

AGENDA ITEM 4:
CAC OUTREACH TASK GROUP REPORT
July 2, 2018

- PR and marketing communications services
- NEM policy revisions: outreach to NEM customers and solar providers

PR and marketing communications services

- Circlepoint performance
 - Term of service and remaining projects ending soon
- PR/Marcom agency selection
 - Request for Proposal
 - City of Davis procurement process (per legal staff)
 - Role of the Outreach Subcommittee in agency review
- Role of Outreach Subcommittee
 - Participate in staff-agency calls and meetings
 - Review messaging and content prior to “going final” for public release
 - Report regularly to CAC on areas of concern

Outreach to NEM customers and solar providers

- Negative public perception of current VCE NEM policy
 - Financial impact on some NEM customers
 - Potential for opt-outs
- Revision of NEM policy
 - Based on input from solar vendors/NEM customers and staff analysis of financial impacts
 - Need for CAC recommendation and Board action
- Outreach recommendations
 - Immediate update for solar providers re: policy review
 - Policy clarification for existing NEM customers



Agenda Item 7: NEM Policy Update

July 2, 2018

Woodland, CA



VALLEY
CLEAN ENERGY

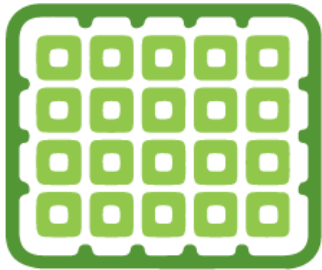
Agenda Item 7: History

- VCE went through a lengthy process to approve the existing NEM policy
- Current policy was reviewed by staff, CAC and was made available to the public
- Current policy requires monthly billing and an annual true-up 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

Agenda Item 7: CCA Policy Comparison

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
Marin Clean Energy	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 6	None
Valley Clean	Retail plus \$0.01	Wholesale plus \$0.01	April	Monthly	>\$100 can elect

Agenda Item 7: NEM Feedback and Options



Some issues have been raised by the local Solar community

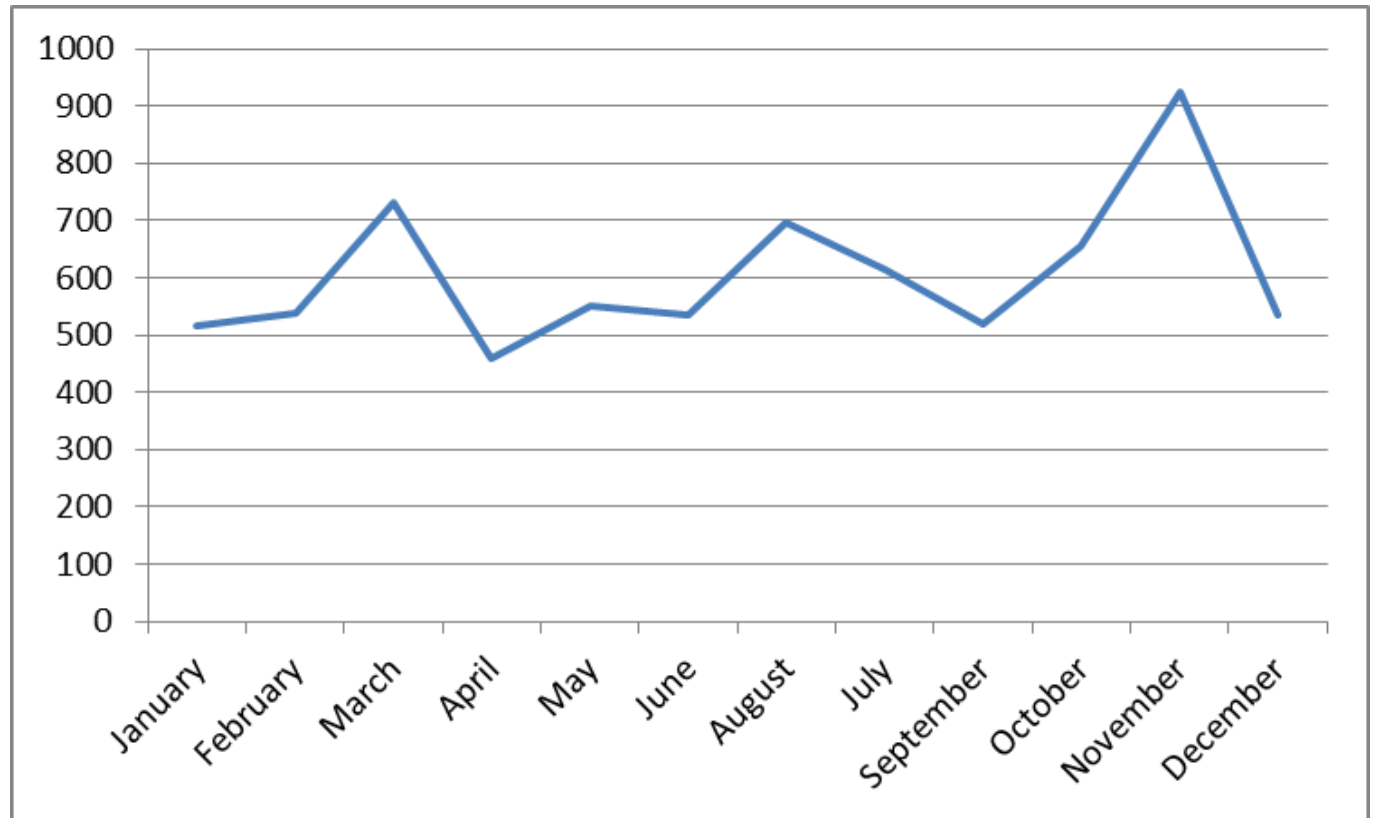
We are re-looking at our NEM policies to see if changes are justified

Looked at several options including:

- 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

Agenda Item 7: 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



Agenda Item 7: Current NEM Policy Example

Example for September PG&E True-Up Under Current Model												
	Jan	Feb	Mar	April	May	June	July	Aug	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 be much lower
- 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

Agenda Item 7: PG&E Model

PG&E Model												
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Monthly Charges	\$114	\$114	\$114	\$114	\$(140)	\$(140)	\$(140)	\$(140)	\$(140)	\$114	\$114	\$114
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

Agenda Item 7: Recommendation

Postpone NEM enrollment

- Postpone NEM enrollment to 2019 (expected Q1 2019) to allow for development/finalization of a modified policy and billing systems.

Agenda Item 7: Policy Amendment Concepts

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

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

Shift some 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.

New NEM Customers

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

Agenda Item 7: Financial Impacts—Net Position

	# of 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		\$ 2,126	\$ 9,431	\$ 16,250	\$ 20,622	\$ 1,639
>\$1000 annually	124	\$ 2,126	\$ 9,504	\$ 16,508	\$ 20,882	\$ 1,379
>\$750 annually	255	\$ 2,126	\$ 9,585	\$ 16,703	\$ 21,078	\$ 1,183
> \$500 annually	667	\$ 2,126	\$ 9,767	\$ 16,988	\$ 21,366	\$ 895

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

Agenda Item 7: Issues

- Proposed changes will require up-front costs to upgrade the billing and back-office systems. SMUD is working on an estimate.
- Changes may increase ongoing administrative costs for VCE by having to support multiple true-ups per year rather than one time in April.
- Changes VCE's cash flow.
- Changes will take time, delaying inclusion of NEM customers into VCE. Existing NEM customers would need to stay with PG&E for an undefined period while policies and processes are put in place.

Agenda Item 7: Issues

- Timing of outreach to NEM customers
- Outreach to solar installers
- Other issues/ideas will arise—keeping it relatively simple may be difficult.

Agenda Item 7: Next Steps

- Present information to the CAC July 2
- Present information to the VCE Board July 12
- Work with SMUD to get estimate of costs to change billing/back-office systems to support proposed changes
- Get final recommendations from CAC at the late July meeting
- Present final recommendations to the Board at August meeting
- If Board approves changes, send letters to all NEM customers and contractors notifying them of the proposed changes—one for postponement and one to notify them of the revised policy
- Proceed with changes to billing/back-office systems
- Implement changes and enroll customers



ValleyCleanEnergy.com



VALLEY
CLEAN ENERGY



Agenda Item 8: Integrated Resource Plan

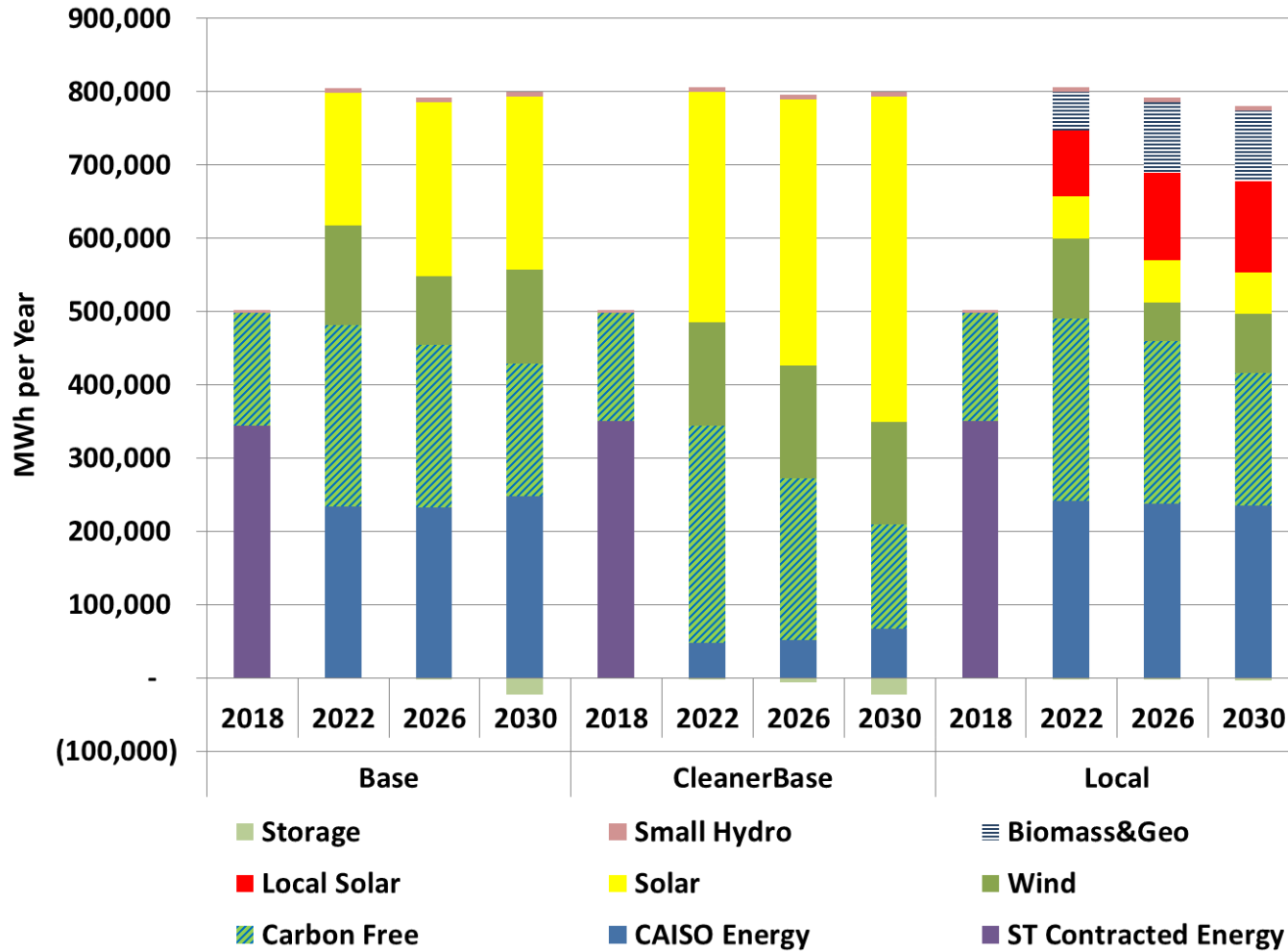
VCEA Community Advisory Committee July 2, 2018 Meeting
Woodland, CA

Agenda Item 8: IRP Update

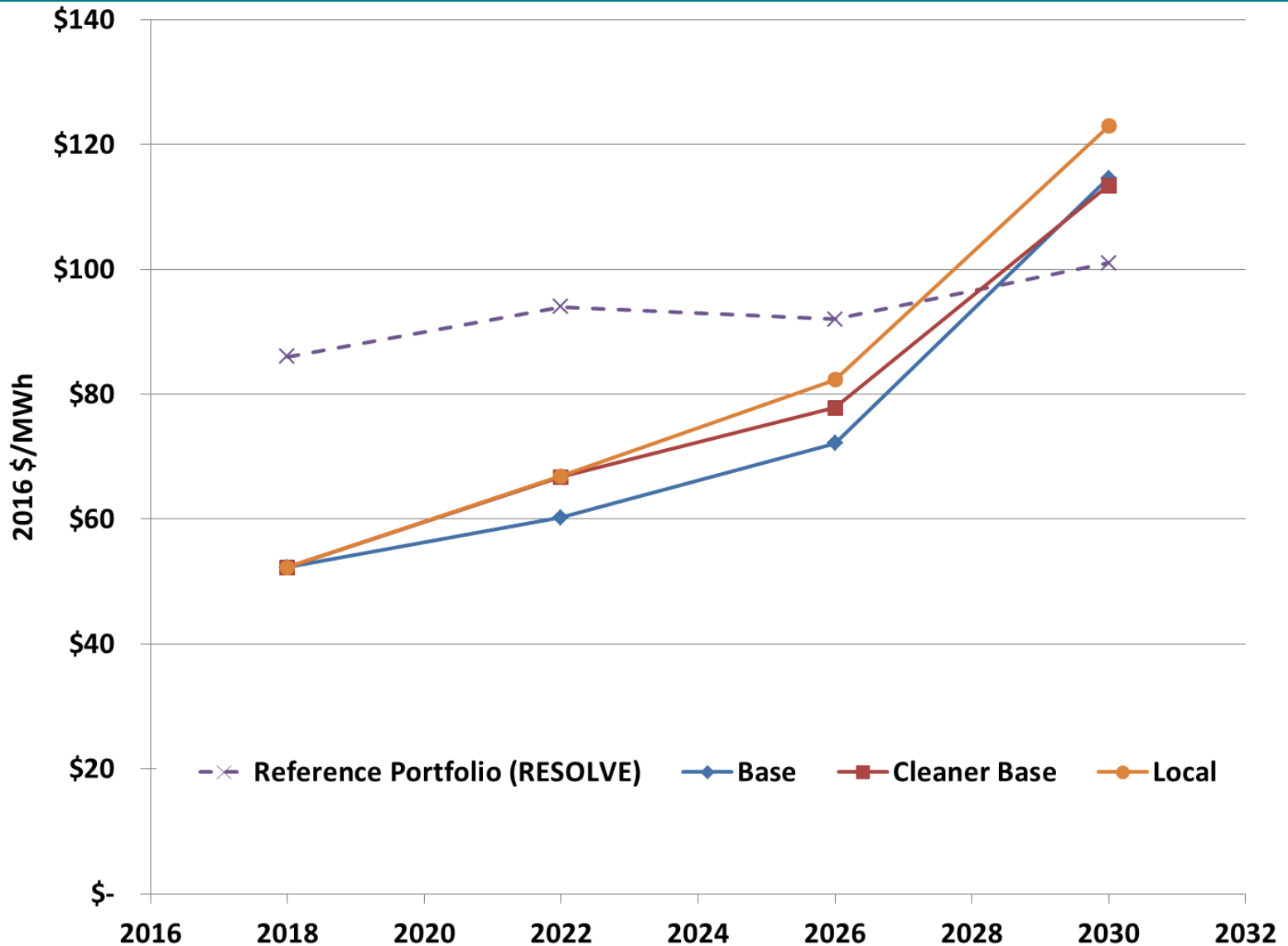
Agenda Item 8: What's New?

- **Reduced Number of Scenarios and fine tuning model and assumptions**
 - **Base** – 50% RPS, 75% clean
 - **Cleaner Base** –80% RPS, 100% clean
 - **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**
- **Key objective today:**
 - **Indicate preferred resource portfolio for Board approval**
 - **Review and finalize action plan items and prioritization**

Agenda Item 8: Resource Portfolio Generation Mix



Agenda Item 8: Estimated Generation Costs by Portfolio



Agenda Item 8: Note on Resource Choices

- **Biomass and Geothermal**

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

Agenda Item 8: Note 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, corresponding to 161,518 MWh per year or an average hourly generation of 18.4 MW. This is approximately equivalent to¹
 - 25MW biomass plant
 - 55-60 MW wind farm
 - 600+ Acres solar installation
 - 150 commercial rooftop / parking lot solar systems

Agenda Item 8: Action Plan

- **Placed into IRP Report format**
- **Added some additional descriptive text for IRP Report**
- **Incorporated CAC edits**
- **Added action item on evaluating impacts of electrification on load forecast**
- **Incorporated consensus prioritization**

Action Plan - Voting Results

CAC IRP Proposed Prioritization of Action Plan Activities				
List of Action Plan Activities	Suggested Priority Ranking			Suggested Changes/Comments:
	*SMUD-GB-LK-MA	Tom Flynn (TF)	Christine Shewmaker (CR)	
Long Term Procurement	1	1	1	TF: Suggested the following additions/revisions: 3. Develop position on producing out of state resources. Develop criteria defining limits on which states to procure long term renewables from. 4. Develop a definition of "local" renewable resource procurement. 5. Determine whether to continue battery or other storage options in solicitation.
Establish Renewables	2	2	2	TF: Commented that the first sentence "[c]onduct studies to evaluate in more detail the costs and ability of VCEA to achieve greater than 50% RPS by 2030, when carbon neutrality might be able to be achieved " stating that "this sentence is confusing and could have different meanings depending on what is intended here. Do we want to know when we can achieve carbon neutrality? It is our hope that this can occur by 2030?" 3. add verbiage to this sentence "develop ... local renewable content, out-of-state resources, etc."
Key Portfolio Performance Indicators	3	3	5	
Evaluate Impacts of Climate Change on Load Forecast	4	4	3	
Evaluate Impacts of Electrification on Load Forecast	-	-	4	
Evaluate Options for Assuming Responsibility for Energy Efficiency/Demand Side Programs from PG&E	5	5	7	TF: Suggested to insert "including cost" after the word "effort", to read as "... scope of effort including cost to assume control..."
Evaluate Non-Battery Storage and Demand Response Options	6	6	6	

* SMUD's original list with comments/suggestions from Gerry Braun, Lorenzo Kristov, and Mark Aulman incorporated.

Agenda Item 8: Discussion and Recommendation

Action plan prioritization and additional feedback

Preferred Portfolio recommendation

Agenda Item 10 - Critical Path Items for LT Solicitation

Task	Decisions Needed by July 30	Decision Needed To Inform Bid Evaluation	Decision Needed Later
Develop criteria/information requests to evaluate new renewables for projects implementing responsible siting practices (both environmental and land use). Develop associated evaluation criteria.			
<i>Develop siting criteria</i>	Needed for solicitation document		
<i>Develop associated evaluation criteria.</i>		Needed for project evaluations	
Develop criteria for acceptable and preferred renewable technologies and locations (e.g. local vs. remote).			
<i>Preferred Technologies</i>	Only needed for exclusions		
<i>Local vs Remote</i>		Needed for project evaluations	
Develop position on procuring out-of-state resources. Develop criteria defining limits on which states VCEA will procure long term renewables from.			
<i>Allow out-of-state resources (Yes/No)</i>	Needed for solicitation document		
<i>Criteria on limits from specific states</i>	Needed for solicitation document		
Develop a position on the definition of "local" for renewable resource procurement.			
<i>Local Definition</i>	Needed for solicitation document		
Determine whether to include battery or other storage options in solicitation.			
<i>Battery Storage</i>	Needed for solicitation document		
<i>Other Storage [Staff is recommending not including]</i>			
Develop criteria for assessing the portfolio content of local versus non local for short-list selection.			
<i>Local Criteria</i>		Needed for project evaluations	
Do a literature review on the economic impacts/value of locally sited renewable resources.			
<i>Local Resource Values Literature Review</i>			Needed to support recommendations to Board for Short Listing of Projects