

September 19, 2022

Low Carbon Fuel Standard Program California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Comments on Potential Changes to LCFS (as Proposed at August 18 Staff Workshop)

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I. Introduction

The Vehicle Grid Integration Council ("VGIC")¹ is a 501(c)(6) membership-based trade association committed to advancing the role of electric vehicles ("EVs") and vehicle-grid integration ("VGI") through policy development, education, outreach, and research. VGIC supports the transition to a decarbonized transportation and electric sector by ensuring the value from flexible EV charging and discharging is recognized and compensated in support of a reliable, affordable, and efficient electric grid. VGI encompasses a variety of technologies and use cases to employ unidirectional managed charging ("V1G"), provide on-site backup power and behind-the-meter customer bill management (Vehicle-to-Building, or "V2B"), or export power to the grid (Vehicle-to-Grid, or "V2G"). Additional applications include residential emergency power backup during blackouts and the use of EVs for powering homes during on-peak hours (Vehicle-to-Home or "V2H") and providing emergency power backup to a section of the grid or "microgrid" (Vehicle-to-Microgrid or "V2M"). These technologies and services target two of the largest sectors contributing to California's greenhouse gas ("GHG") emissions: transportation and electricity. VGI will play a critical role in helping California achieve its ambitious GHG emissions reduction goals. The transportation sector is California's largest source of GHG emissions, accounting for almost 40% of statewide emissions in 2019.² VGI can directly help California achieve transportation decarbonization goals by incentivizing the adoption of electric vehicles by reducing the total cost of ownership, unlocking additional services the vehicle can provide the customer (such as V2H home backup power), and improving the utilization of public charging infrastructure, so that investments stretch further, among other ways.

¹ VGIC member companies and supporters include American Honda Motor Co., Inc., Customized Energy Solutions, dcbel, Enel X North America, Inc., Engie, Fermata Energy, FlexCharging, Inc., Flo/AddEnergie, Ford Motor Company, FreeWire, General Motors, Kaluza, Nissan North America, Inc., Nuvve Corporation, Sacramento Municipal Utilities District, Stellantis N.V., Sunrun, Switch EV Ltd, The Mobility House, Toyota Motor North America, Inc., Veloce Energy, Inc., Wallbox, and WeaveGrid. The views expressed in these comments are those of VGIC, and do not necessarily reflect the views of all individual VGIC member companies or supporters. (https://www.vgicouncil.org/).

² CARB. *California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators*. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf



II. VGIC Recommends CARB Coordinate with the California Energy Commission and California Public Utilities Commission on Strategies to Promote VGI, including through the Smart Charging Pathway

The LCFS Smart Charging Pathway was launched in 2019 as a new pathway to generate incremental EV charging credits. The pathway has the potential to better align EV charging with the electric grid's carbon intensity throughout the day. Meanwhile, California's major investor-owned utilities offer compelling, EV-specific time-of-use ("TOU") rates that discourage EV charging during the grid's hours of peak demand. EV-specific TOU rates lower the total cost of EV ownership, accelerating transportation electrification and reducing transportation sector GHG emissions. While the LCFS Smart Charging Pathway and EV-specific TOU rates are, at times, at odds with one another, even though both strategies are intended to reduce transportation sector emissions.

Meanwhile, the California Energy Commission ("CEC") and the California Public Utilities Commission ("CPUC") have been coordinating to establish additional strategies, programs, and rates to align EV charging and discharging with grid conditions to reduce emissions. With this in mind, VGIC recommends that CARB coordinate closely with CEC and CPUC to align the full suite of California's VGI strategies in a way that allows for more streamlined participation from customers and maximizes VGI in the state.

Respectfully submitted,

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