

November 1, 2018

Mr. Mark Williams, Mailstop 3E
California Air Resources Board
P.O. Box 2815
Sacramento, California 95812

RE: Electrify America's Cycle 2 ZEV Investment Plan for California

Dear Mr. Williams:

eMotorWerks appreciates the opportunity to comment on Electrify America's Cycle 2 Zero-Emission Vehicle (ZEV) Investment Plan for California. We respectfully request that the California Air Resources Board (CARB or ARB) give consideration to these late-filed comments in advance of the November 15-16, 2018 hearing at which the board intends to vote on the Cycle 2 Investment Plan. eMotorWerks also intends to submit a physical copy of these comments at the board meeting.

eMotorWerks is a California-based leader in the electric vehicle (EV) charging market with more than 35,000 units of residential and commercial EV supply equipment (EVSE) products installed worldwide. The company's cloud-based software platform, JuiceNet™, enables EVs to become part of the smart grid ecosystem. JuiceNet™ is embedded in a number of manufacturers' hardware devices, including eMotorWerks' JuiceBox™ Level 2 (L2) EVSE, the best-selling EV charger on Amazon. eMotorWerks partners with electric utilities across the United States to provide demand response aggregation services using the JuiceNet™ platform, and is also an active demand response provider in the California Independent System Operator (CAISO) wholesale markets, utilizing exclusively smart EV charging as a demand response resource.

Electrify America's proposed Cycle 2 ZEV Investment Plan includes an \$8-12 million budget for residential charging. According to the plan, the residential budget would include the following:

- \$1-2 million for a user-friendly online tool that promotes L2 residential charging and provides a simple and intuitive way for EV drivers to identify and apply for residential EV charging incentives;
- \$6-8 million for 2,500-3,500 no-money-down L2 chargers and installations, allowing EV drivers who are unable or reluctant to cover the up-front costs to access home charging and pay off the charger over time; and
- \$0.5-2 million for a demand response platform by which Electrify America would manage EV drivers' charging loads in exchange for rewards, lowering the overall cost of charging.

The Cycle 2 Plan proposes to reduce barriers to charging for residential customers living in multi-unit dwellings (MUDs) through investments in DC fast charging clusters located in metropolitan area neighborhoods with high densities of MUDs. Also, Electrify America intends to target at least 35% of its Cycle 2 investments in disadvantaged and low-income communities (DAC / LIC).

eMotorWerks offers the following comments on the Cycle 2 Plan's proposals pertaining to the residential customer segment:

- **ARB should adopt an increased low-income target for residential no-money-down L2 charging investments.** Electrify America's stated rationale for proposing a residential no-money-down financing option for L2 charger purchase and install is to address EV drivers' reluctance or inability to cover the up-front costs of home charging. This thesis is not yet verified for all customer segments; however, low-income customers as a segment are more likely to be unable to cover the up-front costs of, and have the highest barriers to, home charging. As such, the ARB should adopt a low-income target for residential no-money-down investments greater than the overall 35% target for Cycle 2 investments in DACs / LICs.
- **ARB should remove barriers for MUD residents to access L2 home charging as part of the residential no-money-down program.** Many submissions in the Cycle 2 Plan formulation stage recommended that the plan include a high-priority focus on MUDs, as MUD residents face several obstacles to installing EVSE and have historically been the most difficult segment to provide access to charging infrastructure. eMotorWerks commends Electrify America for its innovative strategy to address MUD resident charging barriers through investments in strategically-located DC fast charging clusters. However, we believe that MUD residents (or owners) should still have a pathway to access Electrify America's no-money-down financing option for L2 charging purchase and install. To effectuate this, the ARB should strike the requirement listed in Footnote 18 of the Cycle 2 Plan for residential applicants to have a dedicated panel, meter, and parking spot to be eligible, and should also direct a material portion of the residential budget for the MUD segment of residential customers.
- **ARB should require that hardware vendors selected for the residential program provide smart EVSE and customer engagement platforms.** Smart, networked EVSE should be explicitly required for the residential no-money-down program. This will help ensure that Cycle 2 investments are not stranded and will effectuate Electrify America's proposal to integrate residential EV charging into an aggregated demand response platform. Further, Electrify America should only contract with hardware vendors that have customer engagement platforms that can target customers for program enrollment. This is especially important for doubling-down on marketing efforts to engage customers in DACs / LICs.
- **Electrify America should primarily use its demand response budget to educate its customers about smart EV charging services and enable them to participate with demand response service providers.** Electrify America states that it intends to enroll residential customers in a demand response (DR) platform to "sell the electric utility capacity to 'shed' or reduce [EV charging] load when demand on the grid is highest." eMotorWerks recommends that Electrify America use a significant portion of this budget area on marketing, education, and outreach to increase awareness of the benefits of vehicle-grid integration in the communities in which it invests. Electrify America could then partner with an experienced provider of smart EV charging energy services, such as eMotorWerks, so that it avoids expending the time and resources needed to stand up a successful smart EV charging program on its own. Electrify America's budget would be effectively leveraged as compared to its proposal by targeting its EVSE subsidy recipients as well as non-recipients to encourage enrollment in demand response / smart EV charging programs. In this way, Electrify America would maximize the benefits generated from its demand response budget, lowering the overall cost of EV charging as well as electricity costs for all ratepayers.



eMotorWerks appreciates CARB's consideration of these late-filed comments. We look forward to working with Electrify America to ensure a successful implementation of its Cycle 2 Investment Plan in California.

Sincerely,

/s/ Marc Monbouquette

Marc Monbouquette
Senior Manager, Regulatory and Government Affairs
eMotorWerks