with over $100 in retail credits is cashed out. Customers with NEM systems installed prior to EBCE's launch are cashed out at NSC, and customers with NEM installed following launch receive a higher payment. Therefore, on cursory view EBCE's NEM policies seem at parity or more generous than PG&E's NEM policies.

However, there is a scenario when PG&E's outcome is favorable. This occurs for an EBCE "existing" NEM customer that has a month in which they deplete any reserve credit and make payment to EBCE for generation service. At that point, they are paying a retail rate to EBCE for power they need. As a PG&E customer, they would make no payment at that time. Fast forward to EBCE's April true up and consider that this customer now has accrued more than $100 in their retail credit balance. At that point, they are cashed out by EBCE for their surplus at NSC (wholesale), after already paying retail when they were in a deficit. When this EBCE customer paid retail for kWhs in a given month, they lost the opportunity to offset those kWh with future onsite generation, while the PG&E customer retains the opportunity to offset those kWh with onsite generation (rather than cashing out at a wholesale rate). In other words, for a portion of the kWHs produced, the EBCE customer received NCS payment, while the PG&E customer offset a retail kWh. This scenario is possible under all three of EBCE's service levels (Bright Choice, Brilliant 100, or Renewable 100) and for all rate schedules.

The example below shows identical customers with zero balance going into March, one on PG&E service and one on EBCE service. In March they are net consumers of 50 kWh, and then in April they are net generators of 200 kWh. The PG&E customer pays nothing for generation service in March or April, and then has 150 kWh cashed out at NSC. The EBCE customer pays for 50 kWh at retail rates in March, and then has 200 kWh cashed out at NSC. Therefore, while the EBCE customer received more nominal payment at true-up, they had already paid retail for 50 kWh, so the PG&E customer got more value per kWh of production.

		March	April	True-up
EBCE	Starting Balance	0	0	
	Current Month Net	50 kWh net consumption	200 kWh net production	
	Cash Flow	Pay for 50 kWh at retail	0	
	Ending Balance	0	200 kWh retail	200 kWh at NSC
PG&E	Starting Balance	0	-50 kWh	
	Current Month Net	50 kWh net consumption	200 kWh net production	

	Cash Flow	0	0	
	Ending Balance	-50 kWh	150 kWh	150 kWh at NSC

All of the other California Community Choice Aggregators (CCAs) credit net annual surplus at a rate higher than NSC, mostly at retail or above. Therefore, the other CCAs avoid this problem entirely. EBCE's policy aims to avoid paying out additional incentives to customers who made their purchasing decision based on the PG&E value proposition, and therefore avoid free ridership and focus EBCE's financial resources on the Local Development Business Plan. However, the result of EBCE's current policy includes a small number of edge cases that do not meet our general policy of ensuring that customers are on par or better than they would be with PG&E's NEM policy.

If EBCE wants to ensure that in all cases Bright Choice and Brilliant 100 customers come out at parity with, or better than, PG&E service, then EBCE needs to adjust its NEM policy. This objective has always been of utmost importance to EBCE's staff, Board, and stakeholders, and is especially resonant in the wake of recent media coverage doubting that EBCE's rates benefit customers.

Options

There are several potential pathways that EBCE can consider:

1) **No policy change**. Rather than change policy, EBCE could message to customers that EBCE's monthly balancing approach provides benefits by avoiding a large annual true-up payment that many NEM customers face on PG&E service. EBCE's NEM policy might not be for everyone, but it provides a choice. The downside of this approach is that EBCE could no longer make the blanket statement "all customers on Bright Choice pay less than they would have on PG&E".
2) **Parity with PG&E**. In order to achieve parity with PG&E, EBCE could either:
    a. Match PG&E's accrual approach and charge customers a single time per year in April. Implementing PG&E's accrual approach would require back-end programming and would negatively impact cash flows for EBCE by carrying a balance for NEM customers until April each year. Annual net cash from EBCE's NEM accounts is estimated to be approximately $25 million, and the back-end programming would cost >$25,000. Or,
    b. Continue to balance accounts monthly, and then perform an annual true-up each May that compares each account's performance on EBCE to the outcome had the account been on PG&E bundled service with a single annual payment. EBCE would then issue a check or credit to the accounts that would have received a greater benefit under PG&E service. Preliminary analysis by EBCE staff forecasts approximately 30 accounts that would receive this corrective payment. The additional payout is estimated at approximately $15,000 per year and retaining SMUD to do the analysis would cost ~$12,000.
3) **Retail cash-out**. Other CCAs do an annual cash out at retail rates, rather than at NCS. Preliminary analysis shows that such a switch would increase EBCE's cash-out burden by about $500,000 annually (representing a doubling of cash out to ~$1M for these accounts).

Option 2b above is both low-cost and retains the core of EBCE's value proposition ensuring the opportunity for all customers to have rates at or below PG&E's rates.

Proposed Amendments for Recommendations 1 and 2

1 - Staff proposes to revert the surplus payment calculation for new NEM accounts (not low income, municipal, or existing) to the original language of "The greater of retail capped at $2,500 or the PG&E NSC".

2 - In Electric Schedule NEM, in the section "EBCE Annual Cash-Out" add the text:
Annually in May, EBCE will review the financial outcomes of "existing" NEM accounts (interconnected before June 2018) that have 1) made payment to EBCE in the prior 12 months and 2) held a balance of at least $100 in April. EBCE will assess whether these accounts would have had better financial outcomes on PG&E service, and if so, issue a credit or check for the difference. This applies to all rates schedules and service levels.

Fiscal Impact of Recommendations 1 and 2

1 - There is a substantial cost to update back-end systems to support the payout calculation approved in December 2018 which can be avoided by reverting to the original policy, while having minimal impact on customers.

2 - Additional payout estimated at approximately $15,000 per year and paying SMUD to do the analysis would cost ~$12,000 annually.

Attachments

1. Resolution Amending NEM Policy
2. Exhibit A: Amended NEM Policy
3. Exhibit B: Revised EBCE NEM Tariff
4. Revised NEM fact sheet

CEQA

Not a project