



Staff Report Item 11

TO: East Bay Community Energy Board of Directors

FROM: JP Ross, VP of Local Development, Electrification, and Innovation
Kelly Brezovec, Sr Manager of Account Services

SUBJECT: Recommendations to Update the Net Energy Metering Policy,
Effective April 2021 (Informational Item)

DATE: February 17, 2021

Recommendations to Review

1. Complete the April 2021 Net Energy Metering (NEM) cash-out under the current policy.
2. After the April '21 cash-out, move all customers to a singular NEM policy "2021 NEM" (excluding our current low-income municipal customers).
3. Close enrollments into the low-income/municipal program and encourage participation into new resilience programs specific to municipal and low and moderate income customers.
4. Enroll new communities onto the 2021 NEM policy.

Background and Discussion

At its December 16, 2020 meeting, the Board of Directors adopted an update to the [Net Energy Metering \(NEM\) tariff](#) to include the new communities of Tracy, Pleasanton, and Newark, while maintaining the existing policy. Earlier, the Board adopted, on February 20, 2019, an [amendment to the NEM policy](#) to clarify language in the tariff and add an additional step in calculating the annual cash-out for our "Existing NEM" customers. The [initial NEM policy](#) was adopted on February 21, 2018.

EBCE's NEM policy has always included one major difference from PG&E's policy. PG&E, for the most part, has NEM customers on an annual true-up, meaning that customers accrue debt for under-generation and credits for over-generation, over the course of a 12-month cycle. EBCE does not hold on to that debt from month to month, rather, if a customer under-generates, EBCE will bill them for their usage. EBCE does

carry over over-generation credits from month-to-month. Our cycle is April to April for all customers.

This latest iteration of the NEM tariff and policy takes into account what staff has learned about our NEM program and how it affects our customers and our overall programmatic goals. In the analysis below, staff has noted that most of our program review was focused on those customers with a full 12 months of usage at the time of the April 2020 true-up, which is roughly one-third of the total NEM population. The focus was on this population because self-generation and usage is often seasonal in nature, so a full cycle of usage is necessary to understand customer generation and usage patterns. We used the results of the full year analysis to estimate impacts across all NEM accounts.

Today EBCE serves nearly 30,500 NEM customers, with 70% of those being residential customers that had an interconnection date, or a solar start-date, prior to April 1, 2018, when EBCE started service. NEM customers account for 5% of EBCE’s total customer count. These totals are shown below in Table 1.

Table 1: EBCE NEM customer counts by customer and NEM program type

Customer Type	Total Count	Count with 12 Month History in April 2020
New NEM Residential	7,013	2,156
New NEM Non-Residential	224	140
New NEM Low-income/Municipal	512	163
Legacy NEM Residential	21,951	7,230
Legacy NEM Non-Residential	776	268

Discussion

To review, the policy prior to the addition of our new communities has been as follows:

Table 2: NEM programs offered today

Customer Type	NEM + Customer Description	Monthly Settlement per kWh	Annual Settlement per kWh
Existing NEM	Interconnection date prior to 6/1/2018	Retail*	Net Surplus Compensation (NSC)**
New NEM	Interconnection date after 6/1/2018	Retail*	The greater of retail capped at \$2,500 or NSC
Low Income and Municipal NEM	Interconnection date after 6/1/2018 and identified as low income or municipal	Retail* + \$0.01	Retail + \$0.01

*Equivalent to the generation rate you are charged by EBCE

**Existing NEM customers also go through a “sweep” at the April cash out period to ensure that they are doing just as well financially with EBCE’s monthly true up as they would have on PG&E’s annual true up.

EBCE staff has been evaluating the benefits of the current Policy and has found that the NEM policy has not resulted in additional solar being installed on our customer’s homes and businesses.

The evidence for this comes from three separate evaluations:

1. Growth rates between similar cities with and without EBCE’s NEM Policy show similar growth across cities
2. A customer survey that found that EBCE’s NEM Policy did not influence customer’s decision to purchase their solar system
3. A predominant solar quoting tool, Energy ToolBase, does not factor EBCE’s retail NEM policy into customer solar quotes

EBCE reviewed solar installations across the service territory to understand growth rates of solar before and after EBCE started service in 2018 and instituted the extra retail compensation for new solar installations. We focused the evaluation on Cities with similar climate to the new communities that did not have access to EBCE’s NEM policy. The analysis, shown below, indicates that solar installations (normalized by population) have been similar across Cities regardless of access to EBCEs retail compensation for excess production.

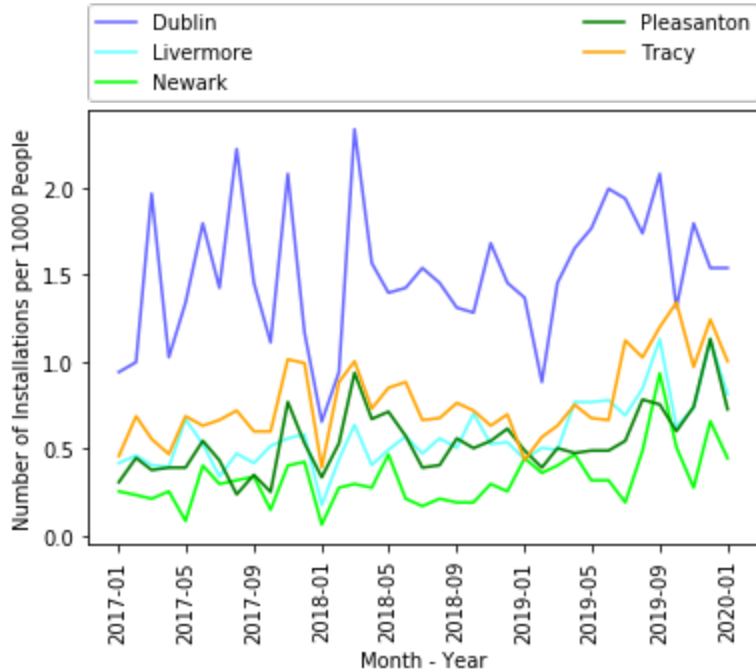


Figure 1: Solar installations across existing and new communities

We also wanted to understand if our customers’ decisions to purchase solar was influenced by EBCE’s NEM policy. EBCE sent out a survey to 250 solar customers who installed their solar system after June 1, 2018 and are receiving the New NEM cash-out benefit. The results of the survey indicate that purchasing decisions were not influenced by EBCE’s NEM policy, with the vast majority (89%) indicating that EBCE’s NEM policy had no impact on their decision to purchase a solar system.

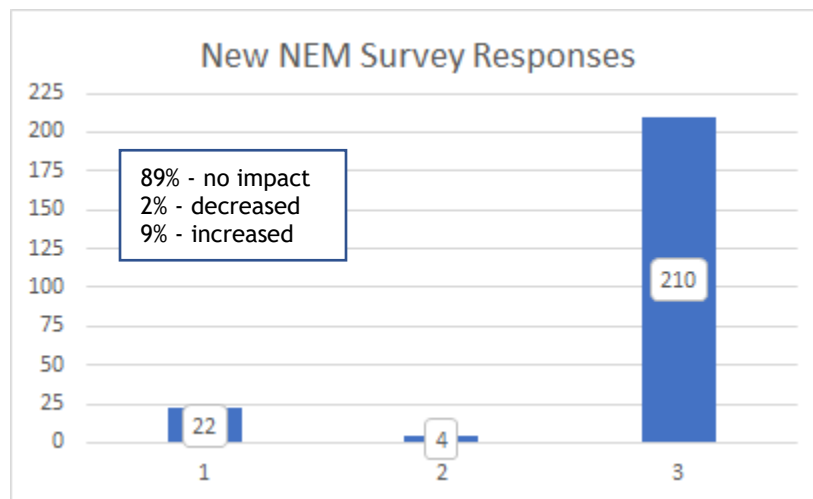


Figure 2: Customer responses to Question: Did having EBCE for electric generation service have any impact on your choice to install solar?

Additionally, EBCE’s current NEM Policy offers an uneconomic incentive to customers. Paying extra for excess production is not incentivizing the right outcome for EBCE or its customers. Net annual excess means that the customer is generating more than their home uses over the course of the year. This is uneconomic for customers because they are not being compensated for full retail rate, only the Generation charges (not Transmission and Distribution charges). Generation charges are lower than the cost of solar and therefore customers will still be losing money even with EBCE’s retail compensation.

The policy is not economic for non-participating EBCE customers. This is because EBCE is paying full retail generation rates to these customers when the market price for wholesale generation is at its lowest, during the middle of the day when wholesale solar generation costs are driving down wholesale market prices (sometimes below \$0/MWh). Therefore, EBCE is paying significantly more for NEM generation than we can purchase from similarly clean sources.

Proposed 2021 NEM Policy

As stated in the recommendations, staff proposes the new policy as shown in Table 3.

Table 3: Proposed NEM offerings beginning April 1, 2021

Customer Type/Program Description	NEM + Customer Description	Monthly Settlement per kWh	Annual Settlement per kWh
Low Income and Municipal NEM	Interconnection date between 6/1/2018 and 4/1/2021, identified as low income or municipal and an EBCE customer during these dates. Customers will be grandfathered under this policy, closed to new enrollments.	Retail* + \$0.01	Retail* + \$0.01
2021 NEM	NEM customer enrolled with EBCE	Retail*	Net Surplus Compensation (NSC)**

*Equivalent to the generation rate charged by EBCE

**NEM customers will go through a “sweep” at the April cash out period to ensure that they are doing just as well financially with EBCE’s monthly true up as they would have on PG&E’s annual true up.

This updated NEM policy will also simplify our operations and customer service support, as EBCE will support two NEM offerings. More importantly for operations, all customers - current NEM and future NEM - will participate in the same program.

As mentioned below in Figure 3, EBCE’s current NEM customers will go through the April 2021 cash-out based on their current program and then most will change to the 2021 NEM offering.

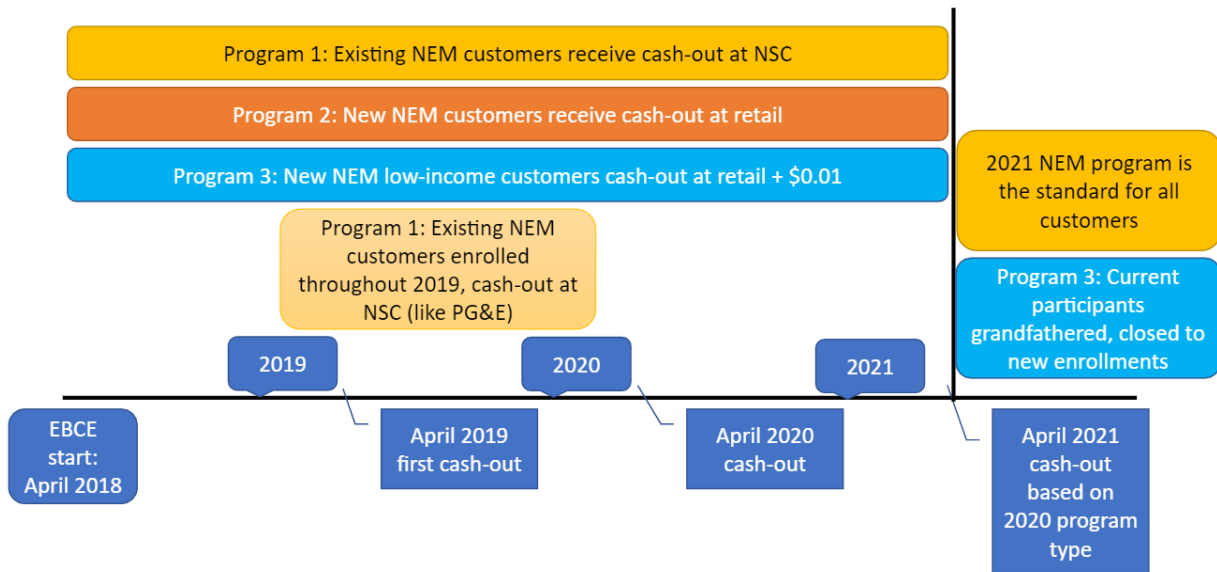


Figure 3: Timeline of NEM policies from April 2018 to April 2021 and forward

Discussion of 2021 NEM Policy

Staff proposes renaming the Existing NEM policy the 2021 NEM policy to indicate that this is EBCE’s standard program. 2021 NEM will have the same features as the former Existing NEM policy, including the NEM sweep function. The sweep has been cumbersome to implement and staff is working to speed the process to complete the annual cash-out in a timely manner.

Staff will communicate the updated NEM policy to impacted customers and update our website and tariff appropriately.

Discussion of NEM Low-income and Municipal Policy

EBCE does not recommend changing this policy for existing customers, but will close it to new enrollments, including new communities. By closing this policy to new enrollments, EBCE can divert these funds to programs that target low income and municipal customers. EBCE is currently running programs to support solar and storage for all customers; our Resilient Home and municipal critical facilities programs are both available to all EBCE customers and participating Cities.

Today, EBCE has just over 500 customers receiving this extra benefit. Of these, 163 customers had a full 12 months of usage in April 2020. These customers received a total cash out of \$10,657 as seen in Table 4 below. Since the 12-month population is

about one-third of the total low income and municipal population, staff would expect to pay this population about \$30,000 in future years.

Municipal customers received an average cash out of \$187 and low-income customers received an average cash out of \$60. There were only two municipal customers that received a cash out in 2020.

Table 4: Cash outs for municipal and low income NEM customers with 12 months of usage

Customer Class	Total cash out	Average cash out
Municipal	\$1,311	\$187
Low-income	\$9,346	\$60
Total	\$10,657	\$65

Financial Impacts

Shifting from the New NEM to the 2021 NEM policy, EBCE expects to save approximately \$600,000 from existing New NEM customers. The New NEM cash-out policy, for just the 12-month only customers, resulted in \$245,000 in cash-outs. Staff estimates the NSC-based cash-out at about \$45,000. Moving this group to the 2021 NEM policy will then save EBCE \$200,000. Since the 12-month only population is about one-third of the total population, staff estimates the total savings at \$600,000. The 12 month-only positive cash-out balance is shown below in Figure 4. On average, EBCE will save \$70 per residential customer and \$330 per non-residential customer. Staff expects to see 5,500 additional NEM interconnections by the end of 2021 across all communities. Assuming that the bulk of these are residential, the 2021 NEM policy will keep an additional \$385,000 with EBCE at the 2022 cash-out.

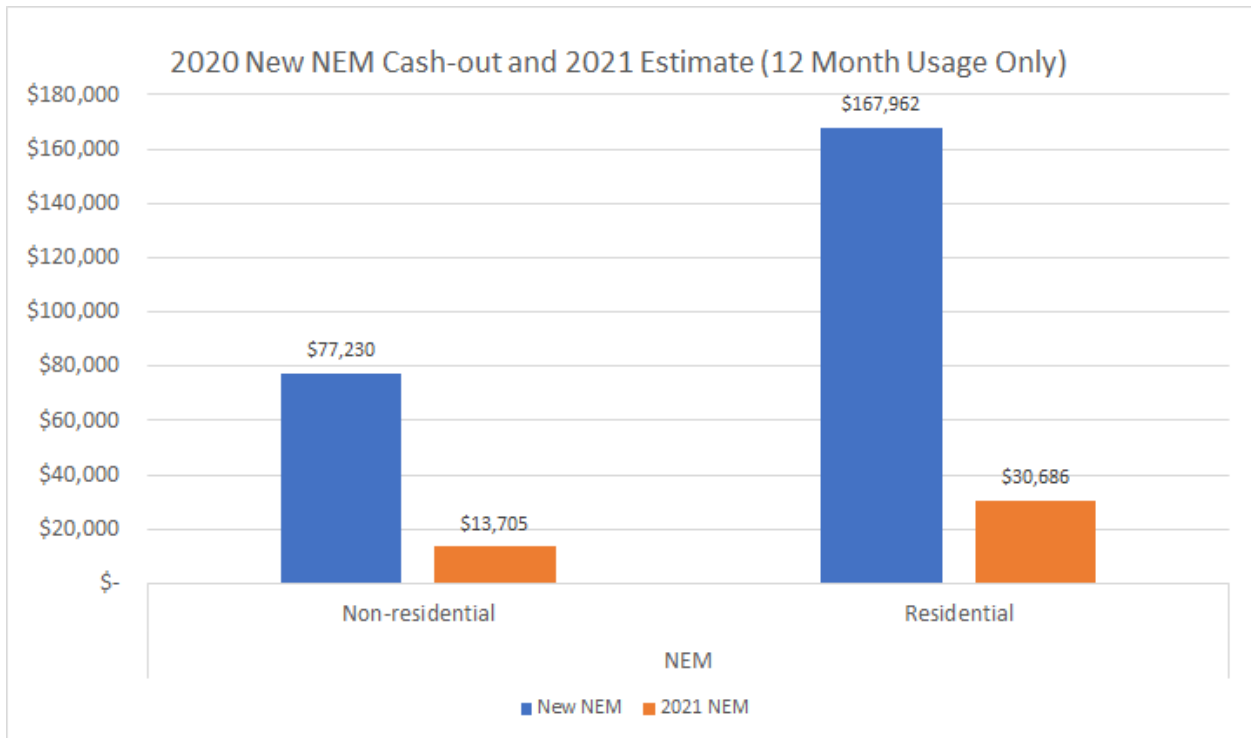


Figure 4: New NEM cash out

EBCE will evaluate how these savings will best serve EBCE customers through the annual budgeting process.

Attachment

- A. NEM Program and Policy Update PPT



NEM Program and Policy Update – Informational Item

February 17, 2021



EBCE and PG&E NEM Programs

	EBCE	PG&E
Accrue credits on the applicable retail rate, roll-over from month-to-month	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cash-out/true-up at the Net Surplus Compensation rate per kWh	With some cash-out at a higher rate <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Annual true-up, debt for usage in excess of generation is held month-to-month		<input checked="" type="checkbox"/>
Monthly true-up, debt for usage in excess of generation is billed	<input checked="" type="checkbox"/>	

EBCE Current NEM Policy

- EBCE currently has 3 different NEM programs based on customer type and solar interconnection date
- Multiple programs are confusing for customers and operationally complex for EBCE
- The additional compensation for New NEM customers, at Retail rates, that have purchased solar after EBCE enrollment is costing EBCE ~\$600k/year more than the equivalent NEM offering from PG&E and customers are not aware of this program

NEM Programs

Customer Type	NEM + Customer Description	Monthly Settlement per kWh	Annual Settlement per kWh
Existing NEM	Interconnection date prior to 6/1/2018	Retail*	Net Surplus Compensation (NSC)**
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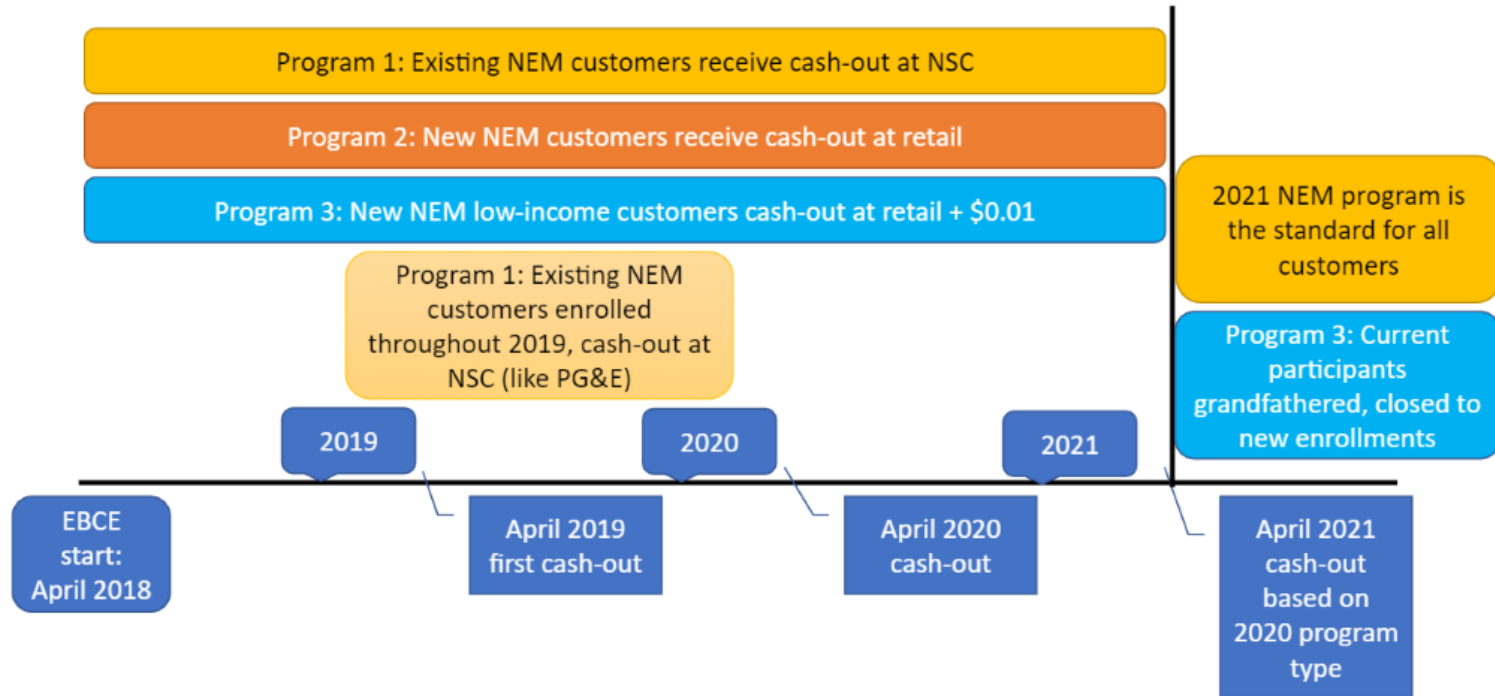
*Equivalent to the generation rate you are charged by EBCE

**Existing NEM customers also go through a "sweep" at the April cash out period to ensure that they are doing just as well financially with EBCE's monthly true up as they would have on PG&E's annual true up.]

EBCE NEM Recommendations

1. Complete the April 2021 Net Energy Metering (NEM) cash-out under the current policy
2. After the April '21 cash-out, move all customers to a singular NEM policy “2021 NEM” (excluding our current low-income municipal customers)
3. Close enrollments into the low-income/municipal program and encourage participation into new resilience programs specific to municipal and low and moderate income customers
4. Enroll new communities onto the 2021 NEM policy

Timeline for Current and Proposed Policies



Proposed NEM Programs Beginning April '21

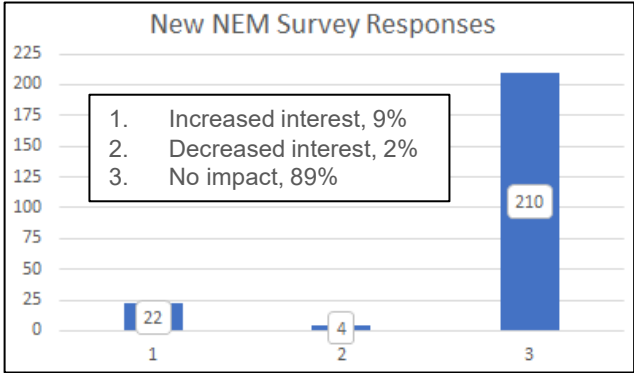
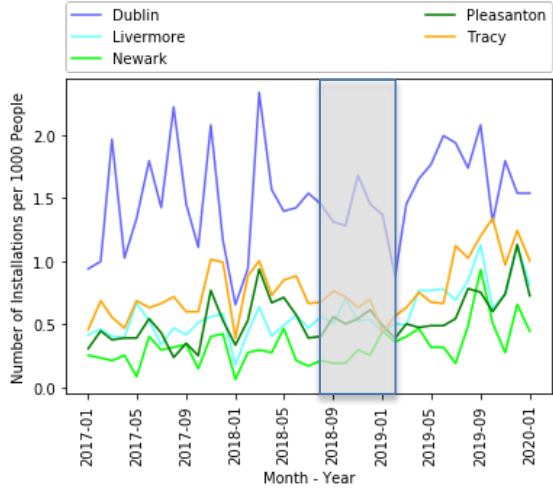
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2021 NEM	NEM customer enrolled with EBCE	Retail*	Net Surplus Compensation (NSC)**

*Equivalent to the generation rate you are charged by [EBCE](#)

**NEM customers will go through a “sweep” at the April cash out period to ensure that they are doing just as well financially with EBCE’s monthly true up as they would have on PG&E’s annual true up.

EBCE NEM Policy is not Increasing Solar

- Staff evaluated efficacy of NEM policy and determined that additional payments for NEM are not impacting installations
 1. Growth rates between similar cities with and without EBCE’s NEM Policy show similar growth across Cities
 2. A customer survey that found that EBCE’s NEM Policy did not influence customer’s decision to purchase their solar system
 3. A predominant solar quoting tool, Energy ToolBase, does not factor EBCE’s retail NEM policy into customer solar quotes



EBCE Low Income and Municipal NEM Policy

- EBCE does not recommend changing this policy for existing customers, but will close it to new enrollments.
- EBCE is currently running programs to support solar and storage for all customers; our Resilient Home and municipal critical facilities programs are both available to all EBCE customers and participating Cities.

• Current participation-

Customer Class	Total Customer Count	Total Customer Count with positive balance	% with positive balance	Customer Count (12 months of usage)	Customer Count with positive balance (12 months of usage)	% with positive balance (12 months of usage)
Municipal	10	2	20%	7	2	29%
Low-income	502	250	50%	156	76	49%
Total	512	252	49%	163	78	48%



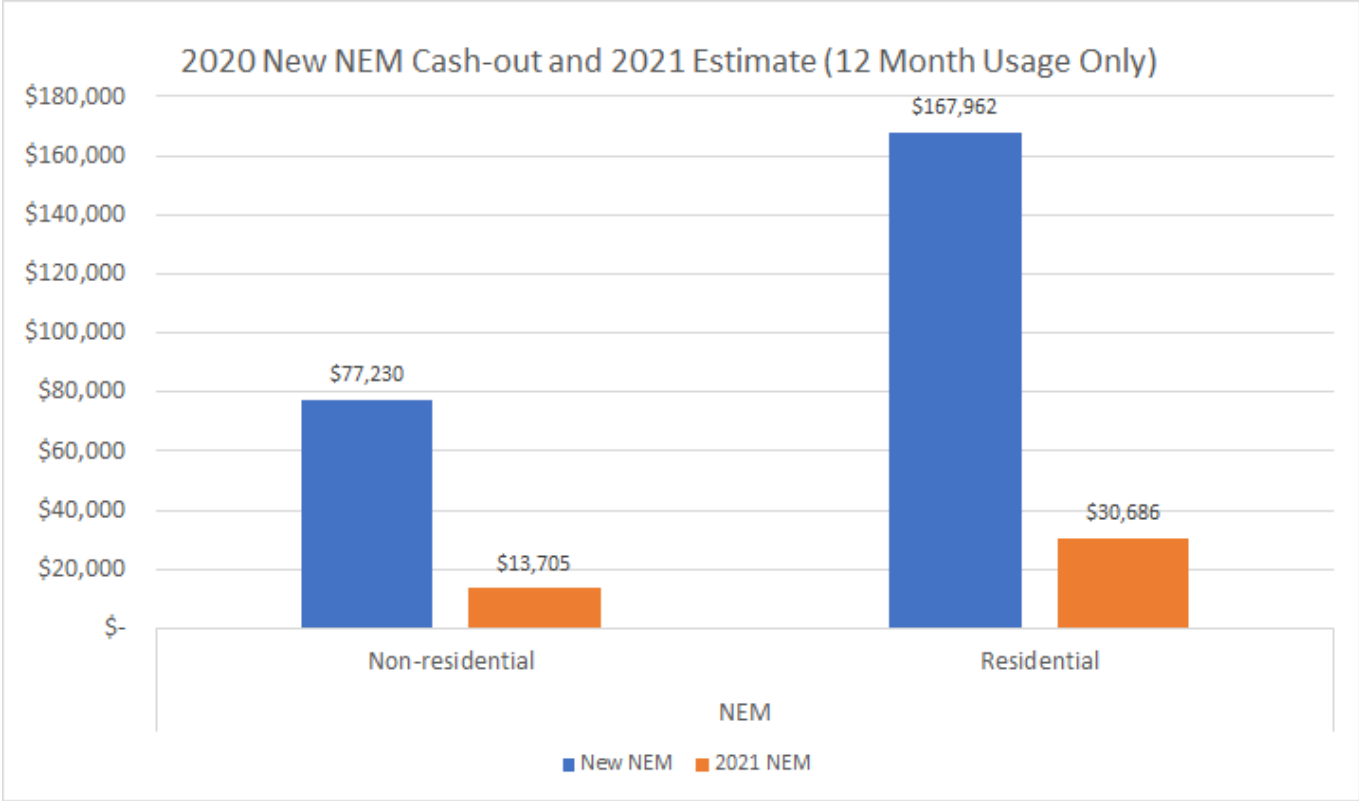
EBCE Low Income and Municipal NEM Policy

- Current cash out (12 months of usage only) = \$10,657
- Since the 12 month population is about one-third of the total low income and municipal population, staff would expect to pay this population about \$30,000 in future years.

April 2020 cash out for low income and municipal customers with 12 months of usage

Customer Class	Total cash out	Average cash out
Municipal	\$1,311	\$187
Low-income	\$9,346	\$60
Total	\$10,657	\$65

Financial Impact of Draft 2021 NEM Policy



Financial Impact of Draft 2021 NEM Policy

- Current new NEM cash out (12-month only customers) = \$245,000
- Staff estimates the NSC-based cash-out = \$45,000
- Moving this group to the 2021 NEM policy will then save EBCE \$200,000
- Since the 12-month only population is about one-third of the total population, staff estimates the total savings at \$600,000
- EBCE will evaluate how these savings will best serve EBCE customers through the annual budgeting process.