

VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 13

TO: Board of Directors

FROM: Edward Burnham, Finance and Operations Director

SUBJECT: Summary of VCE Grant Activity

DATE: December 14, 2024

This informational report summarizes VCE’s grant participation activities during 2024.

VCE Awarded Grants & External Funded Programs - In-Progress

1. Sacramento Area Council of Governments (SACOG) - EV Charger installations (“Electrify Yolo” project).

This \$2.9 million grant awarded in December 2018 and is for the installation of electric vehicle charging infrastructure within Yolo County. VCE was awarded the grant in cooperation with Yolo County and the cities of Davis and Woodland. VCE coordinated with the City of Winters to get additional charging infrastructure installed there. VCE is near completion of the installation of the charging stations in partnership with member jurisdictions. VCE received a grant extension expiring December 31, 2024.

2. Responsive, Easy Charging Products with Dynamic Signals (REDWDS) - California Energy Commission (CEC)

The California Energy Commission’s (CEC’s) Clean Transportation Program grant provides up to \$9 million in grant funds to accelerate the development and deployment of easy-to-use charging products which help customers manage electric vehicle (EV) charging and respond to dynamic grid signals. Up to \$300 million in additional grant funds may be available in the future to complete a second phase of work for agreements initially awarded funding under this solicitation. VCE in partnership with Monarch Tractor and GridTractor has been provisionally approved for \$337,500 to provide bidirectional electric tractors using dynamic rates similar to the the AgFIT program.

3. California Public Utilities Commission (CPUC) - Agricultural Flexible Irrigation Technology (AgFIT).

Launched in 2022, VCE’s AgFIT supports local growers in decreasing energy usage and costs and VCE was awarded \$4.2 million. In partnership with Polaris Energy Services and TeMix, the program provides incentives for irrigation automation and leverages software to help agricultural customers manage energy costs while providing maximum flexibility. The system gives agricultural customers visibility into energy prices a week ahead to help schedule irrigation for when energy costs (and other demands on the grid) are lowest. This program continues to evolve and gain participation.

4. County of Yolo American Rescue Plan (ARP) - Electrification Retrofit Rebate Outreach (ERRO)

Electrification Retrofit Rebate Outreach program to encourage low-income households to access a portion of \$1B in state electrification rebates. Yolo County has partnered and awarded VCE with \$100,000 in American Rescue Plan (ARP) funds to VCE for execution.

5. California Public Utilities Commission (CPUC) - AgFIT (Expanded Pilots #1 and 2)

Pilot #1 is similar to the original AgFIT Pilot and is geared toward ag customers. It is administered by VCE in VCE territory. Pilot #2 has more eligible customer classes, including residential. It is administered by PG&E.

VCE Requested Grants & External Funded Programs – Applied/Pending

6. EPA Grant: Environmental and Climate Justice Community Change Grants Program.

The Community Engagement and Collaborative Governance Plan ensures the successful implementation of environmental and climate justice projects through strong relationships and meaningful engagement with community leaders, residents, and project partners. The total grant application is \$19M with \$10M allocation for VCE. Yolo County, the Lead Applicant, will work with collaborating entities and the broader community to ensure project activities are responsive to community needs, equitably distributed, and inclusive of all voices— especially those from farmworkers, low-income families, and tribal communities. The EPA grant plan includes several projects, including two microgrids (one for VCE, one for Yocha Dehe Wintun Nation); an expansion of VCE/Yolo County's ERRO program, community outreach performed by De Colores and Cool Davis, rebates for electrification, and other associated projects.

7. California Air Resources Board - Electric Autonomous Tractor Swarms (EATS) Grant.

VCE has partnered with UC Agriculture and Natural Resources (ANR) and Monarch Tractor to apply for a \$5M statewide grant for the engagement of the agricultural sector to develop customer programs and initiatives that decarbonize, community resiliency and custom savings. The grant application is under review and evaluation.

VCE Grants & External Funded Programs – Unsuccessful Applications

8. California Department of Food and Agriculture (CDFA) - Community Resilience Centers (CRC) Microgrid Program

The CRC Program will focus on improving community facilities to enhance the state's emergency preparedness capabilities, particularly in response to climate change. VCE applied for \$5.7 million in funding to enable VCE's Gibson project (13 MW photovoltaic (PV)+ 13 MW battery storage) to act as a microgrid for the Yolo County Capay Valley. The Capay Valley (Madison Circuit) has been identified as one of the most interrupted circuits in California. The Madison circuit serves 5 emergency support centers including fire districts and medical. The Madison Circuit serves +4000 customers, 800 CARE/FERA, +160 life support, and +10 critical support customers. VCE was not approved for this grant opportunity and was recommended to pursue the strategic growth council grant.

9. Strategic Growth Council (SGC) - Community Resilience Centers (CRC) Microgrid Program

The CRC Program will fund neighborhood-level resilience centers to provide shelter and resources during climate and other emergencies, as well as year-round services and programming that strengthens community connections and the ability to withstand disasters. VCE applied for \$5.7 million in funding to enable the Gibson photovoltaic (PV)+ battery storage facility to act as a microgrid as described in the above CDFA grant. This grant application is under review and evaluation.

10. California Energy Commission (CEC) - Grid-Supportive Transportation Electrification

Grid resilience technology that would support EVs, electrified homes, and add dynamic rates focused on Residential customers. The purpose of this solicitation was to fund technology demonstration and deployment projects that support EPIC 4 objective to increase the value proposition of DERs to the grid. VCE would have been a subgrantee under UC Davis and the project will demonstrate SPIN, a grid-supportive residential control system for electric vehicles, onsite generation, onsite battery energy storage and electric appliances. VCE would contribute the dynamic rate component based on the prior AgFIT pilot program.

11. California Energy Commission (CEC) - Power Electronics for Zero-Emission Residential Resilience (PEZERR)

Grid resilience technology that would support EVs, electrified homes, and add dynamic rates focused on Residential customers. The purpose of this solicitation was to fund emerging power electronics technologies that improve affordability and simplify the complexity and time required for installing and integrating zero-emission backup power systems for powering critical loads during grid outages. (SPIN) would have been a unique product that acts as the energy center for the entire home (i.e. microgrid in a box) by transforming the way electric vehicles (EVs), stationary battery storage and the grid interact with residential energy systems. SPIN would have controls power flow to optimize energy for the consumer and utility, while delivering energy security to occupants through its full home, automatic, backup power capability without the need for utility service upgrades.

12. California Energy Commission (CEC) - Virtual Power Plant Approaches for Demand Flexibility (VPP-FLEX)

Dynamic rates with shiftable load as a VPP for residential customers. The California Lighting Technology Center (CLTC), in collaboration with Pacific Gas and Electric Company (PG&E), Valley Clean Energy (VCE), Panasonic, Yolo County and its northern California communities (collectively called "Team") proposed to develop and deploy a residential, community, virtual power plant (VPP) program called the North Valley, Residential, Community VPP (North Valley VPP). The proposed VPP will deliver at least 1.0 MW of load-modifying demand reductions from aggregated load shift and/or shed of residential smart appliances and electric vehicles (EVs), used in combination with behind-the-meter, (BTM) distributed battery energy storage systems (BESS). The Team's approach, would have combined community-scale aggregation of DR resources dispatched automatically in response to real-time pricing signals, had the potential to

address core shift and shed DR services. The North Valley VPP would have been the first in California to integrate dynamic rates in the form of hourly changes in electricity prices, also called real-time pricing (RTP), with PG&E's distributed energy resource management system (DERMS) for the purposes of continuously monitoring, dispatching, and automatically controlling BTM resources in real time, and in combination with distribution system and grid-connected resources. Budget submission includes funds for one year of VCE's Electric Advisor service.