Valley Clean Energy
Board of Directors Meeting

Thursday, September 13, 2018

Woodland Council Chambers
300 First Street, Woodland, CA 95695
Agenda Item 11 - Customer Enrollment Update

3,747 Opt Outs
5.8% of customers

- Unicorp. Yolo: 28%
- Davis: 23%
- Woodland: 49%

113 Opt Ups

- Unicorp. Yolo: 16%
- Woodland: 21%
- Davis: 63%

Opt Out Channel

- CSR: 35%
- IVR: 32%
- Web: 33%

Opt Out Channel Summary:

<table>
<thead>
<tr>
<th>Category</th>
<th>Eligible</th>
<th>Opt-Out</th>
<th>% Opt Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>56,500</td>
<td>3,141</td>
<td>5.6%</td>
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<tr>
<td>Non-Residential</td>
<td>8,500</td>
<td>606</td>
<td>7.1%</td>
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<tr>
<td>Total</td>
<td>65,000</td>
<td>3,747</td>
<td>5.8%</td>
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Status Date: 9/13/18
Policy Amendment Recommendations
Existing NEM Customers

Stay with the true-up schedule and billing cycle used by PG&E for the majority of existing NEM customers
• This would be seamless to customers and they will receive VCE benefits
• They retain their annual billing cycle and existing true-up date

Shift some NEM customers to monthly billing
• Shift existing NEM customers who consistently owe more than $500/yr (approximately 882 customers, 12.6% of NEM customers) from annual payments to monthly payments with an annual true up date in February.
• Non-residential customers with >$5000 annual balance may be moved to monthly billing/February true-up.
VCE customers that install solar after June 1, 2018 will be placed on the new NEM policy:
   - Monthly billing
   - February true-up

• Current VCE customers with solar (385) have monthly billing and an April true-up date.
• These customers will be moved to a February true-up date. We will notify VCE NEM customers of the change.
### Reason for February True-Up

#### PG&E True-Up Date, Monthly Billing #1

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<thead>
<tr>
<th>Jan</th>
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<tbody>
<tr>
<td>PG&amp;E True-Up</td>
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<td>VCE Bill</td>
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<tr>
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<td>$250</td>
<td>$340</td>
<td>$430</td>
<td>$520</td>
<td>$610</td>
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</table>

- For a true-up date in June, a customer could pay $770 by May, then be reimbursed for the wholesale value of their $300 in credits on their true-up in June, even though they’re not a net generator.
- Cycle would continue every year. This is not a ‘first-year’ issue.

#### PG&E True-Up Date, Monthly Billing #2

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<th>Jan</th>
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<td>$270</td>
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- For a true-up in September, this customer will spend $520, then credits kick-in and keep them under a $100 balance at true-up.

#### PG&E True-Up Date, Monthly Billing #3

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<td>VCE Bill</td>
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- Customer has $100 credit at true-up--paid out at wholesale? Rolled over?
# First Year Impact Examples

## Three NEM Customer Examples

<table>
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<td><strong>Year 1 Cumulative Payments</strong></td>
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<td><strong>Year 1 Cumulative Payments</strong></td>
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</tbody>
</table>

- **Jan**: January
- **Feb**: February
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- **July**: July
- **Aug**: August
- **Sept**: September
- **Oct**: October
- **Nov**: November
- **Dec**: December
### Financial Impacts—Net Position

#### Table: Financial Impacts

<table>
<thead>
<tr>
<th>Scenario</th>
<th># of Customers / % of NEM Customers</th>
<th>2018 ($1,000's)</th>
<th>2019 ($1,000's)</th>
<th>2020 ($1,000's)</th>
<th>2021 ($1,000's)</th>
<th>Running Average</th>
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<tbody>
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<td><strong>Current NEM Policy</strong></td>
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<td></td>
<td>$ 2,071</td>
<td>$ 10,377</td>
<td>$ 17,927</td>
<td>$ 22,261</td>
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<tr>
<td><strong>All NEM to Annual (same as PG&amp;E)</strong></td>
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<tr>
<td></td>
<td>$ 2,126</td>
<td>$ 8,922</td>
<td>$ 16,296</td>
<td>$ 20,441</td>
<td>$ 1,820</td>
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<tr>
<td><strong>&gt;$1000 annually</strong></td>
<td>228/3.3%</td>
<td>$ 2,126</td>
<td>$ 9,641</td>
<td>$ 17,018</td>
<td>$ 21,169</td>
<td>$ 1,092</td>
</tr>
<tr>
<td><strong>&gt;$750 annually</strong></td>
<td>413/5.9%</td>
<td>$ 2,126</td>
<td>$ 9,729</td>
<td>$ 17,107</td>
<td>$ 21,259</td>
<td>$ 1,002</td>
</tr>
<tr>
<td><strong>&gt; $500 annually</strong></td>
<td>882/12.6%</td>
<td>$ 2,126</td>
<td>$ 9,891</td>
<td>$ 17,269</td>
<td>$ 21,423</td>
<td>$ 838</td>
</tr>
</tbody>
</table>

- The cumulative net impacts (3 years) show an estimated difference of $838k when placing the >$500 customers on monthly billing.
- Revenues are not recorded until true-up.
Review and approve new NEM policy recommendations
1. Residential NEM customers with solar systems installed prior to June 2018 may retain their existing PG&E annual billing cycle unless their annual balance exceeds $500.

2. Residential NEM customers with solar systems installed prior to June 2018 with annual balances exceeding $500 will be transitioned to monthly billing with a February true-up date.

3. Residential customers with solar systems installed prior to June 2018 that have been placed on a monthly billing cycle can request to move back to an annual billing cycle if their annual bill is less than $500 per year for a consecutive two-year period.

4. Non-residential NEM customers with solar systems installed prior to June 2018 may retain their existing PG&E annual billing cycle, unless their annual balance exceeds $5,000.

5. Non-residential NEM customers with annual balances exceeding $5,000 may be transitioned to monthly billing with a February true-up.

6. NEM customers may choose a monthly billing cycle with February true-up in lieu of an annual billing and true-up cycle.

7. NEM customers with solar systems installed prior to June 2018 that are on annual billing cycles will retain their current true-up month.

8. The transition from PG&E to VCE will occur on the customer’s true-up date in 2019.
Proposed NEM Policy

9. NEM customers with less than $100 in credits will have the credit balance roll over to the next billing cycle (with no loss of credits). NEM customers with a credit balance exceeding $100 on their annual true-up date will be cashed-out, unless they choose to roll over the balance or donate the funds.

10. NEM customers that generate excess energy on a monthly basis will receive the retail value plus a $0.01/kWh credit for the excess generation, without additional compensation for participation in renewable programs.

11. Customers on time-of-use (TOU) rate schedules will receive a $0.01/kWh credit for excess generation during any TOU period on a monthly basis.

12. NEM customers that generate excess energy on an annual basis will receive the wholesale value of net surplus generation, plus a $0.01/kWh adder.

13. NEM customers may opt-out of VCE’s NEM program and return to PG&E at their discretion.

14. Residential customers adding solar systems beginning June 1, 2018 will be placed on monthly billing with an annual true-up date in February.

15. Non-residential customers adding solar systems beginning June 1, 2018 may be placed on monthly billing with an annual true-up in February.
Agenda Item 16 - Joint Powers Agency New Member Application Policy

• Background – VCE post launch

• Timing and Process Requirements
  o CPUC Resolution E-4907 – requires one year waiting period
  o Revised Implementation Plan submitted to CPUC by December 31st
  o VCE New Membership – Joint Powers Agreement (45 days from notice)
  o Load data request from PG&E and analysis by SMUD
  o Early October notice from potential members to meet Dec 31st CPUC deadline
Agenda Item 16 - Joint Powers Agency New Member Application Policy

• New Member Terms and Fees
  o Financial and pollution reduction benefits
  o On boarding activities and costs
    ▪ updated load analysis
    ▪ preparing an amended Implementation Plan
    ▪ administrative tasks required for organizational integration
    ▪ power procurement
    ▪ customer notification and enrollment
  o Direct costs (not to exceed $50k)
  o Indirect support
  o Reimbursement of direct costs

• Governance
  o Board
  o Community Advisory Committee
Long Term Renewable Solicitation Criteria
Agenda Item 17: Background

• The renewable Solicitation is the #1 IRP Action Plan item.
  • Solicitation was posted August 13.
  • Bids due Monday, September 17.
  • Have received Notices of Intent to Bid from 17 developers with 43 project variations, in excess of 1,500 MW.
• Key outcome is to begin building VCE’s long-term renewable portfolio.
• Recently signed SB100 changes 2030 RPS target from 50% to 60%.
• Legal requirements for LT contracting. To meet minimums, will need more than 91MW of solar equivalent energy (206,761MWh/yr) starting in 2021.
• With attractive pricing, solicitation could supply a full 42% of VCE’s load. This is 141MW solar equivalent (320,383 MWh/yr).
• May receive proposals from existing renewable projects.
• VCE will have additional solicitations in the future.
• Detailed evaluation methodology has not been provided in the solicitation.
Agenda Item 17: Criteria for Review

• Seven criteria for review
  1. Definition of Local Resources
  2. Siting Criteria
  3. Development Status Criteria
  4. Acceptable Technologies
  5. Energy Storage
     • Include in Solicitation (or Not)
     • Which Technologies
  6. Out-of-State Resources
  7. Interconnection Status

• No policy action is requested at this time
  • We plan on returning after solicitation with recommendations on policies for definition of local renewables and siting criteria
Agenda Item 17: Definition of Local Resources

- There are many constraining land uses in Yolo County.
- Renewable development will take more time.
- Value to reserving local designation for Yolo County
- Recommendation:
  1. “Local” is within Yolo County or with nexus to YC.
  2. “Regional” is within the surrounding 6 counties plus Geysers GRA.
With the significance of local agriculture in Yolo County, VCE probably does not want to promote renewable development on prime farmlands.

Additionally, the Renewable Energy Transmission Initiative defined 2 categories of lands to avoid promoting renewable development on.

Recommendation

1. Solicitation includes criteria to screen out development of its renewable projects on prime farmlands.
2. Solicitation includes criteria that screens out Projects proposed for either: RETI Category 1 (development prohibited) lands; or, RETI Category 2 (potential resource conflicts) lands.
• VCE needs to have Projects proposed that are more likely to be successfully completed in the timeframe needed to meet the 2021 minimum contracting criteria.
• Establishing minimum development progress criteria will be important in ensuring this is achieved.
• Recommendation
  Project bidders must provide:
  1. Acknowledgment by the relevant land use authority that a permit application has been received.
  2. Evidence of site control.
Agenda Item 17: Acceptable Technologies

• Staff is not proposing specific restriction on the type of renewable technologies other than to require that equipment be a mature technology.

• Recommendation
  1. Proposers can submit project proposals for any renewable technology and project equipment that is a mature listed technology.
  2. Additionally, the proposer must submit supporting bankability documentation.
Agenda Item 17: Energy Storage

• VCE has an obligation under CPUC rulings to procure energy storage at a minimum level of 1% of its 2020 forecast peak load.
• Additionally, the most cost-effective storage installations currently are integrated with renewables because of the available renewable investment tax credit.
• Recommendation
  Solicitation included request for storage systems, with a preference for battery storage systems integrated with a renewable project (wind and/or solar).
Agenda Item 17: Out-of-State Resources

• There are ample locations for in-state renewable energy development.
• There will be future opportunities to request new long term renewable supply from out-of-state, if it proves necessary.
• Recommendation
  Solicitation limit projects to renewable resources located within California.
It will be important to solicit projects that have already begun the electrical interconnection process. This will help VCE insure it receives bids from projects likely to begin commercial operation in the needed timeframe (2021).

Recommendation
Solicitation included a minimum criteria requiring that any submitted project already be in an interconnection queue, and that the project has requested full capacity deliverability status for its interconnection.
Agenda Item 17: Questions?