VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 10

TO: Community Advisory Committee

FROM: Gordon Samuel, Assistant General Manager & Director of Power Services

SUBJECT: Discuss 80% Renewable by 2030 Policy

DATE: November 17, 2022

Discussion

a. Receive feedback on the power portfolio content.
b. Discuss VCE's current policy of 80% renewable by 2030 and consider modifying this goal.
c. Staff to discuss with Board in December 2022 and plans to bring a formal proposal in mid-2023 for the Community Advisory Committee (CAC) and Board to consider.

Background

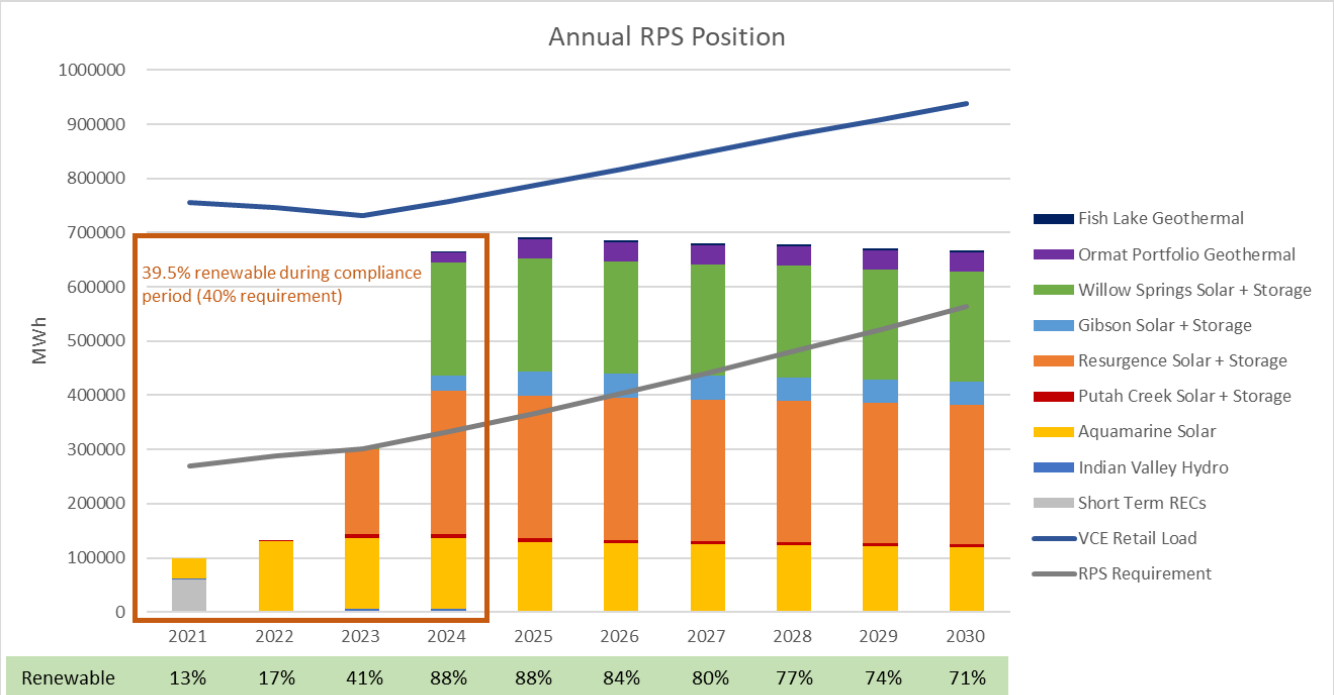
In 2018 the Board adopted a policy for VCE's power content to target 80% renewables by 2030. The policy also set a goal that25% of this amount should be from local resources. At the time this was a very ambitious goal, and some may still consider this to be a stretch or at least a sufficient target. Others may believe this policy does not go far enough. Since this policy was adopted, VCE has entered into several long-term power purchase agreements (PPAs) and has been working towards fulfilling these goals. In addition, in the second half of 2021 and early 2022, staff completed a 100% carbon neutral by 2030 study (CNx2030) which considered not only being carbon neutral but also 100% renewable. In 2022, VCE submitted its integrated resource plan (IRP) to the California Public Utilities Commission (CPUC). This IRP also studied various portfolios from 2023-2035 with the primary focus to be at or below a specific emissions target in an effort to reduce greenhouse gases (GHG). As a result of VCE's procurement and study efforts, a reasonable roadmap is beginning to emerge which presents an opportunity for staff to revisit the current power content policy.

Consistent with Board direction provided earlier this year during consideration of the CNx2030 study, staff is returning to the CAC and Board to continue analysis of VCE's current renewables targets.

VCE Current Renewable Portfolio Trajectory

For reference, staff is including VCE's current renewable portfolio and trajectory out to 2030 which illustrates the resources that put VCE on a path to achieve the current goal of 80% renewable by 2030.

Figure 1 - VCE Current Renewable Portfolio Trajectory (*currently in compliance period 4 – '21-'24)



Note: If renewable content % is projected to be below requirement, VCE will procure RECs closer to the end of the compliance period.

Analysis

Although the CNx2030 report and the IRP were conducted for different reasons, both studies yielded similar results. The key takeaways were that VCE needs to diversify its renewable portfolio (for example, add wind resources to the mix) and to install additional battery energy storage systems (BESS). This procurement of additional resources could occur as early as 2024-2025. The existing contracted portfolio presents significant opportunity to secure a large portion of the portfolio but currently there is a certain amount of risk as much of the portfolio is still under construction. Therefore, monitoring the progress of these projects is critical and making timely adjustments if necessary. Figure 2 is the preferred conforming portfolio from the recently filed IRP which illustrates the types of resources and timing. From this table not only does VCE need some energy producing resources (i.e. wind) but equally important is the addition of BESS to not only satisfy resource adequacy (RA) obligations but also to absorb excess, low cost power on the grid from the abundance of solar resources.

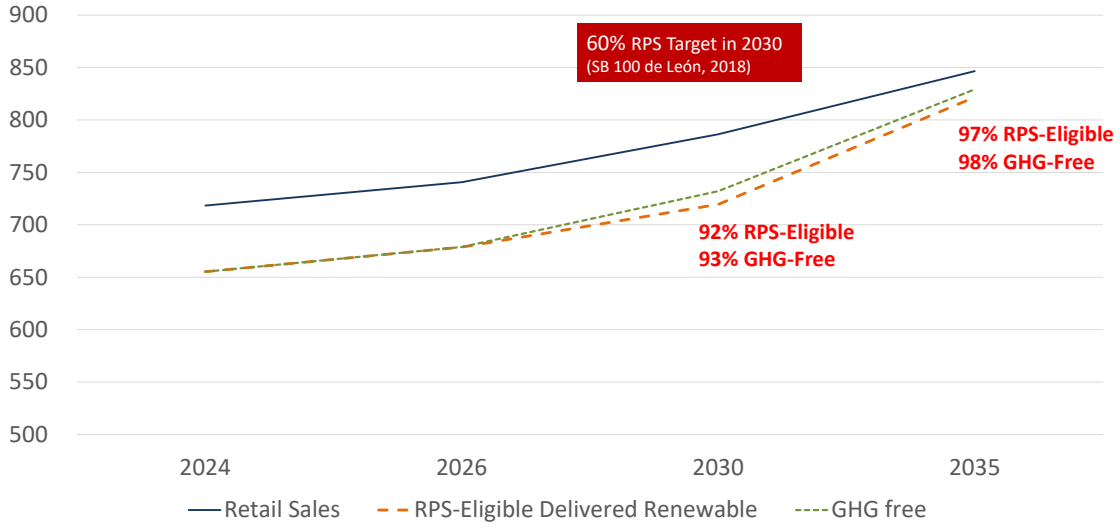
Figure 2 – IRP preferred conforming portfolio

Year		2024	2026	2030	2035
Estimated Resources	BTM PV	66	77	103	134
	CAM Capacity[1]	26	12	6	6
	RA Only Resources	33	42	27	80
Operational Resources	Solar PV	50	50	50	50
	Small Hydro	3	0	0	0
	Demand Response	7	7	7	0
	Battery (4-hr)	3	3	3	0
In-Development Contracted Resources	Hybrid Solar	185	185	185	185
	Geothermal	5	5	5	5
	Battery (8-hr)	0	5	5	5
IRP-Identified Future Resources	Battery (4-, 6-, 8-hr)	20	20	73	70
	Onshore Wind	0	20	39	39
	Offshore Wind	0	0	9	35
Cumulative Total Resources		**394**	**426**	**512**	**609**

1. Cost Allocation Mechanism (CAM) for legacy PG&E resources

If VCE proceeds down the path as shown in Figure 2, the portfolio will exceed the current Board policy. VCE will have a portfolio that not only more than satisfies internal policies but also is approximately 30% more than the State target of 60% by 2030. In addition, the portfolio would meet approximately 80% of the demand with a reliance on the grid for the remaining 20%. Note: since the grid continues to "green" over time (as more and more renewables displace existing fossil resources) this portfolio has emissions value (VCE's emissions are lower) and has financial value as this reliance occurs during lower priced hours (i.e. early morning hours midnight to 6am tend to be lower price hours).

Figure 3 –Portfolio Renewable %, GWh



Conclusion

At this time, staff is not recommending any policy adjustments, but rather is seeking feedback from the CAC on where they see the portfolio in the future. This feedback, combined with the previous studies, will act as a foundation that will be used for future discussions with the Board and CAC to potentially formulate a new policy that can be presented to the Board in mid-2023.

Reference

1. 100% Carbon Free Portfolio Study (Final)
2. Integrated Resource Plan (IRP) filed 11/1/2022