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December 16, 2016

Honorable Mary Nichols
Chair, California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Volkswagen ZEV Investment Plan

Dear Chair Nichols:

Thank you for the opportunity to provide written comments on the Volkswagen Zero Emission Vehicle Investment Plan. ChargePoint appreciates the effort undertaken by the Air Resources Board in negotiating an extraordinary \$800 million investment in California EV infrastructure and education. If implemented in a competitive manner under CARB's guidance, this investment has the potential to increase charging infrastructure in the state and accelerate EV adoption pursuant to the Governor's goal of 1.5 million ZEVs by 2025.

In order to meet this long term goal, it is critical that the State consider the need to support a robust and sustainable market for EV charging stations. In 10 years, when we look back, the State should want to see a thriving EV market, with many automobile, utility, charging service, and other entrepreneurial companies competing for customers, much like mobile phone companies are today. It is this economic ecosystem that could be crushed by a sudden infusion of money spent by one company without some safeguards that this investment is not made at the expense of others. The danger is in uprooting a plant before it takes firm root.

California has negotiated for itself the authority to influence VW's investments through the ability of CARB to approve VW's investment plans. We urge California to exercise the maximum authority in its power to direct VW's investments in ways that both quickly grow the EV infrastructure in the short term and protect emerging businesses in the long term.

RECOMMENDED CHANGES TO GUIDELINE LANGUAGE

The State of California, as a matter of policy, has determined in Senate Bill 350 that state agencies when developing guidelines shall stimulate competition, customer choice and innovation.

Section 740.12 (1) (F) of the CA Public Utilities Code states, "Widespread transportation electrification should stimulate innovation and competition, enable consumer options in charging equipment and services, attract private capital investments, and create high-quality jobs for Californians, where technologically feasible."

Section 740.12 (2) goes on to say, “Agencies designing and implementing regulations, guidelines, plans, and funding programs to reduce greenhouse gas emissions shall take the findings described in paragraph (1) into account.”

That means that all state agencies, including CARB, shall take these findings into account when developing guidelines.

The guiding principles for the VW ZEV Investment presented by CARB at the December 2 public workshop are not adequate and do not meet the requirements of SB 350. The draft states that “investments should not interfere with or undermine established and emerging businesses in the market place” and while we appreciate the intent behind this language, it does not go far enough. The proposed guidance language fails to incorporate the important innovation, competition, and consumer option language in SB 350.

To implement this part of the law, CARB must provide additional guiding principles:

1. Amend the existing “Business Consideration” principles: **Consistent with SB 350, investments should stimulate innovation, competition, and customer choice in charging equipment, networks, and services not interfere with or undermine established and emerging businesses in the established and emerging EV market place.**

In reviewing VW’s plan, CARB should use a balancing test to weigh the benefits of VW’s proposed investments against the costs of negative competitive impacts. The CPUC has used such a balancing test to review its utility EV pilot proposals as established by Decision 14-12-079.¹ The balancing test will review: 1) the nature of the proposed VW invest, including whether VW seeks to own or provide charging infrastructure, billing services, metering, or customer information; 2) the degree to which the market into which the VW program would enter is competitive, and in what level of concentration; and 3) Identification of potential unfair advantages to VW, if any, including access to driver data from a charging network.

If the potential for VW to unfairly compete is identified, CARB must determine if rules, conditions or regulatory protections are needed to effectively mitigate the anticompetitive impacts or unfair advantages held by VW.

The concern for ChargePoint is that VW may seek to develop its own charging network and use this investment to block competition and sustainable growth of the EV charging industry. VW could develop its own network and procure hardware-only from charging station vendors, requiring all of us to become commodity companies with our futures beholden to one automaker.

The network is the core value proposition for EV charging companies. If you allow VW to use this money to develop its own single network of EV charging stations, you’re giving VW the keys to the kingdom. This is where the innovation occurs. If VW develops its own network and requires

¹ The CPUC balancing test is referenced in Decision 14-12-079 available here: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M143/K682/143682372.PDF>.

that this network apply to any stations deployed through the ZEV Investment fund, then the country will be left with VW as the only valuable company with everyone else being simply suppliers. Instead of being a supplier to VW, we hope for the opportunity to be a valued partner in the effort. VW should be working with the industry and embracing the innovation that has occurred to date to create products, services, and networks that support the needs of EV drivers.

Applying a balancing test to the ZEV Investment would ensure that the role of VW in supports competition and does not block development of other EV charging networks. Allowing VW to develop its own single network and procure hardware from other companies, would for those hardware vendors be the equivalent to telling Apple they can't own the technology to deploy content and services through their network on the iPhone, relinquishing the iPhone to just become another piece of hardware, no different than a Samsung or Google or Motorola phone. If all of the value of the network and content for smart phones was owned by another entity, the most innovative companies in this space would now simply become hardware suppliers. This would also allow VW to control interactions with all drivers, including non-VW drivers, and collect data on VW's competitor's drivers' station utilization, driving patterns, and other valuable information. VW currently sells about 4% of vehicles in the US, and this could allow access to 100% of EV drivers from competitors.

2. Investments must be “brand neutral” for vehicles *and* charging station networks.

CARB should assess whether investments are “brand neutral” for vehicles *and* charging networks and take into consideration how the accumulation of customer data allows VW to develop its own single network of EV chargers at the expense of others. It also means that required EV infrastructure investments shouldn't give VW an unfair advantage in potentially manipulating the charging station industry and development of charging products, networks and charging services.

3. To the extent possible, VW investments should be made using rebate programs or competitive grants.

Consistent with long held principles in California regarding government's role in the private market, CARB must ensure that EV customers are dictating the winners of the EV charging market place through competition and customer choice, not VW or the government through approval of VW's plans. CARB should encourage VW to consider rebate programs or competitive grants that allow site hosts to use investment funding to purchase the equipment and services they want from any qualified charging station vendor. Rebate programs have been used effectively in California including the California Vehicle Rebate Program, California Solar Initiative, and utility programs including Southern California Edison and Los Angeles Department of Water and Power's EV charging rebates.

It is also important that this principle prevent VW from giving away stations for free. The timeline for this investment all also force VW to try to get as many stations deployed as possible in order to spend this money. That means there may be an incentive for VW to cover all costs for the stations, including operation and maintenance, procure the hardware from vendors, and require whatever they want from vendors. Free stimulates bad behavior causing sites to install stations in the wrong locations. Free also crowds out other private investment leading to an inefficient use of

the ZEV Investment funding. The VW settlement will become the Total Addressable Market ("TAM") for charging stations in California if the stations are given away for free. It would not be possible to sell a charging station to a site host that has the ability to receive a charging station at no cost from VW. While we agree that the need for charging stations is likely larger than the focus on this investment, when there are incentives on the table – and especially when there is something available for free – that becomes the TAM until all of the "free" has been given away. No one can compete against free.

4. CARB should increase its commitment to encouraging investments in disadvantaged communities.

The VW ZEV Investment should be directed towards areas of greatest need where private capital for charging stations may be less prevalent, including disadvantaged communities. The guidance from CARB states that a "significant percentage (25%) of the funds should be dedicated to investments that serve disadvantaged communities, matching the goals of SB535." ChargePoint encourages CARB to set a higher goal (35% or greater) and set clear guidelines for defining projects that would meet this goal, including what it means to "serve" disadvantaged communities rather than simply "locate" charging stations in these areas.

5. The proposed guidance language on ensuring that investments are "complementary and additional" to other funding should be supported.

CARB should direct VW to work with the industry and state agency to identify areas of greatest need rather than duplicate efforts or crowd out private or public investment, including that made by utilities. VW should also embrace the innovation that has occurred to date to create products, services, and networks that support the needs of EV drivers. Importantly, VW should not be permitted to rip out and replace functioning stations simply to expand its own charging network and spend this ZEV Investment.

Thank you for considering our comments. If you have any questions, please contact me at anne.smart@chargepoint.com or 408-858-5076.

Sincerely,

A handwritten signature in cursive script that reads "Anne Smart".

Anne Smart
Vice President, Public Policy
ChargePoint