TO: Valley Clean Energy Alliance Board of Administration

FROM: Mitch Sears, Interim General Manager
      Michael Champ, SMUD

SUBJECT: Net Energy Metering Policy

DATE: February 8, 2018

RECOMMENDATION

Staff is requesting the VCEA Board to adopt Net Energy Metering policy option 4, and the recommended administrative policy decisions.

BACKGROUND AND ANALYSIS

At the January 18, 2018 VCEA Board meeting, the Board directed staff to develop a recommended Net Energy Metering (NEM) Policy that incentivizes increased solar adoption, and is beneficial to existing NEM customers. Staff has analyzed the administrative impacts of implementing a NEM policy, as well as the economic impacts of several options for compensating excess generation.

Administrative Policy Decisions

When a NEM customer is enrolled into a CCA, a true-up is triggered with PG&E. This true-up may result in required payments to PG&E or adjustments to accumulated credit balances. At times farther from a customer’s regular true-up date, the required payment or credit balance is likely to be larger, while at the true-up date, it should be closer to zero. Staff recommends enrolling customers on a schedule that aligns with their current PG&E true-up date, rather than all at once during the overall CCA launch. Each enrollment event of NEM customers will require VCEA to pay a $4,475 mass enrollment fee to PG&E. Thus, having 12 monthly enrollments rather than combining with the existing mass enrollment will incur an additional one-time expense of $49,225.

Staff recommends truing up all NEM customers annually on their April bill cycle. Currently, customer true-ups occur on the anniversary of the system operation approval date. April true-up will result in operational efficiencies, and reduced chances for errors or missed payments, as VCEA will manage one process for the year, rather than several overlapping monthly processes.

Staff recommends setting a cash-out minimum of $100, and only cashing out customers electing to cash out. Any balance below $100, and any balance from customers who have not
elected to cash out, will be rolled over to the next cycle as a bill credit. Setting a minimum cash-out limit reduces the number of transactions for the customer, and lowers the overall cost of mailing checks. Requiring an election to cash out reduces the amount of uncashed checks and required follow-up processes.

Staff recommends requiring payment monthly. This eliminates the potential sticker shock of a large bill, and reduces the total accounts receivable exposure. This also simplifies the bill for customers, with them not needing to distinguish between informational bills, and bills that are due. Finally, this clarifies definitions and reporting of delinquent accounts.

**Excess Generation Policy**

Under current PG&E policy, customers are billed monthly, according to their net usage, accumulating bill credits at the retail rate for excess generation in any given billing cycle. Annually on their true-up date, PG&E calculates the net usage on a kWh basis for the past 12 months. If this is negative, any accumulated retail credits are removed. If it is positive, the net surplus generation for the year is compensated at the wholesale energy rate.

Staff discussed three alternative NEM policies with the Community Advisory Committee (CAC):

1. Match PG&E policy, but compensate net surplus generation at a wholesale energy rate plus a $0.005/kWh adder
2. Compensate excess generation in any given month at the retail rate plus $0.01. Settle annually at the accumulated retail credits, up to a maximum of $2,500. Past this amount, pay at the wholesale energy rate plus a $0.005 adder.
3. Compensate excess generation in any given month at the retail rate plus $0.01. Settle annually at the accumulated retail credits.

Through the conversation on the options, the CAC found that Options 2 and 3 spent large amounts annually on customers who have already installed solar, and would prove relatively difficult to change if VCEA wanted to alter incentives in the future.

The CAC asked staff to develop a recommendation that:

- Communicates VCEA’s commitment to and support of NEM
- Reserves the bulk of the budget for incentives that can be targeted to new NEM customers instead of existing NEM customers
- Increases the ability to shift incentives as policy needs change. This could include, for example, shifting focus from solar to batteries or demand response.

In response, staff has developed the following two additional options for Board consideration:

4. Compensate monthly at retail plus a $0.005/kWh adder. Settle net surplus generation at wholesale energy rate plus a $0.005/kWh adder. Use additional funding for targeted solar incentives.
5. Compensate monthly at retail plus a $0.01/kWh adder. Settle net surplus generation at wholesale energy rate plus a $0.01/kWh adder. Use additional funding for targeted solar incentives.

These new options place a higher emphasis on incentivizing new NEM development and allow for more nimble shifts in policy moving forward, while still ensuring VCEA has a strong value.
proposition for existing NEM customers. This distribution of benefits across existing customers for a representative year can be seen in the table below.

Table 1 - Customer Financial Benefit of Various NEM Options

<table>
<thead>
<tr>
<th># Impacted Customers</th>
<th>Total Gain From To</th>
<th>Options</th>
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</thead>
<tbody>
<tr>
<td>$ 1,000 and up</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>$ 500 $ 1,000</td>
<td>4 237 226 6 18</td>
<td></td>
</tr>
<tr>
<td>$ 100 $ 500</td>
<td>39 1,065 1,048 49 86</td>
<td></td>
</tr>
<tr>
<td>$ - $ 100</td>
<td>764 3,879 3,879 4,216 4,161</td>
<td></td>
</tr>
<tr>
<td>No impact $ -</td>
<td>4,539 42 42 1,074 1,074</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Average Impact</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 1,000 and up</td>
<td>2,709 $ 1,938 $ 9,915 $ 2,599 $ 3,789</td>
</tr>
<tr>
<td>$ 500 $ 1,000</td>
<td>584 $ 669 $ 668 $ 604 $ 808</td>
</tr>
<tr>
<td>$ 100 $ 500</td>
<td>270 $ 277 $ 275 $ 246 $ 192</td>
</tr>
<tr>
<td>$ - $ 100</td>
<td>9 $ 30 $ 30 $ 12 $ 23</td>
</tr>
<tr>
<td>No impact $ -</td>
<td>4,539 42 42 1,074 1,074</td>
</tr>
</tbody>
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<tr>
<th>Total Cost</th>
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<tbody>
<tr>
<td>$ 50,000 $ 830,000 $ 2,150,000 $ 100,000 $ 190,000</td>
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</tbody>
</table>

Option 1 does not change the NEM calculation for the majority of customers. It only affects the 18% of customers (primarily non-residential) who net surplus generate on an annual basis. Options 2 and 3 provide benefits to nearly all customers. These options also provide far higher rates for net surplus compensation, paying as much as $0.20/kWh compared to a retail rate of around $0.035. Option 2 caps this benefit at $2,500/customer, while Option 3 leaves it uncapped, thus greatly benefitting large surplus generators.

Options 4 and 5 provide benefits to customers with net surplus generation, and to those who are not yet meeting their entire bill through retail credits. However, they exactly match PG&E’s policy for customers who currently have a $0 bill at true-up time but are not surplus generators. For these customers, the benefit of VCEA’s policy is that if they have changes in load or solar production in future years, VCEA’s rates would be more favorable than PG&E’s.

Staff recommends adopting a NEM policy in line with Option 4. This provide a benefit for the majority of customers moving from PG&E to VCEA, while leaving the majority of the budget available for targeted incentives to solar customers. While the structure and level of incentives remains to be determined, the $730k difference between Option 2 and Option 4 could fund $500 rebates for 1,460 new NEM installations each year. As needs change, the rebate level could be adjusted and the types of technologies targeted could be shifted rapidly. Option 4 provides the best balance between recognizing and appreciating the value of existing NEM customers, while also providing a flexible and cost effective method for increasing solar adoption and reducing greenhouse gas emissions.

CONCLUSION

Staff is seeking Board adoption of the following Net Energy Metering Policy decisions:

- Initial enrollment of NEM customers on a monthly basis, based on PG&E true-up date
• Annual true-up for all NEM customers held annually in April
• Cash-out only for customers with more than $100 in credits who opt-in. Other customers will have credit balance roll over to the next billing cycle.
• Credit customer monthly for excess generation at retail plus $0.005/kWh, without additional compensation for participation in renewable programs
• Settle annually at the wholesale value of net surplus generation plus a $0.005/kWh adder.
VALLEY CLEAN ENERGY ALLIANCE

RESOLUTION NO. 2018-_______

A RESOLUTION OF THE VALLEY CLEAN ENERGY ALLIANCE ADOPTING
A NET ENERGY METERING (NEM) POLICY

WHEREAS, the Valley Clean Energy Alliance ("VCEA") is a joint powers agency established under the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) ("Act"), and pursuant to a Joint Exercise of Powers Agreement Relating to and Creating the Valley Clean Energy Alliance between the County of Yolo ("County"), the City of Davis ("Davis"), and the City of Woodland ("City") (the "JPA Agreement"), to collectively study, promote, develop, conduct, operate, and manage energy programs; and

WHEREAS, in order to carry out its Mission, VCEA is setting Net Energy Metering rates and associated administrative policies to encourage local generation of renewable energy.

NOW, THEREFORE, the Board of Directors of the Valley Clean Energy Alliance hereby adopts a Net Energy Metering Policy (Exhibit A).

ADOPTED, this ____________ day of ________________, 2018, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

____________________________________
Chair

____________________________________
Secretary

Approved as to form:

____________________________________
Interim VCEA Counsel

EXHIBIT A - Net Energy Metering Policy
EXHIBIT A

Net Energy Metering Policy
VCEA POLICY #_____ 

POLICY AND PROCEDURES RELATED TO VCEA NET ENERGY METERING (NEM)

Subject: Policy and Procedures setting NEM rates and associated administrative policies.

Purpose: VCEA is setting a NEM policy to encourage and incentivize local renewable energy production. The NEM policy is intended to:

- Communicate VCEA’s commitment to and support of NEM;
- Create an incentives approach that can be targeted to new NEM customers; and
- Increase VCEA’s ability to shift incentives as policy needs change.

Policy:

1. Initial enrollment of NEM customers shall be on a monthly basis, based on PG&E true-up date;
2. Annual true-up for all NEM customers shall be held annually in April;
3. Cash-out only for NEM customers with $100 or more in credits. NEM customers with less than $100 in credits will have credit balance roll over to the next billing cycle (no loss of credits);
4. Credit NEM customers monthly for excess generation at retail plus $0.005/kWh, without additional compensation for participation in renewable programs;
5. Settle NEM customers annually at the wholesale value of net surplus generation plus a $0.005/kWh adder.