Valley Clean Energy Board of Directors Meeting – June 9, 2022
via video/teleconference

Item 15 – NEM 3.0 Update

Public Comments

To Provide Public Comment on any agenda item please:

- E-mail 300 words or less to: meetings@valleycleanenergy.org

OR

Join the Public Comment Queue by

- "Raising Hand" on Zoom Meeting

OR

- Press *9 if joining by phone

Emailed comments received **before** the item has concluded will be read into the record.

Emailed comments received **after** the item has concluded but before the end of the meeting will not be read but will be included in the meeting record.

VALLEY
CLEAN ENERGY

Item 15 – NEM 3.0 Update

- NEM 3.0 decision stalled in January
  - Significant public backlash, including from Governor Newsom and solar industry
  - Proposed Decision contained significant new charges for solar customers, though existing customers and low-income customers may not be subject to the same charges.
- California Public Utilities Commission (CPUC) reopened the record on the proceeding May 9; is seeking public input:
  - Administrative Law Judge (ALJ) of the CPUC asking specific questions about the glide path approach, non-bypassable charges (NBCs) and Distributed Energy Resources (DERs)
    - "Glide path approach" would give customers a fixed export adder in addition to the avoided cost calculator rate - the adder would step down over time; low-income customers may get a higher adder
    - Proposed NBC charge to imports as well as behind-the-meter consumption (from Sierra Club)
    - DERs– whether low-income customers could benefit from tariff changes similar to the Community Solar/Disadvantaged Community Green Tariff

VALLEY CLEAN ENERGY

Item 15 – NEM 3.0 Update

- Most notably, no questions or feedback about about the proposed new grid charge
  - Could be as high as $50-100/month
  - Major focus of public (and solar industry) backlash

- Opening comments are due by June 10, reply comments are due by June 24
- To make a comment, go to: https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R2008020 and click on "Add Public Comment"

VALLEY CLEAN ENERGY

Item 15 – NEM 3.0 Update

- CCAs are not uniform in response, but many do not support the NEM 3.0 Proposed Decision
- CAC supports making VCE's position public
- Option: send letter to CPUC on behalf of VCE
  - We urge the CPUC to re-evaluate the expensive grid charges
    - They are a financial burden to customers considering solar, especially low-income customers
    - Disincentivize customers from going solar, putting roadblocks in the way of the state's climate goals
  - Battery storage should be more highly incentivized

VALLEY CLEAN ENERGY

Valley Clean Energy Board of Directors Meeting – June 9, 2022
via video/teleconference

Item 16 – Overview of VCE Forecasting

VALLEY
CLEAN ENERGY

Public Comments

To Provide Public Comment on any agenda item please:

- E-mail 300 words or less to: meetings@valleycleanenergy.org

OR

Join the Public Comment Queue by

- "Raising Hand" on Zoom Meeting

OR

- Press *9 if joining by phone

Emailed comments received **before** the item has concluded will be read into the record.

Emailed comments received **after** the item has concluded but before the end of the meeting will not be read but will be included in the meeting record.

VALLEY CLEAN ENERGY

Item 16 – Overview: Load and Power Costs Forecasting

Budget Adoption
- Comprehensive Financial Model (Annual & Long-term)

Revenues & Administrative Costs
- Total Power Costs
- Revenue Model (Rates)
- Administrative Costs

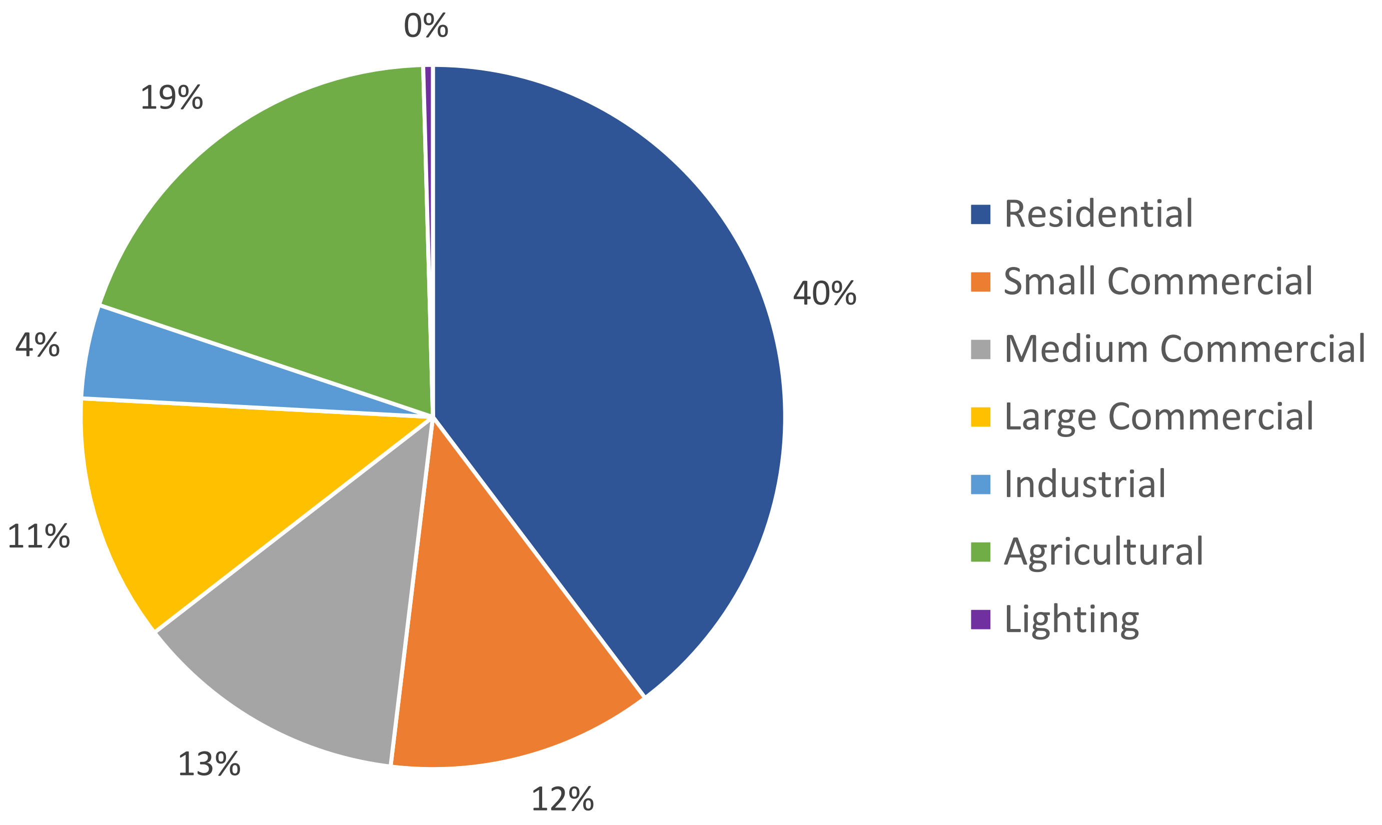
Base Cost Models
- VCE Generation Power Costs Model
- PCIA COSTS (PG&E ERRA PROCEEDING)

External Models and Forecasts
- VCE Load Update (Demand)
- Power Costs (Supply)
- CalCCA Model
- MRW

Market Price Benchmarks (MPBs)
- ACES
- S&P Platts
- Intercontinental Exchange (ICE)

VALLEY CLEAN ENERGY

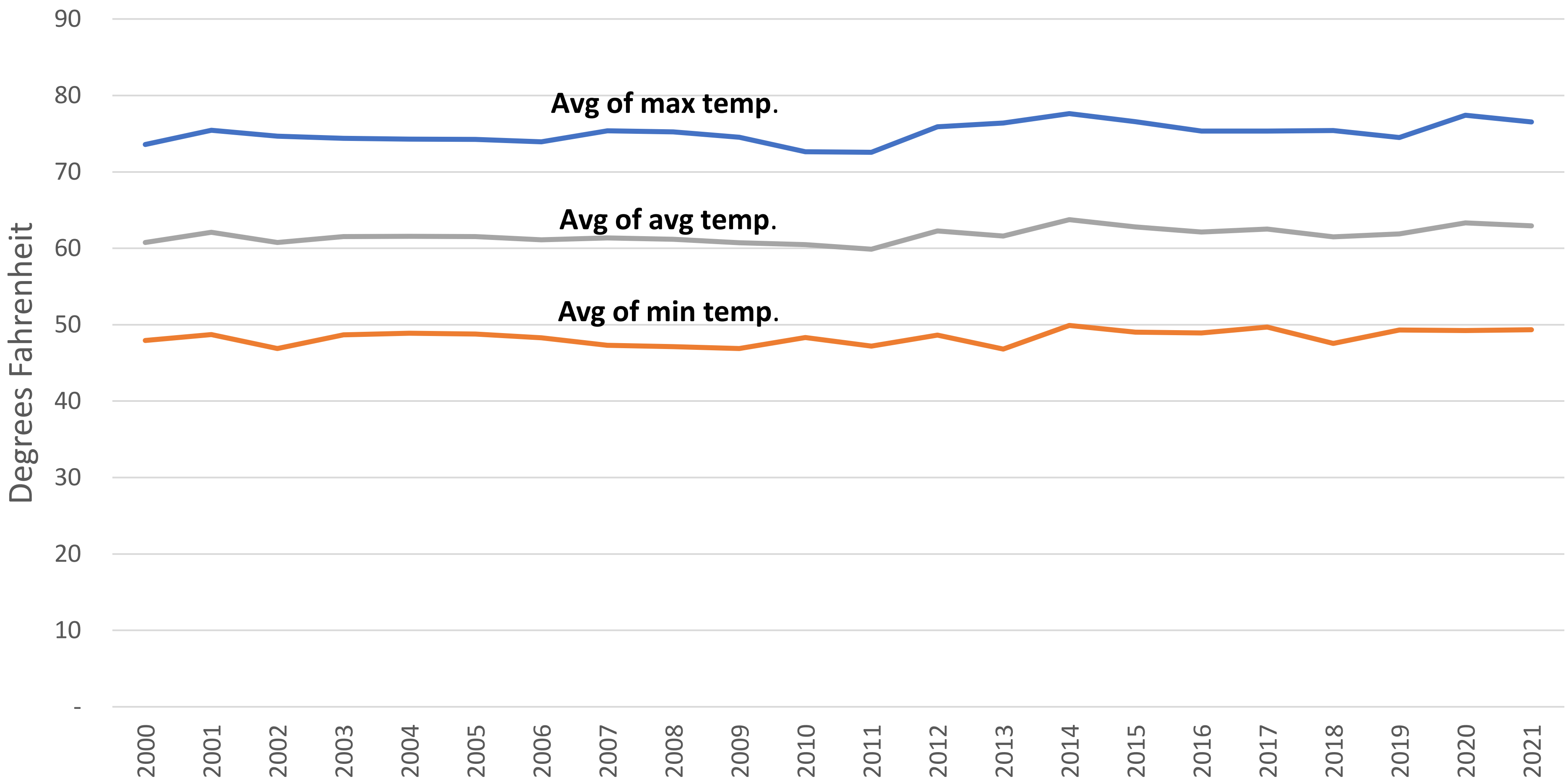
Item 16 – Forecasting: Retail Load by Customer Class



Wholesale load = retail load + 6% distribution losses

Item 16 – Forecasting: VCE Territory Historical Temperature Data

Temps are modestly changing but isolated temperature events are becoming more pronounced

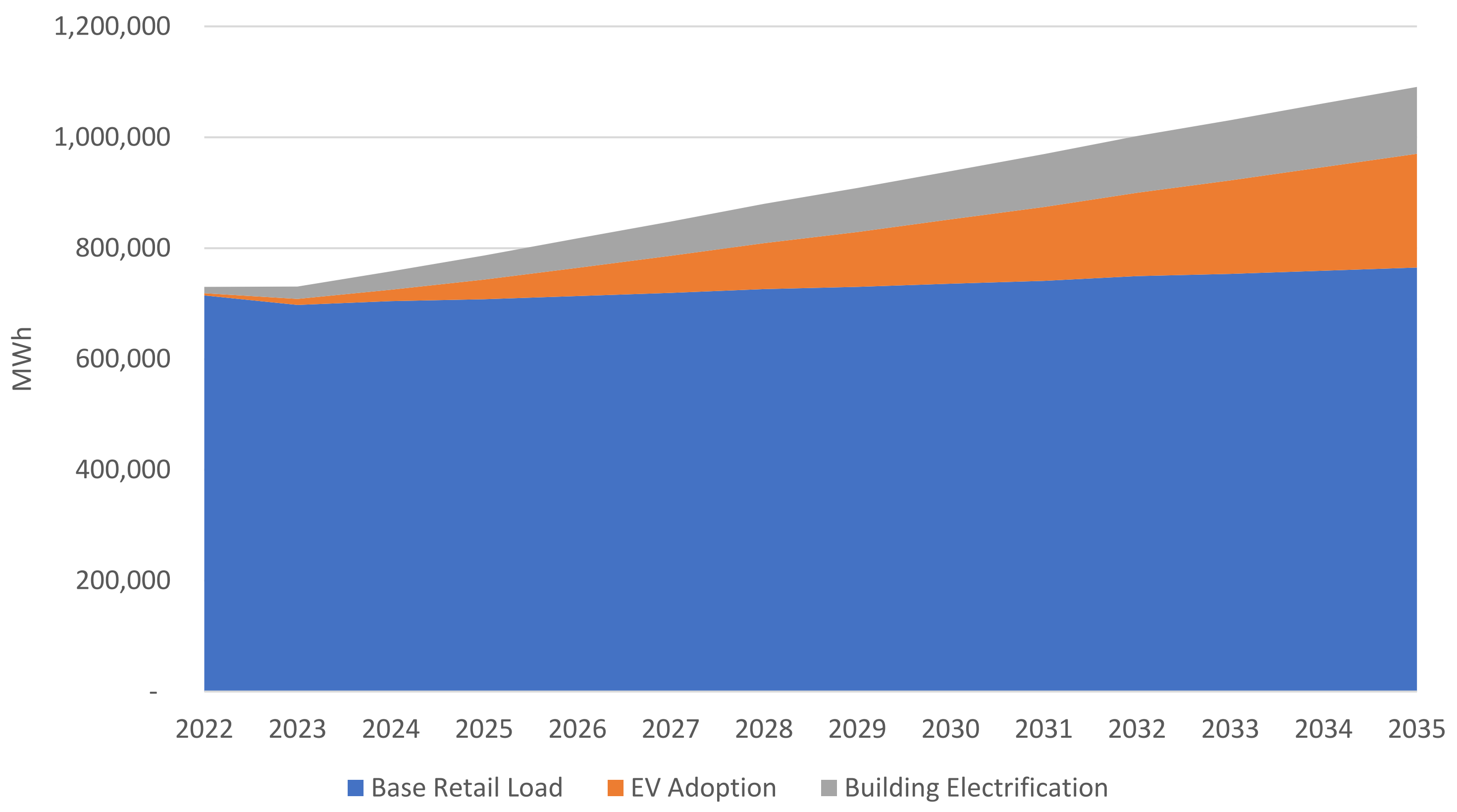


Notes: 1) Currently the average temperature is increasing by 0.36 degrees Fahrenheit per decade
2) Increasing the avg daily temp 1 degree Fahrenheit (across the entire year) resulted in a little over 1% increase in load annually (increase in summer and decrease in winter)

VALLEY CLEAN ENERGY

Item 16 – Forecasting: Impact of EV Adoption and Electrification

Monitoring the adoption of bldg. electrification as well as EV's is critical



- 2.2% load increase from electrification in 2022, 42.7% load increase from electrification (EV & Bldg) by 2035
- Load increase from EV adoption grows more quickly than building electrification
- In 2022, 26% of the electrification load increase is from EV adoption, 23% is from water heating electrification, 52% is from space heating electrification
- By 2035, 63% of the electrification load increase is from EV adoption, 12% is from water heating electrification, 25% is from space heating electrification

Note: VCE's current peak load is approximately 230 MWs

Item 16 – Forecasting: Total Power Costs and Revenues

Power Cost Risks

Annual Load - Overall performance of VCE's load within an acceptable accuracy of 5% annually.

- Energy Costs - Main driver of power cost overages. Annual budget process vs hedging.
- Resource Adequacy (RA) - Increasing CPUC mandated requirements & decommissioning

Risk	Description	2021 Risk	2022 Risk
Load Forecast	VCE's Annual forecast informs energy, resource adequacy (RA), renewable portfolio standard position, and multiple regulatory filings.		
Energy Costs	The risk of extreme fluctuations associated with commodity prices, including energy prices, resource adequacy, and other energy portfolio components, remains.		
Resource Adequacy	Risk of additional regulatory requirements increasing complexity and cost of operations		

Power Cost - Corrective Actions Taken

- Power purchase agreements (PPA) – 238 MW of Renewable, 80% Energy costs, RA
- 2020-22 Power content policy adjustments – Temp reduced the risk of energy costs.
- Financial Calendar (Fiscal to Calendar year-end)

Item 16 – Forecasting: Total Power Costs and Revenues

Revenues Risks

- Power Cost Forecast – Central pillar to setting rates.
- Customer Rates
  - Matching Rate Policy (PG&E Based)
  - Cost-based Rate Policy
- Customer Retention – as forecasted approximately 90% of eligible customers in service territory.

Risk	Description	2021 Risk	2022 Risk
Power Cost Forecast	VCE's Power Cost Forecast accuracy is essential to VCE's ability to adjust customer rates to recover costs, maintain reserves, and allow for timely rate changes.	Yellow	Yellow
Customer Rates	Risk of rate design for cost of service (non-time of use (TOU), PCIA, demand charges, varying generation rates) has been reduced. VCE will continue to develop rate option(s) support risk reductions.	Orange	Yellow
Customer Retention	VCE's launch in 2018 and the addition of Winters, have the most risk of customer opt outs. Risk of higher than expected opt-out level could increased with rising rates.	Yellow	Green

Revenues Corrective Actions Taken

- Power Cost Forecasts – VCE has worked with SMUD to upgrade power cost model components that incorporate load update and forward market costs.
- Customer Rate options - VCE evaluating customer rate options, as described in CAC companion Item 8 on this agenda, to ensure customer retention as a priority.

VALLEY CLEAN ENERGY

Item 16 – Forecasting: Total Power Costs and Revenues

VCE Budget Risks

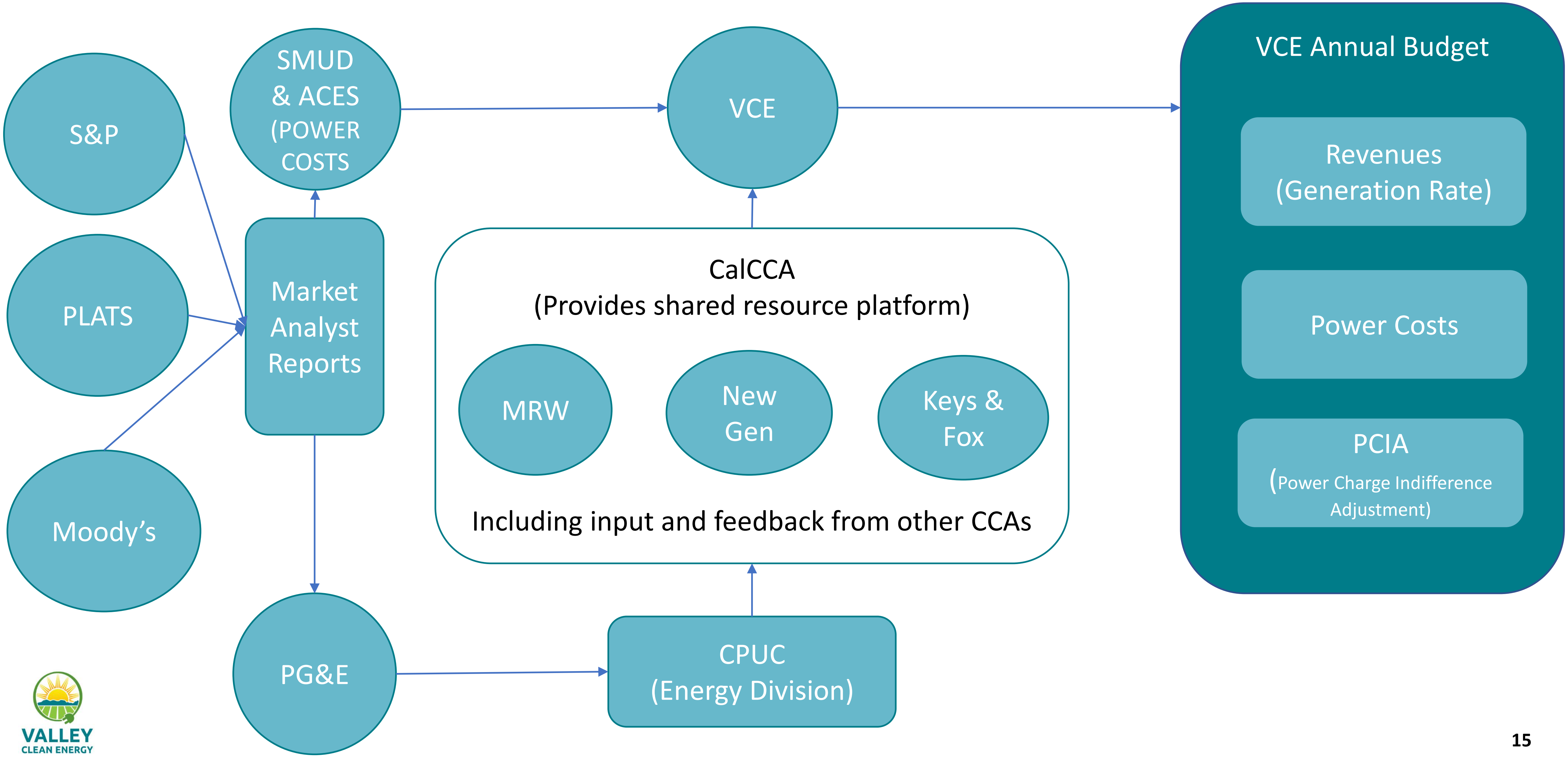
- Power Charge Indifference Adjustment (PCIA) - Volatile PCIA (+46% for 2021 and -57% for 2022)
- Use of VCE Reserves to stabilize customer rates, policies, and customer retention.
- Administrative Costs – Minimized during volatile PCIA and Rates adjustments.

Budgeting Corrective Actions Taken

- Power Cost Contingency – $1.5M for approximately 2% of power costs budgeted
- PCIA Forecasting – CalCCA Modeling
- Collections Policy – VCE adopted a collections policy to maintain healthy receivables

VALLEY CLEAN ENERGY

Item 16 – Forecasting: Total Power Costs and Revenues



Item 16 – Forecasting: Summary

- An inaccurate forecast can result in short term financial impacts
- Overshooting the forecast results in:
  - Higher RA obligations
  - Unnecessary procurement
- Undershooting the forecast results in:
  - RPS compliance risk (across compliance period)
  - Need for additional procurement

- VCE Budget forecasting has been within 9% of actual financial performance
- Energy Market Volatility - Budget Impacts will decrease significantly with Power Purchase Agreements. (90% of Budgeting)
- Continuous Improvement - Working with Partners and developing tools as necessary (e.g. CalCCA)
  - Identifying Risks & Corrective Actions
  - Forecasting is imperfect

VALLEY CLEAN ENERGY

Valley Clean Energy Board of Directors Meeting – June 9, 2022
via video/teleconference

Item 17 – Updated Draft Customer Rate/Product Options

VALLEY CLEAN ENERGY

Public Comments

To Provide Public Comment on any agenda item please:

- E-mail 300 words or less to: meetings@valleycleanenergy.org

OR

Join the Public Comment Queue by

- "Raising Hand" on Zoom Meeting

OR

- Press *9 if joining by phone

Emailed comments received **before** the item has concluded will be read into the record.

Emailed comments received **after** the item has concluded but before the end of the meeting will not be read but will be included in the meeting record.

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Overview

- Background
- Updated draft customer rate/product options
- Tentative Timeline & Next Steps
- Discussion

VALLEY
CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Background - Policy Drivers

- 2017 - VCE Implementation Plan: Program rates must collect sufficient revenue from participating customers to fully fund VCE's budget, including the need to establish sufficient operating reserve funds.
- 2020 – Strategic Plan: Maintain financial stability while continuing to offer customer choice, competitive pricing and establishment of local programs.
- 2018 – 2021 - Strong upward pressure on rates due to regulatory (PCIA, RA) and market conditions (power market price increases in 2020-22). VCE systematically analyzed policy options and implemented strategies to stabilize customer rates, reduce cost, and manage reserves.
    - e.g.: Discontinue rate discount; temporary scale back REC purchases; sign long-term renewable PPA's
- Nov. 2021 – Board adopts cost-based rates and temporary rate increase; directs staff to bring back additional customer rate option in mid-2022.

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

<u>Background - Primary Rate Setting Considerations</u>

- Power Charge Indifference Adjustment (PCIA). A net 46% increase in the PCIA from 2020/21
- Resource Adequacy (RA) mandates and pricing
- Power Prices. Average forward market power prices have increased by nearly 60% since April-2021.

Other key rate setting considerations:

- Western Community Energy Bankruptcy. Regulatory financial oversight pressure
- Implementation of Programs. Ample revenues and reserves required
- PG&E Rate Adjustments.
- Geopolitical Climate. The conflict in Ukraine
- Supply chain interruptions. COVID Pandemic and U.S. trade restrictions
- VCE Cash Reserves – Rate Stabilization

VALLEY
CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Background – Additional Customer Rate Option

- 2020 – During budget adoption, Board direction to investigate additional customer rate option.
- 2020-21 – Staff, in consultation with CAC, research and develop additional customer rate option for Board consideration.
- Nov 2021 – Board postpones consideration of additional customer rate option. Directs staff to bring back in mid-2022.

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Background (CCA Community)

CCA	IOU Territory	Customer Accounts	Number of Rate Options	% Difference to IOU Gen Rate (default product)	Renewable Content Target (default product)
Valley Clean Energy	**PG&E**	**63,509**	**2**	**0% (match)**	**42%**
Clean Power SF	PG&E	311,777	2	0% (match)	50%
East Bay Community Energy	PG&E	546,707	2	-1%	40%
MCE Clean Energy	PG&E	473,826	3	-6%	60%
Peninsula Clean Energy	PG&E	287,987	2	-5%	50%
Pioneer Community Energy	PG&E	87,704	2	-6%	33%
San Jose Clean Energy	PG&E	350,000	3	8%	60%
Silicon Valley Clean Energy	PG&E	225,973	2	-0.50%	50%
Sonoma Clean Power	PG&E	243,436	2	-0.50%	49%
Clean Power Alliance (Los Angeles area)	SCE	1,000,000	3	-6%	50%
Desert Clean Energy	SCE	37,375	2	14%	100%

Notes:
(1) The above information is based on recent publicly available data and is subject to change per IOU and/or CCA rate activities and PCIA adjustments.
(2) VCE's current year target renewable content rate is 20% due to cost-cutting strategies.
(3) Due to the PCIA structure, each CCA has a specific "vintage" date based on what year it launched service and how it phased in its customer base.

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Current Customer Rate/Product Options

- VCE currently offers two retail energy product categories:
  1) "Standard Green" which is at least 75% carbon-free and 25% renewable
  2) "UltraGreen" which is both 100% carbon-free and 100% renewable.
- VCE Rate Policy: Match PG&E + Customer Dividend
- Discount for CARES and FERA

Updated Draft Customer Rate/Product Options

- Draft customer product structure with three options could be established by implementing a new "GreenSaver" option.

  Proposed “GreenSaver” option:

  1. Increased customer choice by adding a new least-cost customer option
     - Approximately 0.5% below PG&E (Total Bill)
  2. 5% more renewable than California RPS requirements

Note: VCE's existing customer dividend program would continue to provide VCE with a mechanism to credit eligible customers when VCE reaches its financial/reserve objectives.

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Draft Customer Rate Structure (Design)

"GreenSaver" *(**New** "Least Cost" product: Priced 0.5% below PG&E with energy sources at least 5% above RPS target)*

Standard Green
(Existing Default: cost-based rate)

UltraGreen 100% Renewable
(Existing Opt-Up: cost-based rate)

VCE Draft Customer Products (Content and Pricing Strategy)

Customer Rate Option	Rate	Portfolio	Notes
GreenSaver (new)	Less than PG&E (-0.5%) total bill comparison	5% above RPS requirements	• Ineligible to participate in customer dividend program; reduced access to full customer program benefits • CARE/FERA customers maintain the existing VCE multi-year portfolio mix for Standard Green default through 2023
Standard Green - Default (existing)	Cost-based	Maintain existing VCE multi-year portfolio mix	• Portfolio minimum percent renewable content above GreenSaver to maintain product differentiation • Eligible for customer dividend program and full customer program benefits
UltraGreen – Opt-up (existing)	Cost-based	Maintain existing 100% renewable portfolio	• Eligible for customer dividend program and full customer program benefits

Item XX – Updated Draft Customer Rate/Product Options

Draft Customer Rate/Product Analysis

- Based on staff research, CCA programs with additional customer product options and cost-recovery rates have not experienced significant "opt-out" or "opt down" activity. (residential and commercial/industrial)
- VCE would continue as planned to grow its overall environmentally beneficial portfolio

New "GreenSaver" customer option 5% above RPS target & lower on a total bill comparison to PG&E by 0.5%.

***Sample Residential Cost Comparion**

GreenSaver	Standard Green	UltraGreen	PG&E
Approxmently 5% above RPS Target	45% Renewable 75% Carbon-free	100% Renewable 100% Carbon-free	**29% Renewable
Average Total Costs $171.15	Average Total Costs $172.46	Average Total Costs $180.97	Average Total Costs $172.46
Electric Generation $64.15	Electric Generation $65.46	Electric Generation $73.97	Electric Generation $79.46
PG&E Added Fees $14.00	PG&E Added Fees $14.00	PG&E Added Fees $14.00	PG&E Added Fees (Included in Generation)
PF&E Delivery Charges $93.00	PF&E Delivery Charges $93.00	PF&E Delivery Charges $93.00	PF&E Delivery Charges $93.00
Average lower by 0.5% of Total Bill (1-2% Gen Discount)		Average $7-10 Per Month	

"Standard Green" is the current default "basis" rate with increased renewable energy priced to recover costs + build reserves.

VALLEY CLEAN ENERGY

*Typical Monthly Electric Charges based on typical usage of a residential customer in VCE service area (547 KWH/Month) of PG&E rates and VCE rates effective as of March 1, 2022 under the E-1 rate schedule. Actual differences may vary depending on usage, rate schedule and other factors. Estimate provided is a monthly 12-month period.
**Note: Represents the mot resent (2019) power content data reported to the California Energy Commission's Power Source Disclosure Program

Item XX – Updated Draft Customer Rate/Product Options

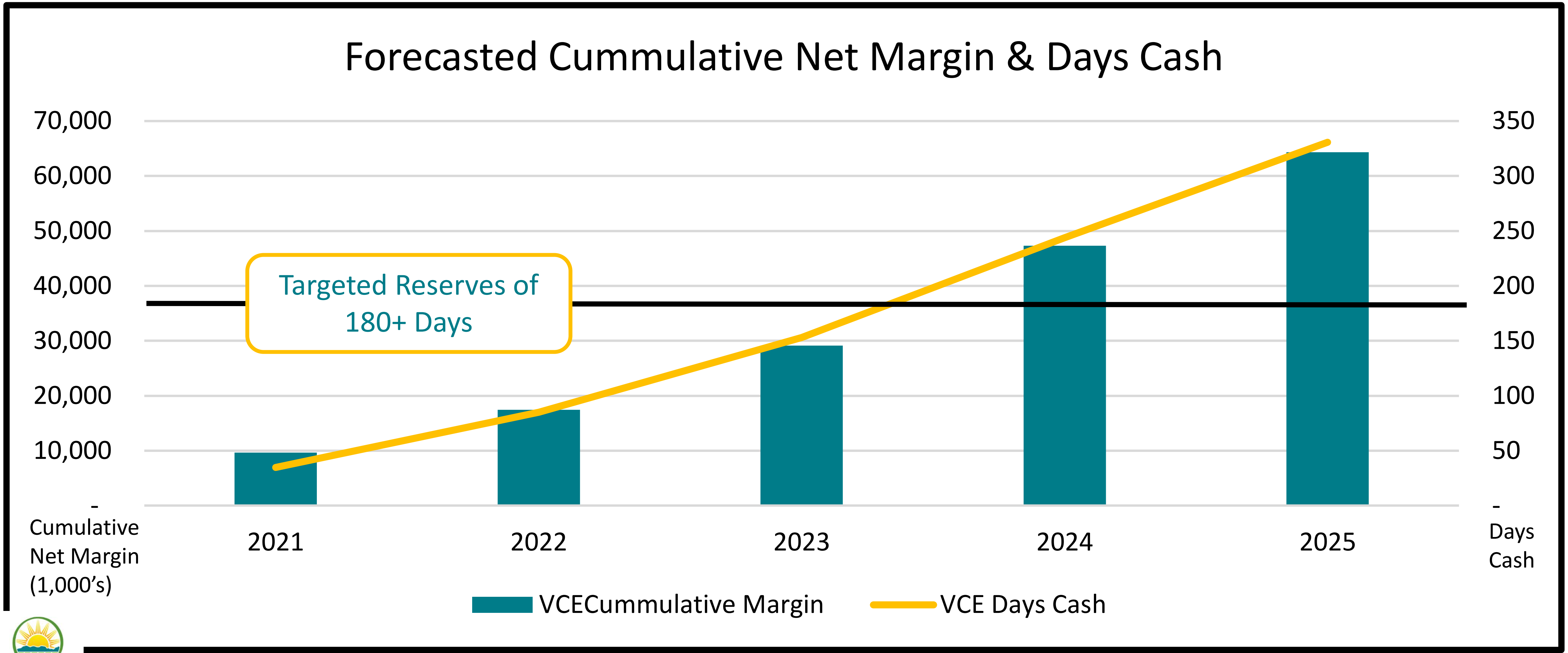
Draft Customer Rate/Product – CAC Initial Feedback

- Product Differentiation – Standard Green –> "GreenSaver"
- Analysis of how long to provide this option as VCE moves toward a 100% renewable future.
- Marketing framework for introducing the new product
- Organizational Cost/Benefit – Value of additional customer choice vs. the effort/value added and risk of customer "opt down."

VALLEY CLEAN ENERGY

Item XX – Updated Draft Customer Rate/Product Options

Example Reserves Timeline



Item XX – Updated Draft Customer Rate/Product Options

Draft Customer Rate/Product - Tentative Timeline

- May 2022: CAC Introduction/feedback on updated draft rate options. **Completed.**
- June 2022: Board Introduction/feedback on updated draft rate options. **Current.**
- June 2022: CAC consideration/recommendation on updated draft rate options.
- July 2022: Board consideration of final updated draft rate options.

Initial Findings

- Adding a least-cost GreenSaver customer rate/product option enhances local control, customer choice, and cost competitiveness
- Adding GreenSaver does not alter VCE's overall portfolio or progress toward 2030 renewable goals.
- Set rates to meet costs/build reserves with lower customer opt-out risk
- Enhances VCE's ability to execute local programs.
- Enhances ability to attract new member jurisdictions.

VALLEY CLEAN ENERGY