Valley Clean Energy Board Meeting – July 13, 2023

Item 14 – 80% Renewable by 2030 Goal

Public Comments

To Provide Public Comment on any agenda item please:

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

OR

If in person, complete a COMMENT CARD

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 ill be included in the meeting record.

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Outline

1. Background
2. Existing Long-term Power Contracts
3. Portfolio Modeling
4. Dispatch Curves – Seasonal & Annual Observations
5. Capacity Additions by Scenario
6. Cost Comparisons
7. RPS Content
8. Key takeaways
9. Strategic Plan / CAC Feedback
10. Recommendation

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Background

- In 2018 the Board adopted a goal for VCE's power content to target 80% renewables by 2030. The goal also stated that 25% of this amount should be from local resources
- At the CAC's November 2022 meeting, the Committee voted unanimously to recommend that the Board modify the existing goal to 100% renewable and maintain the 25% renewable from local resources provision
- In Nov 2022, staff did not have the supporting analysis of the advantages/disadvantages associated with the CAC proposed modification of the current portfolio goal – specifically the 25% local component
- Staff engaged the portfolio modeling services of First Principles Advisory (FPA), the firm that performed the 2022 IRP modeling (VCE Board approved contract in Feb 2023)
  - Analyze the cost impacts of increasing VCE's renewable portfolio content
  - Updated technology cost assumptions – including the incorporation of the Inflation Reduction Act (IRA)

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Existing Long-Term Power Contracts

Notes:
1) Resurgence anticipated COD is early July ’23
2) Putah is a 4 hr system (not 8 hr)

Item 14 – 80% Renewable by 2030 Goal: Portfolio Modeling Scenarios

- Scenario 1.a can be considered the base case or business as usual (BAU)
- Scenario 1.b increases the renewable percentage to 100% by 2030 as well as maintaining the 25% local renewable component
- Scenario 1.c increases the renewable percentage to 100% but only considers the two existing local PPAs[1]
- Scenario 1.d maintains the current 80% renewable by 2030 and only considers the two existing local PPAs[1]

Scenario	NG Price	2030 RPS Target	Local RPS Target
1.a	P50	80%	25%
1.b	P50	100%	25%
1.c	P50	100%	-
1.d	P50	80%	-

VALLEY CLEAN ENERGY

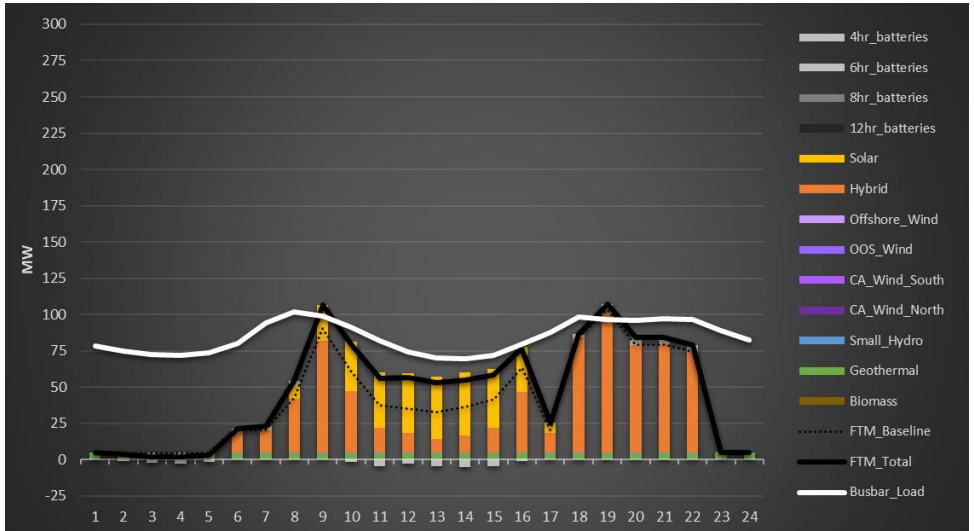
Note: 1) Putah Creek and Gibson
2) In addition, scenarios were performed using a higher natural gas forecast. For this presentation, however, the focus will be on the base case natural gas scenario

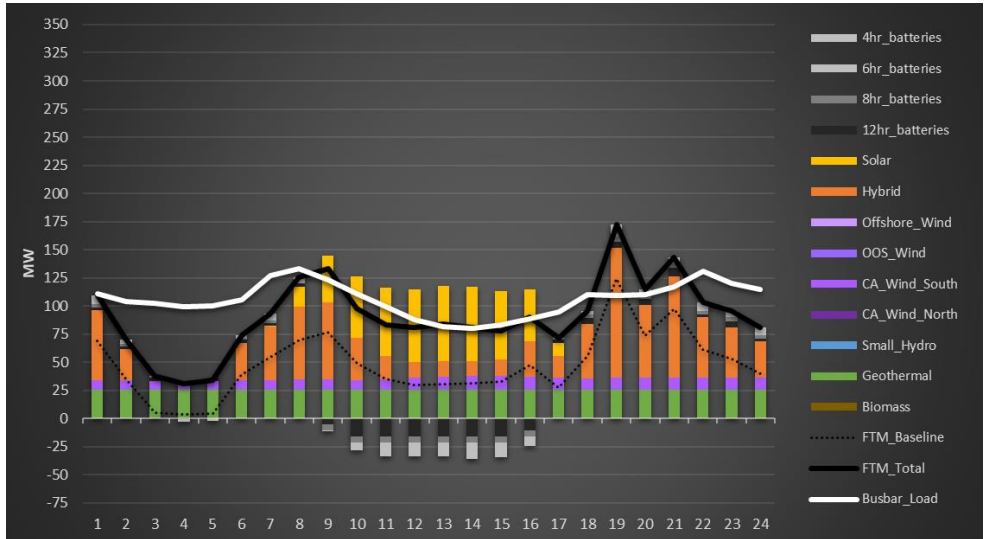
Item 14 – 80% Renewable by 2030 Goal: Dispatch Curves

2024

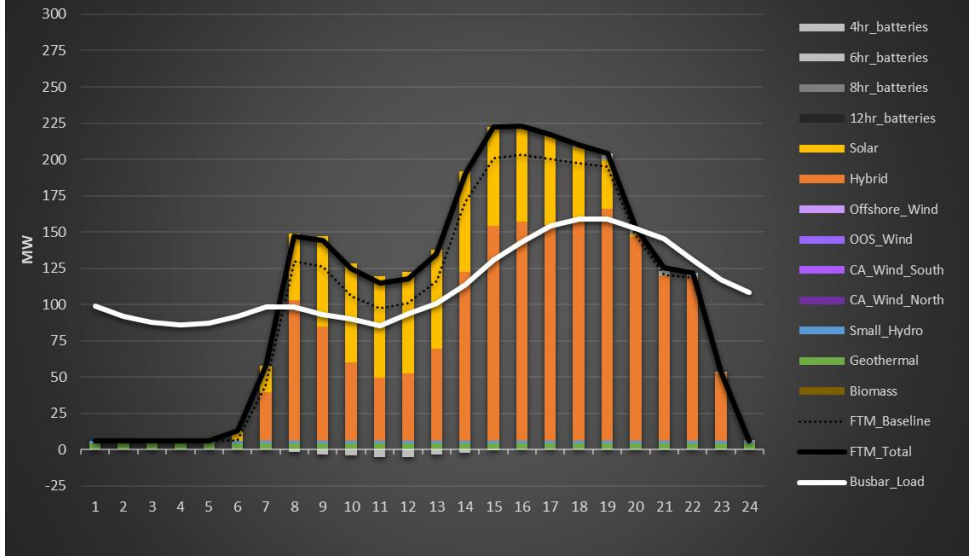
2030

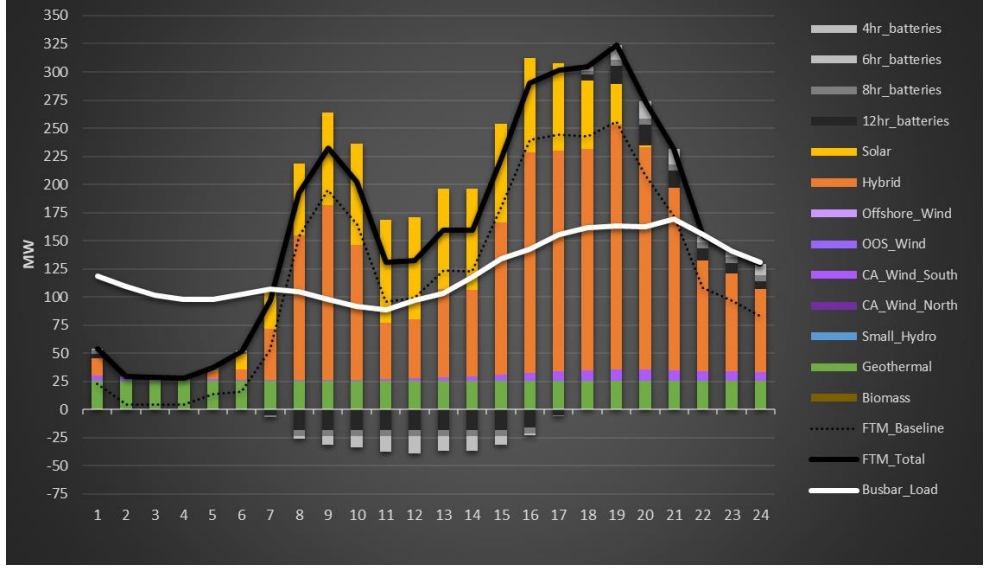
January





July





VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Capacity Additions

Cumulative MWs - Incremental Needs (2030 / 2035)								
	1a - 80% RPS, 25% Local		1b - 100% RPS, 25% Local		1c - 100% RPS, 8% Local[3]		1d - 80% RPS, 8% Local[3]	
	2030	2035	2030	2035	2030	2035	2030	2035
Wind[1]	20	75	20	50	100	155	90	145
Geothermal	25	35	25	35	40	50	40	50
Storage[2]	34	89	37	70	55	115	50	107
Local hybrid (PV+S)	45	65	60	84	-	-	-	-
Total								
1) Wind is on-shore. Off-shore wind is not economical in this planning horizon								
2) Storage in this table includes duration from 4 hr to 12 hr								
3) "Local" in these scenarios assumes only Putah Creek and Gibson project (approx 8%)								

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Scenario Cost Comparisons

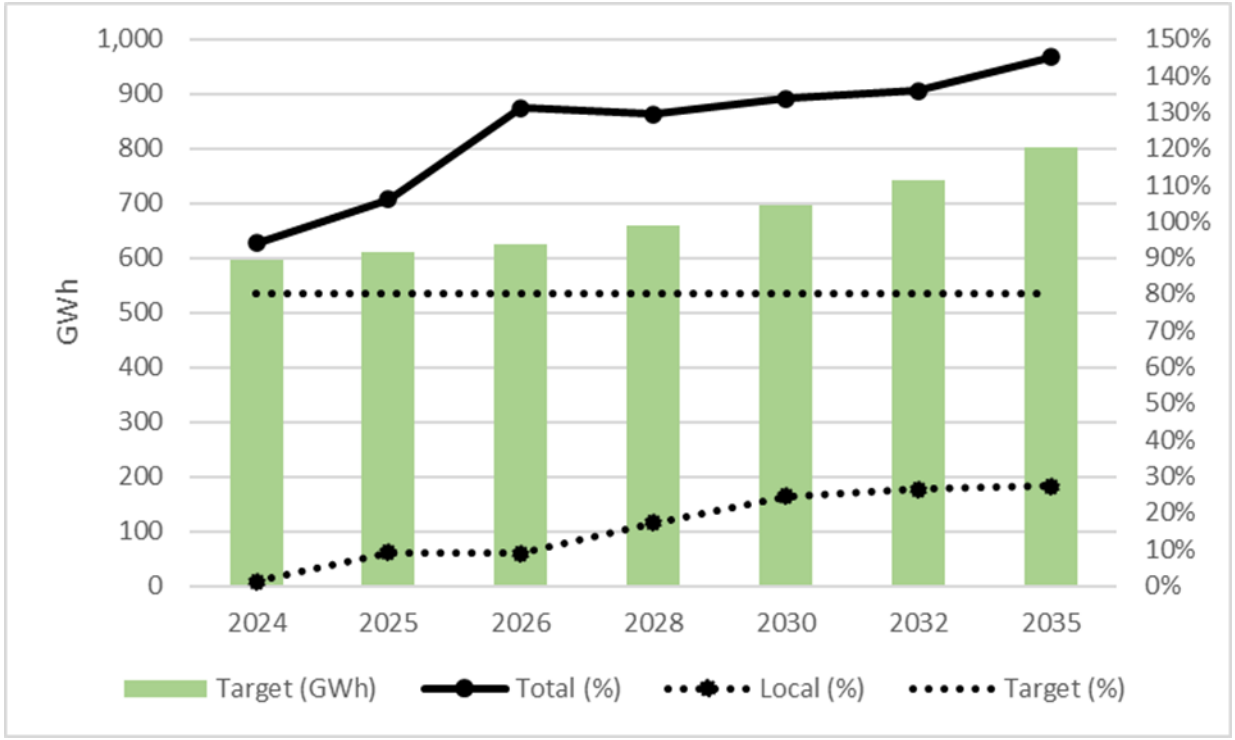
- All scenarios are measured off Scenario 1.a (BAU scenario)
- Scenario 1.b is $23.5 million more than the BAU case
- Scenario 1.c is $33.4 million cheaper than the BAU case (or nearly $57 million cheaper than Scenario 1.b)
- Scenario 1.d is the lowest cost of all cases
- The incremental cost to go from 80% (1.d) to 100% (1.c) renewable is not unreasonable

Scenario	NG Price	2030 RPS Target	Local RPS Target	2024-2035 NPV (2022 $M)	Delta (2022 $M)
1.a	P50	80%	25%	619.6	0
1.b	P50	100%	25%	643.1	23.5
1.c	P50	100%	-	586.1	-33.4
1.d	P50	80%	-	575.7	-43.9

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: RPS Content

- All scenarios meet or exceed 100% RPS by 2030
- The difference in scenarios is the technological make-up of the selected renewable technologies
- Scenario 1.c is a lower cost portfolio as it incorporates more cost-effective technology types that VCE does not currently have & generates additional sale opportunities
  - This scenario also generates the greatest amount RPS credits thanks to a more diverse aggregate generation profile



Note: above graphic is Scenario 1.a

Item 14 – 80% Renewable by 2030 Goal: Key Takeaways

- Primary available renewable technology in Yolo County is solar + storage
  - VCE's portfolio is already heavily concentrated in solar+4hr storage; mandating the 25% carve out will limit the organization's ability to diversify its supply with other technologies
  - Onshore wind, geothermal, and storage greater than 4 hours in duration constitute a greater share of contracted supply for the scenarios where the local constraint is not active
  - Large scale solar is challenging to permit in Yolo County
- Combined, the recently passed IRA legislation and the current strained market conditions for li-ion based storage projects have significantly increased the opportunity cost associated with VCE's local generation policy
- Increasing the RPS target to 100% and keeping the 25% local carveout will result in an additional NPV expense of ~$23M relative to the baseline scenario
- Increasing the current 80% renewable policy to 100%, excluding add'l local, will decrease costs
- In all scenarios, VCE needs additional stand-alone storage. Easier to permit due to smaller footprint (compared to solar)

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Strategic Plan / CAC Feedback

Strategic Plan

- VCE's current Strategic Plan contains the following goal:
  - "Manage power supply resources to consistently exceed California's Renewable Portfolio Standard (RPS) while working toward a resource portfolio that is 100% carbon neutral by 2030."
  - By definition, California RPS renewable energy is also carbon free
- VCE would be exceeding its strategic plan goal by modifying to a 100% renewable goal by 2030

Community Advisory Committee (CAC) Feedback

- The CAC was supportive of Staff's recommendation and further requested a slight enhancement of the recommendation
- The CAC proposed (and staff supports), that when VCE conducts solicitations it states there is a preference for locally sited resources. In addition, the CAC believes the definition of "local" to be expanded to include Yolo County and the adjacent counties

VALLEY CLEAN ENERGY

Item 14 – 80% Renewable by 2030 Goal: Recommendation

Staff's Recommendation:

- Receive presentation and provide feedback on VCE's power portfolio content goals
- Increase the current 80% renewable goal by 2030 to 100% renewable by 2030 and substitute the 25% renewable local component goal with a goal of 25% of future storage amounts to be from local installations
- When conducting solicitations state a preference for locally sited resources[1]

Note: 1) "Local" defined as Yolo and adjacent counties

Valley Clean Energy Board Meeting – July 13, 2023

Item 15 – Net Margin Allocation

Public Comments

To Provide Public Comment on any agenda item please:

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

OR

If in person, complete a COMMENT CARD

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 ill be included in the meeting record.

VALLEY CLEAN ENERGY

Item 15 – Allocation of 2022 Net Margin

Overview

VCE's 2022 audited net margin is $5.3 million. The VCE Rate Structure & Dividend Program Guidelines (adopted in 2019), provides guidance for the Board's options in allocating the net margin.

This presentation will provide:

- Background of 2022 Net Margin
- Present 2022 Net Margin Allocation
- Recommended 2022 Net Margin Allocation

VALLEY CLEAN ENERGY

Item 15 – Allocation of 2022 Net Margin

Dividend Program Formula

The VCE Dividend Program formula recommends allocating the net margin as follows:

- Net margin up to 5% is to be allocated as follows:
  - At least 5% (of the 5%) goes to Local Program Reserves for program implementation
  - The balance goes to cash reserves
- Net margin above 5% is to be allocated as follows:
  - At least 50% to cash reserves
  - Remainder allocated amongst dividends and Program Reserve

Description		Audited 2022 Results	
Electricty Sales		86,662,000	
Operating Expense		80,897,000	
Operating Margin		5,765,000	
Prinipal Debt Payments		441,000	
Adjusted Net Margin less prinicpal Debt Payments		5,324,000	
Adjusted Net Margin Pectentage		6.14%	
Allocation Amount <=5%		4,333,000	
Allocation Amount > 5%		991,000	
Aloocation of Net Margin up to 5%	**Perectage**	**Allocation Amount**	
Cash Reserves Allocation	95%	4,116,000	Minimum
Local Programs Allocation	5%	217,000	Minimum
Aloocation of Net Margin above 5%	**Perectage**	**Allocation Amount**	
Allocation to Cash Reserves	50%	495,500	Minimum
Discretionary Allocation (After Cash Reserves)	**50%**	**495,500**	Maximum

VALLEY CLEAN ENERGY

Item 15 – Allocation of 2022 Net Margin

Discretionary Allocation

Staff considered the following factors related to this recommendation.

- Additional cash reserves would not have a material affect
- Dividends less than a 1% discount; small impact
- ~2.5%/$1M annually in discounts (CARE and FERA)
- Investment in programs provides largest material affect (partial implementation of VCE's 3-Year Programs Plan)

Scenario 1: Additional Programs Funds (Staff Recommended)

Discretionary Allocation (After Cash Reserves)	50%	495,000	Maximum
Cash Reserves	0%	-	
Local Programs (Targeted 2024 Spend)	100%	495,500	
Customer Dividends (Targeted 2024 Spend)	0%	-	

Scenario 2: Additional Cash Reserves

Discretionary Allocation (After Cash Reserves)	50%	495,000	Maximum
Cash Reserves	100%	495,500	
Local Programs (Targeted 2024 Spend)	0%	-	
Customer Dividends (Targeted 2024 Spend)	0%	-	

Scenario 3: Customer Dividends

Discretionary Allocation (After Cash Reserves)	50%	495,000	Maximum
Cash Reserves	0%	-	
Local Programs (Targeted 2024 Spend)	0%	-	
Customer Dividends (Targeted 2024 Spend)	100%	495,500	

VALLEY CLEAN ENERGY

Item 15 – Allocation of 2022 Net Margin

Considerations

- Actual and forecasted cash reserves are an important consideration.
- Ongoing power cost increases and regulatory pressures on resource adequacy
- 2023 Reserve targets to increase to 180+ days of cash on hand
- Cash Reserves are utilized primarily to enhance rate stability

Community Advisory Committee (CAC) Consideration

The staff recommendation was presented to the CAC at its June 22, 2023 meeting. The CAC unanimously supported the staff recommendation.

VALLEY CLEAN ENERGY

Item 15 – Allocation of 2022 Net Margin

Recommendation

Based on VCE's Rate Structure & Dividend Program Guidelines and its assessment of material impact on VCE's strategic goals, staff is recommending the VCE Board of Directors approve the following allocation of VCE's 2022 net margin of $5.3M:

- $4,611,000 to cash reserves to reach cash reserve targets (87%)
- $712,500 to the Local Programs Reserve (13%)

Note: $1 M allocated to low-income customers in 2023 in the form of a 2.5% rate discount approved by the Board in Dec 2022

VALLEY CLEAN ENERGY

Valley Clean Energy Board Meeting – July 13, 2023

Item 16 – CalCCA Best Practices

Public Comments

To Provide Public Comment on any agenda item please:

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

OR

If in person, complete a COMMENT CARD

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 ill be included in the meeting record.

VALLEY CLEAN ENERGY

Item 16 – CalCCA Model Practices: Overview

Overview

This is an informational presentation.

- The California Community Choice Association (CalCCA) released a new guide on responsible business practices and sound governance for Community Choice Aggregation (CCA) programs.
- The Model Practices Guide addresses key areas of CCA operations including financial management, enterprise risk management, implementation and expansion planning, transparency, and deregistration.
- VCE has been set up and managed based on Energy Industry and CCA best practices and plans to use the new CalCCA guide to assess and refine its existing practices.

This presentation will provide:

- Brief background on the CalCCA guide
- Highlight VCE's Actions Related to Model Practices

VALLEY CLEAN ENERGY

Item 16 – CalCCA Model Practices: Background

CalCCA Model Practices Guide

The Model Practices Guide is intended to act as a framework for community choice energy providers to best support their operations while considering scale, local interests, and other unique circumstances. The Guide is designed to:

- Help ensure that Community Choice Aggregators (CCAs) are consistently well-managed, financially secure, operating professionally, and effectively governed by boards of elected or appointed officials;
- Facilitate a more deliberate exchange among Members of model practices for governance and operation;
- Enable CCAs to jointly anticipate and address challenges arising in regulatory and legislative venues and within the CCA community; and
- Communicate model practices to customers, governing boards, policymakers, financial institutions, the CCA community, and the public.

Item 16 – CalCCA Model Practices: Summary

Model Practices Guide - Member commitment

Responsible governance – Enable and foster a governance model that organizes operational, financial, risk management, and reporting processes to inform the Member's governing board .

Sustained Financial Strength – Addressing financial planning and reporting, risk management with the goal of long-term financial viability.

Transparency - Members commit to transparency in their operations and finances to promote accountability to the community they serve.

CalCCA Model Practices Guide – Covered Topics

- **Member commitment**
  - Responsible governance
  - Sustained Financial Strength
  - Transparency
- **Implementation, Deregistration, and Expansion Planning**
- **Enterprise Risk Management**
  - Energy
  - Regulatory & Legislative
  - Information Technology
- **Financial Management & Human Resources**

Item 16 – CalCCA Model Practices: VCE Accomplishments

CalCCA Model Practices Guide – VCE Model Practices Related Actions

VCE's Key Documents webpage hosts all updated documents and financial information

VCE's Responsible Governance ☑

- JPA Agreement (Establishment)
- Mission Statement and Vision Statement
- Feasibility Study and Implementation Plan
- VCE's Strategic Plan (2021-2023)
- VCE Integrated Resource Planning
- Enterprise Risk Management Policy
- VCE's Three Year Programs Plan

VCE's Sustained Financial Strength ☑

Budget Policy, Collections Policy, Cost Based Rate Policy, Financial Reserve Policy, Rate Adjustment Policy, Debt Policy

VCE's Transparency ☑

Hybrid Meetings, Customer & Data Policies, Net Energy Metering (NEM) Policy, Sponsorship Guidelines, Dividend Program Guidelines, and Employee Handbook Updates

Item 16 – Allocation of 2022 Net Margin

Next Steps

VCE has been set up and managed based on Energy Industry and CCA best practices and plans to use the new CalCCA guide to assess and refine its existing practices going forward.

VALLEY CLEAN ENERGY