

**VALLEY CLEAN ENERGY ALLIANCE****Staff Report - Item 13**

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**TO:** Board of Directors

**FROM:** Mitch Sears, Executive Officer  
Rebecca Boyles, Director of Customer Care and Marketing  
Sierra Huffman, Program and Community Engagement Analyst

**SUBJECT:** Approve Participation as a Partner in the Rural Electrification and Charging Technology (REACT) Pilot Program

**DATE:** September 12, 2024

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**RECOMMENDATION**

Approve resolution authorizing the Executive Officer and/or his designee to execute and take all actions necessary to implement the contract with Gridtractor for the Rural Electrification and Charging Technology (REACT) grant.

**BACKGROUND**

The Rural Electrification and Charging Technology (REACT) pilot program is a partnership between VCE, Gridtractor, and Monarch Tractor, designed to offer incentives to farmers to install charging stations for on-farm electric vehicles (EVs), including tractors. Gridtractor's charger software will allow customers to take advantage of dynamic electric rates when the cost is lowest and there are more renewables on the grid. The REDWDs grant will also bring further benefit to agricultural customers by providing backup power (from the tractor battery) should a farm lose electricity during an outage, or by exporting energy back onto the grid during peak (more expensive) hours, a process often called "bidirectional charging."

[Gridtractor](#), a California-based developer of charge-management systems for electric vehicles (EVs), applied for the grant through the [CEC's Responsive, Easy Charging Products with Dynamic Signals \(REDWDS\)](#) initiative. The pilot program will be called REACT, or Rural Electrification and Charging Technology. On July 10, 2024, the California Energy Commission (CEC) approved the \$2.5 million REACT grant for the first phase of a [potential] \$27 million project to help California farmers purchase electric tractors and charging infrastructure.

Electrifying the nation's agricultural vehicles could play a key role in helping Americans reduce greenhouse gas emissions from vehicles. For example, one diesel tractor creates as much greenhouse gas and particulate pollution as 14 passenger cars<sup>1</sup>. Electric tractors are still a relatively new technology and can be expensive compared to internal combustion models, but programs like REACT can make them accessible to growers by offering incentives to make the

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<sup>1</sup> <https://www.smithsonianmag.com/innovation/could-electric-tractors-revolutionize-farming-180982012/>

cost of transitioning from gas to electric the same or less overall, when factoring in charging infrastructure, fuel, and ongoing maintenance. Gridtractor estimates that with its groundbreaking Vehicle to Grid (V2G) capability, farmers could earn enough in three hours of export electricity to run their tractor for the rest of the week<sup>2</sup>.

## **ANALYSIS**

### Program Details

The goal of this pilot program is to develop and deploy products that enable charging load flexibility, which supports transportation electrification, grid decarbonization, and electric system reliability.

Objectives of REACT:

- Pilot partners to develop easy-to-use and interoperable EV charging products that help customers manage charging in response to customer needs and dynamic grid signals. Charging products may include charging network software, vehicle software, unidirectional Electric Vehicle Supply Equipment (EVSE), bidirectional EVSE, aggregator products, and so on.
- Expand, develop, and implement new dynamic rates programs inclusive of bidirectional EV charging in CCA service territories.
- VCE to support sister CCAs in developing and deploying similar rates and pilots.

VCE's role in REACT includes customer outreach and recruitment, implementing bidirectional-capable dynamic rates in its service territory, and working with sister agencies (primarily other CCAs) to demystify dynamic rates deployment and help to support similar endeavors in other CCA territories. The submitted and approved REACT budget for VCE is for staff time to implement the first phase of the pilot program which totals \$337,500 for the first phase of the grant.

## **FISCAL IMPACT**

The REACT Pilot Program would have a net-neutral effect on VCE's budget, as VCE's submitted and approved budget totals \$337,500.

## **ATTACHMENTS**

1. Program Budget
2. Resolution 2024-XXX

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<sup>2</sup> <https://www.gridtractor.com/post/first-ag-v2g-demonstration>

## Attachment 1: Program Budget

<b>PROPOSAL BUDGET</b>			
Category Budget			
<b>Agreement Number</b>	XXX-XX-XXX		
<b>Name of Organization</b>	Valley Clean Energy		
Subrecipient			
None			
Cost Category	CEC Share	Match Share	Total
Direct Labor	\$ 293,478	\$ -	\$ 293,478
Fringe Benefits	\$ 44,022	\$ -	\$ 44,022
<b>Total Labor</b>	<b>\$ 337,500</b>	<b>\$ -</b>	<b>\$ 337,500</b>
Travel	\$ -	\$ -	\$ -
Equipment	\$ -	\$ -	\$ -
Materials/Miscellaneous	\$ -	\$ -	\$ -
Subrecipients/Vendors	\$ -	\$ -	\$ -
<b>Total Other Direct Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Indirect Costs	\$ -	\$ -	\$ -
Profit (not allowed for grant recipients)	\$ -	\$ -	\$ -
<b>Total Indirect and Profit</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Grand Totals</b>	<b>\$ 337,500</b>	<b>\$ -</b>	<b>\$ 337,500</b>
<b>Total CEC Reimbursable Funds Spent in California or Paid to California-Based Entities (if applicable)</b>	<b>\$ 337,500</b>		
<b>Percentage of CEC Reimbursable Funds Spent in California or Paid to California-Based Entities</b>	<b>100.00%</b>		

**VALLEY CLEAN ENERGY ALLIANCE**

**RESOLUTION NO. 2024 - \_\_\_\_\_**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF VALLEY CLEAN ENERGY ALLIANCE RATIFYING VCE’S PARTICIPATION IN THE RURAL ELECTRIFICATION AND CHARGING TECHNOLOGY PILOT PROJECT AS A PROJECT PARTNER, ACCEPT FUNDS AS A SUBRECIPIENT TO GRIDTRACTOR, AND NEGOTIATE AND EXECUTE ANY RELATED DOCUMENTS NECESSARY TO PARTICIPATE IN THIS GRANT**

**WHEREAS**, the Valley Clean Energy Alliance (“VCE”) was formed as a community choice aggregation agency (“CCA”) on November 16, 2016, under the Joint Exercise of Power Act, California Government Code sections 6500 et seq., among the County of Yolo, and the Cities of Davis and Woodland, to reduce greenhouse gas emissions, provide electricity, carry out programs to reduce energy consumption, develop local jobs in renewable energy, and promote energy security and rate stability in all of the member jurisdictions. The City of Winters, located in Yolo County, was added as a member of VCE and a party to the JPA in December of 2019; and,

**WHEREAS**, the California Energy Commission solicited proposals as a part of their Responsive, Easy Charging Products with Dynamic Signals efforts; and,

**WHEREAS**, VCE partnered with Gridtractor and Monarch Tractor to prepare and submit a proposal [the Rural Electrification and Charging Technology pilot project, or REACT] in December 2023 in response to the solicitation; and,

**WHEREAS**, the REACT pilot project aims to engage the agricultural sector in integrating electrified tractors into VCE’s dynamic rates system with the goal of shifting electricity load out of critical peak hours and into hours where more renewable energy is available on the grid; and,

**WHEREAS**, REACT is a two-and-a-half-year (2.5 year) (May 8, 2024 through December 31, 2026) project in which Gridtractor was awarded \$2,499,987 from the California Energy Commission and of that amount, VCE was awarded \$337,500 for VCE’s role in the pilot.

**NOW, THEREFORE**, the Board of Directors of the Valley Clean Energy Alliance resolves as follows:

1. Ratify Valley Clean Energy’s participation in the California Energy Commission’s Responsive, Easy Charging Products with Dynamic Signals grant program as a project partner; and authorize VCE’s Executive Officer or his designee, in consultation with VCE legal counsel, to negotiate and execute any related documents necessary to participate in this grant.

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**PASSED, APPROVED AND ADOPTED**, at a regular meeting of the Valley Clean Energy Alliance, held on the \_\_\_\_\_ day of \_\_\_\_\_ 2024, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

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Lucas Frerichs, VCE Chair

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Alisa M. Lembke, VCE Board Secretary