

**VALLEY CLEAN ENERGY ALLIANCE
COMMUNITY ADVISORY COMMITTEE**

Staff Report – Item 11

TO: Community Advisory Committee

FROM: Mitch Sears, Interim General Manager
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SUBJECT: Near-term Procurement Directives and Delegations for 2022 Power Procurement Activities

DATE: November 18, 2021

BACKGROUND AND ANALYSIS

On January 14, 2021, the Board approved VCE’s Procurement Directives and Delegations of Authority which established the near-term procurement plan for 2021.

The intent of this staff report is to update the approval of delegations necessary for VCE and SMUD staff to continue procurement activities on behalf of VCE’s power supply portfolio. This update provides a high-level overview of the products necessary to meet compliance obligations and maintain a balanced power portfolio while meeting power supply portfolio targets set by the VCE Board.

Principles Guiding Procurement Directives and Delegations of Authority

The procurement directives and delegations of authority will be guided by the following principles and allow VCE and SMUD staff to:

- Meet VCE’s compliance, regulatory, and business practice requirements under the California Public Utilities Commission (CPUC), California Independent System Operator (CAISO), and other relevant regulatory agencies;
- Satisfy the power supply portfolio targets set by the VCE Board;
- Minimize the potential risk exposure of the portfolio, according to practices defined in VCE’s Wholesale Energy Risk Manual;
- Provide the appropriate amount of administrative flexibility for staff to carry out procurement actions.

Product Categories

Resource Adequacy

As a CPUC jurisdictional Load Serving Entity, VCE is required to meet the compliance obligations of the Resource Adequacy (RA) program. The RA program ensures sufficient resources are available to support the anticipated demand in California. The CPUC along with CAISO administer the program and define the requirements necessary to meet reliability standards. VCE is allocated its share of obligations based on its load ratio of PG&E's service territory. The delegation for this product allows VCE to meet its RA obligations in a timely manner, support reliability of the grid, and avoid financial penalties. It also allows for the sale of RA when VCE has a long position.

Renewable Energy

CPUC sets minimum renewable energy requirements under its Renewable Portfolio Standards (RPS) program. Along with meeting any annual renewable targets set by the Board, VCE is obligated to adhere to required renewable percentages over the CPUC-defined compliance periods. Some of this renewable energy obligation will be met with Power Purchase Agreements (PPAs) for resources that are still under construction (e.g. Resurgence 90MW solar, 75 MW battery project), as well as online resources (e.g. Indian Valley hydro and Aquamarine Solar). The rest of the requirements can be met with short-term purchases of RPS-qualified energy from existing resources in the market. The delegation approvals are designed to allow staff to procure around the uncertain new resource online dates to meet renewable energy portfolio targets. Procurement of these short-term purchases of RPS-qualified energy are expected to diminish in future years as VCE's long-term PPA's displace the need.

Carbon-Free Energy

Carbon-Free energy is a voluntary product that reduces the carbon content of VCE's power supply. This comes mainly from large-hydro generation resources that do not qualify as Renewable under the RPS program. The delegation for this product allows staff to procure enough carbon-free energy to meet the target set by the Board, taking into consideration the uncertainty of annual PG&E carbon-free allocations.

Price Hedging Energy

Purchasing energy on a forward basis allows VCE to fix some of its power supply costs ahead of more volatile and uncertain spot market prices. A procurement milestone is set to ensure the targeted amount of energy hedging is completed in a timely manner. Under VCE's Enterprise Risk Management Policy, VCE's Enterprise Risk Oversight Committee (EROC) reviews and provides guidance to staff on the timing and execution of the hedging strategy to meet procurement directives and minimize budget exposure.

CAISO Market Energy and Congestion Revenue Rights

CAISO Market Energy is scheduled for VCE daily into the Day Ahead Market, as required by the CAISO, based on daily forecasts of VCE hourly wholesale loads. SMUD staff currently purchase and sell energy on a daily basis to maintain balance between forecasted demand and supply.

Congestion Revenue Rights (CRRs) are financial instruments allocated by the CAISO to Load Serving Entities for the purpose of hedging the cost of transmission congestion between generation sources and load. Although CRR portfolio management can be quite complex, with auction mechanisms involving multiple hubs on the system, this delegation allows VCE's portfolio manager to only nominate CRRs that are directly related to VCE's supply portfolio. VCE is restricted to participation in the allocation process that does not involve price bidding or speculation.

Portfolio Composition Approach

VCE's portfolio management strategy is evolving as its portfolio matures. VCE has signed multiple long-term renewable PPAs, contributing to the renewable composition of the California grid. Renewable PPAs bring a level of uncertainty regarding construction completion and online dates, as well as annual output. Whereas VCE's early procurement actions focused primarily on firm volume deliveries from existing generation assets, VCE will be the off-taker of variable output resources under the long-term agreements. Once all PPA assets are online, VCE anticipates exceeding renewable targets set by the California RPS program. But the uncertainty during the transition to new resources complicates the achievement of internal portfolio targets. Irrespective, VCE is required to achieve the renewable target for the California RPS program compliance period and is on course to meet these minimum requirements. The upcoming RPS compliance period is 2021-2024.

PG&E's carbon-free allocations will continue into calendar year 2022, and these carbon-free allocations are expected to contribute to VCE's carbon-free portfolio content in the form of large hydro resources paid for by VCE customers in the Power Charge Indifference Adjustment (PCIA). However, the exact volumes of these resources will not be certain until after the calendar year is complete.

Procurement Directives

Taking into account the considerations outlined in the sections above, Table 1 shows the specific Procurement Directives and Delegations recommended for 2022.

Table 1. 2022 Procurement Directives

Valley Clean Energy Power Procurement Directives and Delegations for Calendar 2022					
Product	For Year	Procurement Milestone Date	Cumulative Percentage Procured by Milestone Date	Delegated To	Notes
CAISO Market Energy					
CAISO Market Energy	2022	Daily	100%	SMUD	Procure Day Ahead and Imbalance Energy for 100% of VCE wholesale load.
Congestion Revenue Rights					
Congestion Revenue Rights	2022	Monthly During Year	Up to 100%	SMUD	Request monthly allocations, if economic, as approved by VCE AGM.
Congestion Revenue Rights	2023	October 31, 2022	Up to 100%	SMUD	Request annual and/or quarterly year ahead allocations, if economic, as approved by VCE AGM.
Price Hedging Energy					
Price Hedging Energy	2022	Daily/Balance of Month	TBD	SMUD	Daily hedging strategy to be revisited, contingent upon analysis of Daily and/or Balance of Month hedging efficacy, changes upon approval of EROC.
Price Hedging Energy	2023	December 31, 2022	100%	SMUD	Quantity and timing contingent upon review by the VCE EROC of forward market power prices/trends.
Renewable Energy					
Renewable Energy	2022	September 30, 2022	100% *	SMUD	True up procurement as needed based upon actual loads/updated load forecast and updated PPA generation forecast.
Renewable Energy	2023	December 31, 2022	100%*	SMUD	Minimal short term renewable procurements anticipated, based upon expected long term renewable PPA deliveries. Once greater certainty regarding renewable online dates, procure short term PCC1 power as needed and approved by GM.
Large Hydro Energy					
Large Hydro Energy	2022	September 30, 2022	100% *	SMUD	100% of the forecast need for Large Hydro. Only needed if carbon-free portfolio targets exceed expected PG&E allocation volume.
Large Hydro Energy	2023	December 31, 2022	up to 100% *	SMUD	Up to 100% of the forecast need for Large Hydro, based upon pricing and availability, as approved by VCE GM. Only needed if VCE sets 2023 carbon-free portfolio target that exceeds expected PG&E allocation volume.
Resource Adequacy Capacity					
Resource Adequacy Capacity	2022	October 31, 2021	100%	SMUD	Procure for any remaining monthly RA deficiencies and sell monthly RA surpluses, as approved by GM.
Resource Adequacy Capacity	2023	October 31, 2021	100%	SMUD	All RA products forecast, including some provision for RA from possible CEC Load Forecast adjustments or Local RA obligation increases, required to achieve compliance by October 31, 2022 for 2023. Procurement amount may exceed 100% in total for year to insure that all months achieve at least 100% compliance.

Note: Procurement milestone dates represent targets but do not represent expiration of SMUD delegation. Where necessary to achieve compliance, procurement is approved under this delegation until the next calendar year delegation is approved by the Board of Directors.

NEXT STEPS

Staff will be presenting this Plan to the Board in December and recommending the Board to adopt a resolution approving:

1. Near-term Procurement Directives and delegations to SMUD for procuring portions of VCE’s power portfolio for calendar year 2022 through 2023.