



October 26, 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:

Tesla appreciates the opportunity to submit comments and share our overall support for the strategy outlined in Electrify America's Cycle 2 California Zero Emission Vehicle (ZEV) Investment Plan.

Tesla is an American manufacturer of advanced electric vehicles and battery energy storage systems, with the mission to accelerate the world's transition to sustainable energy. Today, Tesla is one of the largest manufacturing employers in California with more than 20,000 workers in the state. This includes more than 10,000 employees in Fremont, where all Tesla vehicles, including the Model 3 are assembled. The Model 3 is designed and built to be the world's first mass-market electric vehicle. As a leading manufacturer of EVs, Tesla has a direct interest in transportation electrification and associated EV charging infrastructure issues. In California, Tesla currently has more than 30 service, gallery and store locations, 87 Supercharger stations with a total of 1,191 Superchargers capable of providing up to 170 miles in approximately 30 minutes, and more than 1,400 Level 2 Tesla Wall Connectors as part of its Destination Charging network.

Electrify America notes that Cycle 2 will focus on ZEV fueling infrastructure and ZEV education, awareness, and marketing, which are two important areas that can help spur EV deployment in California and help bring the state closer to meeting the Governor's goal of 5 million ZEVs by 2030. Access to charging infrastructure continues to be a key barrier to EV adoption, especially for those who live in multi-unit dwellings (MUDs) or rent and do not have access to home charging. Tesla is, therefore, pleased to see a focus on metro-community charging and providing some level of investment for residential charging in the Cycle 2 investment plan.

Tesla is offering brief comments on the following areas of the investment plan:

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- **Direct Current Fast Charging (DCFC) near MUDs**

Electrify America notes that “*placing DCFCs in sections of metro areas with high MUD density, which has been recommended by UCLA researchers, is an innovative solution to addressing the need of future BEV drivers that live in MUDs.*”¹ As mentioned previously, providing access to charging to those living in MUDs is critical in the near term to increase EV adoption. In the short term, bridging the gap to charging access for MUDs with DCFC near apartment complexes could be useful and we look forward to learning more about Electrify America’s efforts in this space. At the same time, it will continue to be important to encourage Level 2 charging access at MUDs as Electrify America has done through on-going efforts in Level 2 investments in Cycle 1. At Tesla, we support the concept of “Charge Where You Park” whenever feasible. Most cars sit idle for more than 20 hours a day while people are at stores, at work, and at home. That presents an opportune time to charge a vehicle by having charging options at home, work, and around town where people shop and dine.

- **Residential Charging**

In the plan, Electrify America cites that “*according to the Department of Energy’s Office of Energy Efficiency & Renewable Energy (EERE), over 80% of charging happens at home...and the convenience of home charging is one of EV drivers’ top 5 favorite things about their electric vehicle.*”² Electrify America is proposing several investments in the residential sector to drive access to home charging including a “*user friendly web tool that promotes Level 2 residential charging and helps EV drivers take advantage of existing offers which reduce the cost of home charging.*”³ Tesla is supportive of creating such a tool to increase consumer awareness and recommends that the effort be closely coordinated with existing education efforts in California, such as those through utilities, and integration with the “One-Stop-Shop” tool for low-income car buyers as referenced in the plan.⁴

The residential focus area also includes a new demand response program, where Electrify America will modulate charging times and power levels and aggregate the load of all its customers within a given region, in order to provide load shed capabilities during high demand periods. Tesla looks forward to learning more about the implementation details of this program and how Electrify America will work with utilities and the grid operator across the state. Customer experience is key when evaluating a demand response program for EVs and it is therefore important to maintain customer flexibility

¹ Cycle 2 Investment Plan, p.37

² *Id.*, p.52

³ *Ibid*

⁴ *Id.*, p.53

by allowing drivers to input preference and opt in/out at specific times as recommended in the investment plan.⁵

Tesla thanks the California Air Resources Board for the opportunity to provide comments on the Cycle 2 Investment Plan and continues to support the focus on providing ZEV fueling infrastructure access, especially for MUDs. We look forward to continuing to receive updates on the lessons learned from the implementation of Cycle 1 and Cycle 2 investments via the quarterly reports.

Sincerely,

Francesca Wahl

Sr. Policy Associate, Business Development and Policy

Junaid Faruq

Sr. Charging Policy Engineer, Business Development and Policy

⁵ *Id.*, p.54