VCEA Citizen’s Advisory Committee
NEM Policy Introduction
January 11, 2018
Overview

• What is NEM?
• Who is on NEM?
• NEM Policy Considerations
• CCA NEM Policy Comparison
What is NEM

Net Energy Metering

- A statewide policy to provide credits to solar customers for excess generation
- Customers are billed monthly according to their net usage by time-of-use period, and can carry over credits for excess generation.
- At year-end, customers may be compensated for any net surplus generation.
NEM 1.0 vs. NEM 2.0

- The California Legislature directed the CPUC to develop NEM 2.0 to address concerns about cost shifting from non-solar customers to solar customers.
- For PG&E territory, NEM 2.0 applies to customers with new solar installations after 12/16/2016
- Key changes include:
  - All NEM 2.0 customers must take service on time-of-use (TOU) rates.
  - There is no longer a 1MW size limit on NEM projects. The generator can be sized to generate up to the customer’s annual load. There is a one-time flat $145 interconnection fee for generators sized 1 MW or less. Larger projects will have a cost-based fee.
  - Customers will be billed for State Mandated Non-Bypassable Charges (NBCs) based on each kWh of electricity consumed from the grid, not just on the annual net amount. These charges include:

<table>
<thead>
<tr>
<th>Charge</th>
<th>E1(Residential) 2017 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Purpose Program (PPP)</td>
<td>$0.01501</td>
</tr>
<tr>
<td>Nuclear Decommissioning (ND)</td>
<td>$0.00149</td>
</tr>
<tr>
<td>DWR Bond Charge (DWR Bond)</td>
<td>$0.00549</td>
</tr>
<tr>
<td>Competition Transition Charge (CTC)</td>
<td>$0.00130</td>
</tr>
<tr>
<td>Total</td>
<td><strong>$0.02329</strong></td>
</tr>
</tbody>
</table>
Who is on NEM

• 3,971 customers at December 2016
• 34,000 MWh of excess generation in 2016
NEM Policy Considerations

Compensation for excess generation

- NEM is designed to incentivize uptake of solar more than just reducing the bill.
- PG&E and CCAs typically provide credits monthly at the retail rate, or in some cases slightly higher than the retail rate.
- Annually, PG&E will cash out any total excess at the wholesale rate. CCAs generally cash out at the retail rate.
- Each $0.01 offered above retail would be an additional investment (compared to pro-forma) of about $350k/yr.
Annual True-ups

• A customer may have excess generation in some months, and not in other months. With PG&E, the net is recorded monthly, and accumulated until a year-end true-up.

• Several CCAs are requiring payment monthly when there is net use, and carrying forward credits when there is excess generation. Differing true-up processes have different implications for customer communications and cash flow.
NEM Policy Considerations

Enrollment

• Enrollment of a NEM customer triggers a true-up on the PG&E side.

• Enrolling additional customers triggers a $5,000/event fee from PG&E
NEM Policy Considerations

Cap on payments

– Generation Systems are designed to match the load of the property they are installed on.

– Some CCAs have set a cap on annual payouts. This cap supports the requirement that that systems match load.
# CCA NEM Policy Comparison

<table>
<thead>
<tr>
<th>CCA</th>
<th>Excess Generation</th>
<th>True-Up</th>
<th>Cash Out Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peninsula Clean Energy</td>
<td>Retail plus $0.01</td>
<td>April</td>
<td>&gt;$100 can elect cash out</td>
</tr>
<tr>
<td>Marin Clean Energy</td>
<td>Retail plus deep green (currently $0.01)</td>
<td>April</td>
<td>&gt;$100 can elect cash out</td>
</tr>
<tr>
<td>Silicon Valley Clean Energy</td>
<td>Retail. Credit not applied if net generation is less than zero.</td>
<td>October</td>
<td>None – Always cashed out</td>
</tr>
<tr>
<td>Lancaster Choice Energy</td>
<td>Retail. Credit not applied if net generation is less than zero.</td>
<td>October</td>
<td>None – Always cashed out</td>
</tr>
<tr>
<td>Clean Power SF</td>
<td>$0.0693 – average retail rate $0.0893 – average SuperGreen rate</td>
<td>April</td>
<td>None</td>
</tr>
<tr>
<td>Sonoma Clean Power</td>
<td>Retail plus $0.01</td>
<td>April</td>
<td>&gt;$100 can elect cash out Cap on payout</td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>Wholesale, plus adder if given RECs</td>
<td>Annual based on enrollment</td>
<td>None</td>
</tr>
</tbody>
</table>
Next Steps

• Staff and consultants will bring recommended policy, along with the pros/cons of various options. Key considerations in the development of the policy will include:
  – Not harming existing NEM customers
  – Providing continued incentive for rooftop solar
  – Ensuring customer understanding of program
  – Managing impact to agency budget and overall power portfolio
  – Alignment with other NEM programs