



PROCEED
WITH
CERTAINTY

July 14, 2017

Mary D. Nichols
California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814

Re: AeroVironment's Support for Approval of the Cycle 1 CA ZEV Investment Plan

Dear Chair Nichols:

AeroVironment, Inc, a California based leader in electric vehicle charging technology, supports Electrify America's (EA) California Zero Emission Vehicle Investment Plan, and strongly urges CARB to approve it.

Early on, AeroVironment understood the impact our energy technologies could have on vehicles—leading, in 1989, to our role in the development of the GM Impact, the prototype for the world's first commercially produced electric vehicle, the EV-1. Since then, our EV test systems and charging solutions have fast become the intelligent choice for most electric vehicle manufacturers, fleet managers and drivers, paving the way for a cleaner, more sustainable world. AeroVironment is not only a leader in EV charging infrastructure, but is also the leader in airport ground support equipment and material handling equipment chargers.

AeroVironment supports Electrify America's supplemented plan for the following reasons:

- EA's inclusion of Fresno for community charging will increase the visibility of charging infrastructure and encourage EV adoption amongst central valley residents that live or work in Fresno. AeroVironment has supplied a number of chargers to this community and continues to get many requests to provide infrastructure in the Central Valley.
- Our relationships with nearly all major automotive OEM's puts us in direct contact with many Dealers throughout the state. The dealers in the Central Valley have indicated that there is pent up demand for the vehicles now that range is being extended and that if there were additional infrastructure, they believe there would be a significant increase in EV sales volume.
- The EA plan includes a range of charging segments including workplaces and residential locations. AeroVironment's experience has shown that increasing the availability of charging where people are parked most had the greatest impact on EV adoption (CEC Residential EVSE program). The utilization of these stations was consistently higher than corridor chargers and had a more significant impact on air quality.

- The EA project will, most likely, include charger and network options from a number of companies and requires hardware flexibility to allow the host to change networks. The support of multiple hardware and network providers will strengthen a number of different California businesses and improve the experience for many charger hosts. To date, many programs have allowed closed networks to flourish at the detriment to competitive advancement and host flexibility.

We urge CARB to approve the EA plan, because delay will cause:

- California is in danger of falling behind because EPA has approved EA's investment plan several months ago and EA is already deploying in other states - (DC, MD, VA).
- OEMs have to prioritize for their biggest markets. Market leaders have been in California to date because of California's policy leadership position. We shouldn't lose that position. Investment in support of charging infrastructure will be a key factor in consumer adoption and rapidly expanding markets.

We support approval of the EA plan, as supplemented, because we firmly believe it is in the best interest of California environment and economy, our business, and people in disadvantaged communities across the state.

Sincerely,



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April 11, 2017

Mary D. Nichols
California Air Resources Board (CARB)
1001 I Street
Sacramento, CA 95814

Dear Chair Nichols,

The Volkswagen (VW) settlement decree represents a unique opportunity to accelerate the electric vehicle (EV) market in California. Expanding this market will create jobs and new economic opportunity, help California achieve its climate mitigation goals, and protect the health of disadvantaged communities who face the worst effects of tailpipe pollution. We urge CARB and the other parties to implement the requirements of the existing settlement as soon as possible.

This letter is signed by companies representing the full breadth of the EV charging industry, including EV Supply Equipment (EVSE) manufacturers, installers, technology providers, and users. We are concerned that the full perspective of the EV charging industry has not been well communicated to policy makers and other stakeholders so far on this issue. Our companies are committed to competition and understand how the California ZEV Investment Plan, as it is currently written, will be beneficial to the public and the industry.

As you know, Appendix C of the settlement decree establishes the California ZEV Investment Plan, which requires VW to invest \$800 million in California over the next ten years. We applaud CARB for securing this requirement as part of the settlement agreement. Along with the rest of the settlement, we believe that Appendix C is an effective mechanism to hold VW accountable for its actions, while also achieving important public benefits.

In particular, we believe the provisions of the existing settlement have the following benefits:

- **Enables California’s Transportation Policy Goals:** Many of California’s landmark transportation policies (tailpipe emissions standards, the ZEV mandate, and the LCFS) require or benefit from expanded deployment of EVs and other ZEVs. That need is reflected in California’s current target to put 1.5 million ZEVs on the road by 2025. The VW settlement will help enable all of these policies by expanding access to public charging to reduce range anxiety at a critical point when many mass-market EVs are starting to enter the market. By enabling California’s transportation policy framework, the settlement will help deliver broader consumer and public health benefits for all California residents.
- **Requires Broad Geographic Deployment:** The settlement requires VW to make investments across a variety of cities, metro areas, and types of locations, such as workplace, multi-family, and other public locations. This will ensure maximum access for existing and future EV drivers, including high speed charging on highways and public chargers in workplaces, multi-family dwellings, and community settings, such as grocery stores and shopping malls.
- **Expands Access to Public Charging Infrastructure:** VW has stated its commitment to installing public DC-fast charging and Level II charging as part of the ZEV Investment Commitment. Range-anxiety is still a major adoption barrier for consumers and expanding public charging infrastructure is a critical step to addressing this concern. Further, the settlement specifically prohibits eligible investments at or adjacent to VW dealerships.
- **Supports Disadvantaged and Low-Income Communities:** In addition to requiring a broad geographic and site distribution (e.g. multi-unit housing) of charging infrastructure, the settlement directs VW to make investments that will benefit disadvantaged communities in two ways. First, it encourages EV charging infrastructure for heavy-duty trucks, freight transport and transit, which are a major source of diesel air pollution that disproportionately affects disadvantaged communities. Second, it encourages wider access to EVs by directing investments at programs that increase public access to ZEVs through car-sharing, ride-hailing services and other mechanisms to allow low-income customers to acquire a ZEV.
- **Creates Jobs:** The California ZEV Investment Plan will result in exponential expansion of electric vehicle infrastructure well beyond the existing approved deployments. This will create good-paying jobs throughout California in construction, electric utilities, system installation, system operations, and maintenance.
- **Ensures Appropriate State Oversight of VW’s Investment Plans:** Under the terms of the settlement decree, CARB must review VW’s 30-month investment plans. It then has the discretion to approve or disapprove specific elements of the plan to ensure compliance with the requirements of the settlement decree. This ensures that the State will have an appropriate oversight role while still providing

the market certainty and efficiency necessary for market participants to support these investments.

- **Requires Technology-Neutral, Non-Proprietary Standards:** The settlement requires VW to install EV charging infrastructure that supports multiple, non-proprietary connectors, open network communication protocols, and charging protocols that anticipate the evolving field of EV charging. As an example, VW has stated that it will support all broadly accepted standards for Level II and DC-fast charging. This includes supporting CHAdeMO DC-fast charging connectors, even though VW does not plan to support CHAdeMO in its own vehicles.
- **Preserves Fair Competition:** VW has stated that it will work with multiple, qualified vendors to achieve the requirements of the California ZEV Investment Plan and it will make those decisions based on competitive processes.

California has always been a global leader in moving the automotive market towards a cleaner, more efficient future. The VW settlement represents another unique moment for California to push forward and jumpstart broad adoption of EVs and other ZEVs. We are concerned that some have raised objections and proposed delays to implementing the settlement. We firmly believe that our state, our industry, and our planet, cannot afford any unnecessary delay and we urge you to move forward as quickly as possible under the existing terms of Appendix C and require VW to fulfill its obligations under the current California ZEV Investment Plan.

Sincerely,

Brett Hauser
Chief Executive Officer
Greenlots

Dave Schembri
Chief Executive Officer
EVgo

Mahi Reddy
Chief Executive Officer
SemaConnect

Mike Anderson
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Efacec USA, Inc.

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