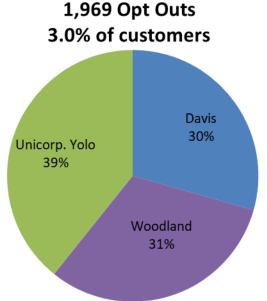
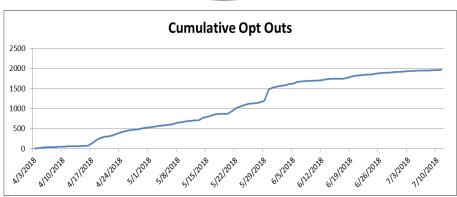
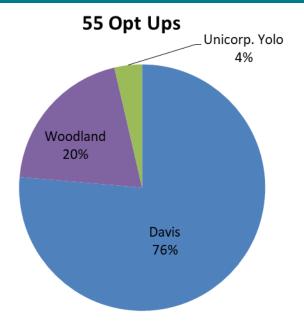
Item 9 - Enrollment Update







Opt Out Channel					
CSR	38%				
IVR	28%				
Web	34%				

	Eligible	Opt Out	% Opt Out
Residential	56,000	1,284	2.3%
Non-Residential	8,500	685	8.1%
Total	65,000	1,969	3.0%





Item 12 - NEM Policy

July 12, 2018 Board Meeting Woodland, CA



Background

- VCE went through a lengthy process to approve the existing NEM policy; used other CCA programs as models.
- Current policy was reviewed by staff, CAC and was made available to the public
- Current policy requires monthly billing and an annual trueup in April which is similar to most CCAs
- Current policy pays customers 1 cent/kWh more than PG&E for excess generation
- Current policy designed to balance customer needs and the cashflow requirements of VCE
- The policy was approved on Feb 8, 2018 by the VCE Board

CCA Policy Comparison - NEM

CCA	Excess Gen - Monthly	Excess Gen - Annual	True-Up	Settlement	Cash Out Limit
Peninsula Clean Energy	Retail plus \$0.01	Accumulated Credits	April	Monthly	>\$100 can elect cash out
MCE	Retail plus deep green (currently \$0.01)	Accumulated Credits	April	Monthly	>\$100 can elect cash out
Sonoma Clean Power	Retail plus \$0.01	Accumulated Credits	April	Monthly	>\$100 can elect cash out Cap on payout
Silicon Valley Clean Energy	Retail GreenPrime if enrolled	Accumulated Credits	April	Monthly	>\$100 can elect cash out Cap on payout
Lancaster Choice Energy	Retail	Accumulated Credits Credit not applied if annual net generation is less than zero.	October	Monthly	None – Always cashed out
Clean Power SF	Retail	Average retail rate	April	Monthly	None
PG&E	Retail	Wholesale, plus adder if given RECs	Annual based on enrollment	Annual, Monthly for some	None
Valley Clean Energy	Retail plus \$0.01	Wholesale plus \$0.01, plus adder if given RECs	April	Monthly	>\$100 can elect cash out

NEM Feedback and Options

Local Solar community feedback raised concerns that some NEM customers could pay more in their first year of service

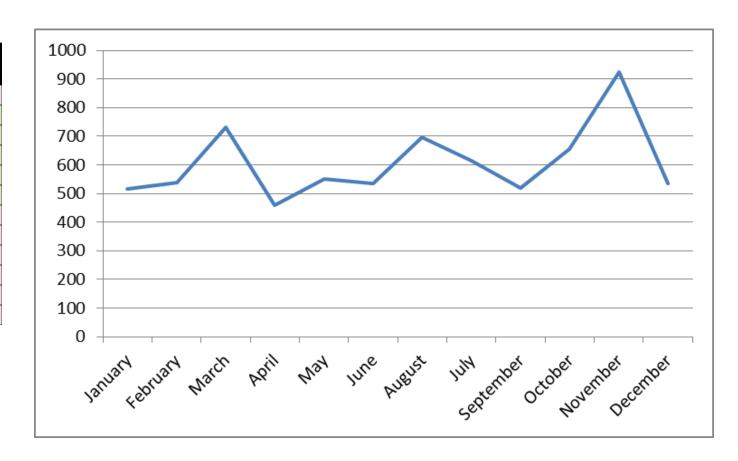
Staff initiated an examination of the VCE NEM policy to see if changes were warranted

To balance the objectives of simplicity and minimizing fiscal impacts, several options are being examined:

- Existing policy with April true-up date and monthly billing
- Move to the PG&E true-up date but retain monthly billing
- Move to the PG&E approach—keep the existing true-up date, with annual billing and a monthly payment option
- Hybrids of the above

PG&E NEM True-Up Dates by Month

Month	NEM Anniversaries
January	515
February	540
March	733
April	459
May	552
June	536
July	696
August	614
September	520
October	655
November	925
December	534



Current NEM Policy Example

Example for September PG&E True-Up Under Current Model													
	Jan	Feb	Mar	April	May	June	July	Aug	0)	Sept	Oct	Nov	Dec
PG&E True-Up									\$	100			
VCE Bill	\$100	\$100	\$100	\$(120)	\$(120)	\$(120)	\$(120)	\$(120)	\$	100	\$100	\$100	\$100
Running Total	\$400	\$500	\$600	\$ 480							\$100	\$200	\$300

- For a PG&E true-up date in September, this customer would pay \$480 by the VCE true-up date in April
- Most customers would pay less, some would pay more
- The customer would accrue \$480 in additional credits over the course of the summer and by the next true-up period would only owe \$100
- The customer would essentially be back on track, but would have spent \$480 out of pocket during the first year of VCE service

PG&E Model

PG&E Model												
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Monthly Charges	\$100	\$100	\$100	\$100	\$(120)	\$(120)	\$(120)	\$(120)	\$(120)	\$100	\$100	\$100
Annual True-Up									\$ 100			

- True-up month varies by customer and there will be true-ups every month of the year
- Customers are billed annually, although some are on monthly billing cycles

Recommendation

Postpone NEM enrollment

- Postpone NEM enrollment to 2019 (expected Q1 2019) to allow for development/finalization of a modified policy and billing systems.
- If Board approves postponement, direct staff to host public workshops to provide information and receive public input on proposed changes to NEM policy.

Policy Amendment Concepts - Discussion

Stay with the true-up schedule used by PG&E for the majority of existing NEM customers

This would be seamless to customers and they will receive VCE benefits

Shift some NEM customers to monthly billing

- Shift the roughly 670 existing NEM customers (less than 10% of NEM customers), who consistently owe more than \$500/yr from an annual payment to monthly payments while maintaining their existing true-up date.
- Allow staff to negotiate with Ag and commercial customers (less than 100 customers).

New NEM Customers

 New customers would be placed on annual billing and trued-up on the month they become a NEM customer, unless annual true-up exceeds \$500

Financial Impacts—Net Position

Scenario	# of Customers / % of NEM Customers	2018 (\$1,000's)	2019 (\$1,000's)	2020 (\$1,000's)	2021 (\$1,000's)	Cumulative Difference
Current NEM						
Policy		\$ 2,071	\$ 10,377	\$ 17,927	\$ 22,261	
All NEM to						
Annual (same as						
PG&E)		\$ 2,126	\$ 9,431	\$ 16,250	\$ 20,622	\$ 1,639
>\$1000 annually	124 / 1.7%	\$ 2,126	\$ 9,504	\$ 16,508	\$ 20,882	\$ 1,379
>\$750 annually	255 / 3.5%	\$ 2,126	\$ 9,585	\$ 16,703	\$ 21,078	\$ 1,183
> \$500 annually	667 / 9.3%	\$ 2,126	\$ 9,767	\$ 16,988	\$ 21,366	\$ 895

- The cumulative net impacts (3 years) show an estimated difference of \$895k when placing the >\$500 customers on monthly billing
- Revenues are not recorded until true-up

Issues for Consideration

- Keeping NEM program simple for customers (i.e. structure similar to existing PG&E program)
- Changes to VCE's cash flow.
- Proposed changes will require up-front costs to upgrade the billing and back-office systems.
- Changes may increase ongoing administrative costs for VCE by having to support multiple true-ups per year rather than one time in April.
- Changes will take time, delaying inclusion of NEM customers into VCE. Existing NEM customers would need to stay with PG&E while policies and processes are put in place.
- Timing and cost of outreach to NEM customers.
- Outreach to solar installers.
- Other issues/ideas will arise—keeping it relatively simple may be difficult.

Proposed Next Steps

- Schedule and conduct outreach to NEM customers/solar installers in late July/early August
- Finalize policy amendment concepts and present to the CAC at their August meeting
- Finalize policy amendment concepts and present to the Board for approval at the September meeting
- If Board approves recommendation, send 2 letters to all NEM customers and contractors notifying them of the proposed changes—one for postponement (immediately), and one to notify of revised policy when it is finalized (September)
- Proceed with changes to billing/back-office systems if final policy amendments are approved by the Board
- Implement changes and enroll customers beginning in early 2019

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Item 13 – IRP Adoption

Valley Clean Energy Integrated Resource Plan (IRP) Adoption

July 12, 2018



Background/Process

Integrated Resource Plan – Required by CPUC under SB 350 for all CCA's (LSE's)

- Portfolio planning for years 2018-2030
- Requires "preferred portfolio" to be identified by VCE
- Requires Action Plan to ID proposed implementation steps
- Updated every 2 years

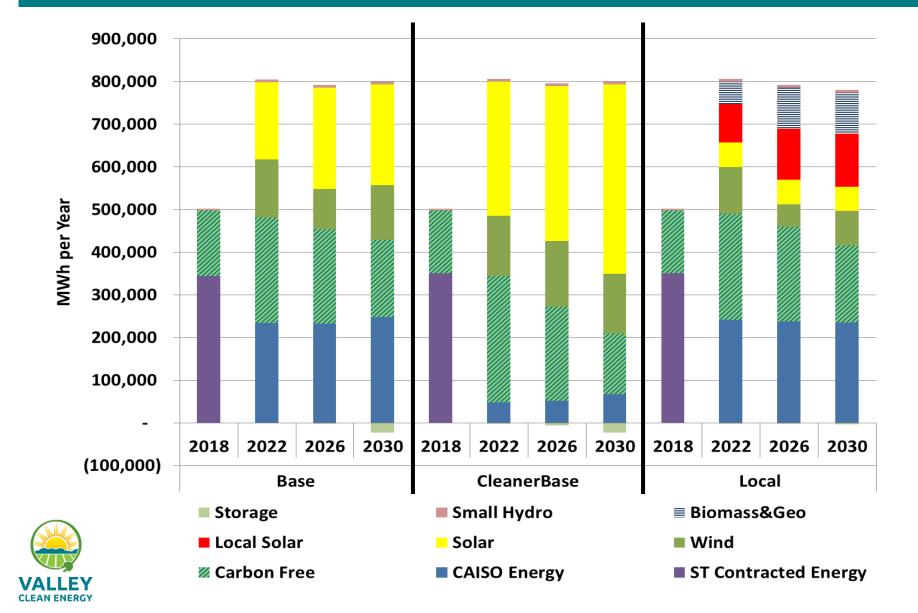
Development of IRP

- Public Workshop April 26 (hosted by CAC)
- Community Advisory Committee Meetings: May 30 & July 2
- Board Briefings/Direction: May 10 & June 6
- Board Action: July 12
- Submit to CPUC by August 1st; presentation to CPUC in early August

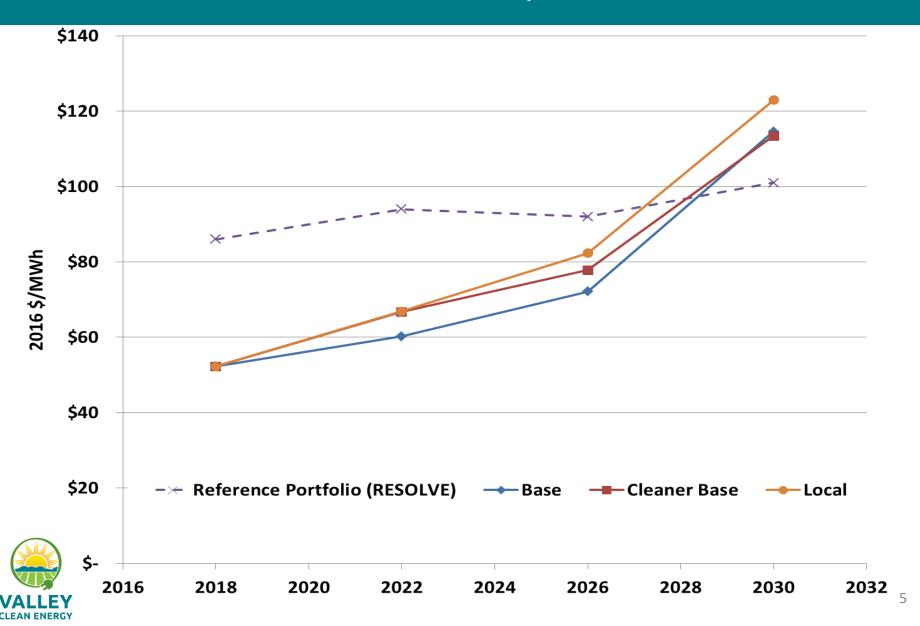
What's New?

- Reduced Number of Scenarios based on Board and CAC Feedback
 - Base 50% RPS, 75% clean
 - Cleaner Base –80% RPS, 100% clean (Recommended)
 - Local 50% RPS, 75% clean, a more balanced local solar portfolio with more projects in the 1-10 MW size range
- Updated scenarios result in closer range for costs by 2030 and a more plausible local portfolio
- Revised action plan and prioritization based on CAC inputs
- Board Actions:
 - Select Preferred Portfolio
 - Approve IRP

Resource Portfolio Generation Mix



Estimated Generation Costs by Portfolio



Notes on Resource Choices

Biomass and Geothermal

- **Greenfield (new):** Long lead-time with significant cost and risk during development. Typically long permitting process. Scale is 50-200 MW, which could necessitate partnering where VCE would be a small part with limited influence over process & price.
- **Existing:** Limited availability price and availability to be discovered in RFO.

<u>Note:</u> Despite high costs, baseload renewables may become necessary in the long term to manage load at high renewable energy penetration. Remote generation could be an option.

• **Solar PV.** Likely the easiest local resource and very cost competitive at 1MW and larger. Scalable but may conflict with agricultural and environmental interests. Diminishing value of solar as renewable portfolio grows owing to its inability to support night-time electric demand.



Notes on Resource Choices – Cont.

- **Wind.** Cost effective and has attractive profile relative to solar generation. New wind projects are typically in the 50-200+ MW range which would require partnering with others for the off-take. Limited incremental potential in California. Picking up smaller contracts with existing wind facilities may be a good match for VCEA's size.
- **Storage.** Increasingly cost effective. Costs expected to fall throughout the forecast period. Qualifies for RA and Flexible Capacity requirements but cost-prohibitive for riding through non-solar hours.



Notes on Portfolio Choices

- **Portfolio choices.** The Base Portfolio is very similar in overall cost to the Cleaner Base which has significantly higher percentage of renewables. This result is driven by expected low costs for solar PV relative to CAISO electricity prices and other renewables. Due to the high risk and high cost of baseload renewables such as biomass and geothermal, we propose VCEA focuses mainly on large scale solar and wind resources and explore local renewable projects if and when VCEA receives attractive offers from developers (through solicitation or unsolicited)
- By 2021, 65% of VCEA's RPS energy must be met by resources under long term contracts (approx. 161,500 MWh per year). This is approximately equivalent to:
 - 25MW biomass plant, OR
 - 55-60 MW wind farm, OR
 - 600+ Acres solar installation, OR
 - 150 commercial rooftop / parking lot solar systems



Action Plan

Updates from last Board briefing on June 6th:

- Placed into IRP Report format
- Additional descriptive text for IRP Report
- CAC edits and prioritization
- Added evaluation of impacts of electrification on load forecast

Action Plan Key Elements:

- 1. Long term renewable procurement
- 2. Establish long term renewable energy and GHG targets for 2030
- 3. Key portfolio performance indicators
- 4. Evaluate impacts of electrification on load forecast
- 5. Evaluate impacts of climate change on load forecast
- Evaluate options for assuming responsibility for energy efficiency / demand side programs from PG&E
- 7. Investigate non-battery storage technologies and demand response options

Recommendations

- Approve the Integrated Resource Plan (IRP) which includes the "Cleaner Base" portfolio as the Preferred Portfolio and the associated Action Plan, for submission to the California Public Utilities Commission (CPUC).
- 2. Authorize staff to make any non-substantial changes necessary to finalize the IRP document for filing.

