

RICHARD F. TEEBAY

June 24, 2019

Mary D. Nichols, Chair
California Air Resources Board
1011 I Street, P.O. Box 2415
Sacramento, CA 95814

Re: Docket EVSE201 - Electric Vehicle Supply Equipment Standards

Dear Chair Nichols:

The following are my personal comments and opinions and do not necessarily reflect the thoughts and positions of my employer.

The County of Los Angeles is home to more than 10 million people – more than a quarter of the State's population. I have worked for the County of Los Angeles for the past 24 years and have been involved in EVs and EV infrastructure since 1997 when I obtained grant funding to lease ten EVs (five EV-1s, four RAV4-EVs, and a Ranger pickup). I oversaw the installation of charging infrastructure at the County's first 12 sites. I am currently responsible for the operation and maintenance of more than 400 networked Level 2 plugs at more than 60 County sites. I am developing ten additional sites, eight of which will each have between 20 to 45 plugs.

The County's five fleets have approximately 16,000 vehicles and pieces of equipment. The County has more than 110,000 employees and thousands of contract employees. The average employee's commute is 24 miles – one way. Many employees and contract employees drive their personal vehicles on County business. The County's ambitious Sustainability Plan calls for the County to have 5,000 Level 2 plugs by 2025 and 15,000 plugs by 2035. This regulation will clearly have significant impact at County facilities.

First and foremost, I fully support the efforts of your staff as they try to address numerous long-standing issues.

The networks and EVSE/DCFC firms have expressed a willingness to "correct" these issues for years. As recently as January 2019 at an LA Economic Development Corporation e4 Mobility meeting, four significant networks sang "Kum Ba Yah" and said that they embraced CARB's efforts and would be fully compliant – while one or more of these same networks were supporting legislation introduced this year to limit/strip your Board of its authority to create this regulation.

1. **Electric Vehicle Service Providers (EVSP)** should be the Networks – not the individual public agency or property owner. How many public agencies and individual properties have ChargePoint EVSE? The reporting requirement will be much easier for the networks. (Networks should provide site hosts with copies of the reports for equipment at their sites.) As written, this requirement could be VERY burdensome for

smaller agencies and businesses, especially those with a limited number of plugs, those with limited staff, and/or those in humble communities. It will create yet another barrier to increasing the number of public plugs at an agency or business. *The larger networks already have this data. They have the equipment AND its location – for their maps.* (See attached report from one network provider.)

2. Under definitions, please expand "(i) A workplace EVSE and its associated space.." to include "...employees, *contact employees*, and/or contract drivers."
3. Let this be a "**Forward Looking**" regulation with some retrofit implications, such as posted pricing. Pick a date after which all new installations must comply with this regulation. For example, all new EVSE and/or DCFC ordered *after January 1, 2020* must comply with the regulation. Within the past decade, the Energy Commission, realizing the energy demand of new flat screen TVs, set a very high energy efficiency bar for new TVs to be sold in California the following year. There was no shortage of TVs for sale the following year and prices continued to fall. Your Board adopts emissions standards for new vehicles. Let these new standards be like new stricter emissions standards.
4. **Beware of unintended consequences:**
 - a. Many public agencies struggle to find funding for the expansion of charging infrastructure. There are MANY competing demands. Every dollar spent to retrofit an existing site is a dollar that won't be spent on additional infrastructure.
 - b. Many early sites (2012~2016) do not comply with current ADA requirements (January 2017). These sites are grandfathered until the site is disturbed. At several of these sites, there is a high probability that the EVSE will be removed because it will be cost prohibitive to address ADA. I submitted more than 20 County sites for Edison's Charge Ready Program. Four sites were dropped because ADA could not be addressed within the Program's cost parameters.
 - c. The Energy Commission just invested \$29.4 million for DCFCs within the South Coast AQMD region. Many/most of these new DCFC will NOT comply with the proposed regulations. How will these retrofits be funded?
5. I presume that your Board's staff will provide the **form** that the ESVP or (hopefully) Network Provider will fill out and submit. PLEASE make the reporting form the same for both the Low Carbon Fuel Standard and this regulation. Much of the data is the same and it would simplify reporting for those of us that have to do the inputting.
6. There needs to be a consequence if a Network doesn't submit the required report in a timely manner. I would like to suggest that the EVSP (Network) would not be able to sell their LCFC credits until they have submitted the required reports.
7. Please create a marketing campaign for sites that fully comply with the new requirements. Label compliant sites as "**California Access for All**" or something similar so that when a driver uses the PlugShare App or their App on their dash, they will know which sites are truly open access. Require that the networks also label their own sites in their app that are fully compliant with the new regulation.
8. **Rip & Replace** - the importance of 2360.3 (b) Open Charge Point Interface (OCPI): As you may know, within the past year, another large public agency opened proposals

for networks and EVSE. One of the proposals was very competitive. The agency was stunned to learn from its current network provider that the two systems were incompatible and that the only way the low bidder would be able to control the existing EVSE would be to rip and replace the proprietary legacy EVSE. The agency has \ a significant investment in the legacy EVSE. The agency will have to operate two systems or pay more to expand the existing propriety system. What if the legacy firm were to file for bankruptcy as two other prominent firms did several years ago? Two new firms, one Canadian, and one from the East Coast, seeing opportunity, are coming to California this year. Both use proprietary systems. The time is NOW to require EVSE and payment standardization so that agencies and business aren't further locked into proprietary solutions that only advantage the seller.

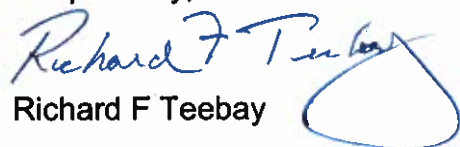
9. **Credit Cards and Readers:** I am not a fan. I believe that credit cards and debit cards will be little used by 2025. Credit Cards, and readers add costs and user fees. It will be interesting to see whether it will be less costly to use one's credit card or pay new roaming charges. I believe that other technologies such as Near Field Communication (NFC), and for newer vehicles, ISO 15118, or something like it, will ultimately become the path of choice. Another option would be platforms like Venmo and/or QR codes, like those used by street food vendors in other countries.

Remember when your debit card would only work at your own bank? I look forward to the day when the unique RFID cards that my daughter and I must carry are just memorabilia – like a 5 ¼ inch floppy drive.

I truly appreciate the time and effort that your staff has spent trying to address issues that they didn't create but are real barriers for both the user and for the site hosts.

Thank you for allowing me to provide my comments.

Respectfully,


Richard F Teebay

County's Zero-Emissions Targets

	2025	2035	2045
Countywide	<ul style="list-style-type: none"> • 60,000 new public EV charging stations (2018 baseline) • 30% of all new light-duty private vehicles are zero-emission vehicles 	<ul style="list-style-type: none"> • 130,000 new public EV charging stations • 80% of all new light-duty private vehicles are zero-emission vehicles 	<ul style="list-style-type: none"> • 100% of all new light-duty private vehicles are zero-emission vehicles
County Operations	<ul style="list-style-type: none"> • 5,000 EV charging stations at County facilities • 100% of new non-emergency light duty vehicle (LDV) purchases to be zero-emission vehicles 	<ul style="list-style-type: none"> • 15,000 EV charging stations at County facilities • 100% medium-duty vehicle and emergency light-duty vehicle purchases to be zero-emission 	<ul style="list-style-type: none"> • 100% of all vehicles in the County fleet to be zero-emission

The County's Sustainability Plan identifies short- and medium-term actions to help meet the zero-emissions targets established:

- Streamline permitting and construction of zero-emission vehicle infrastructure;
- Install EV chargers at County facilities and properties for public, employee and fleet use;
- Revise and regularly update the County's fleet policy to require zero-emission vehicles whenever possible;

Station Name	Serial Number	Location Name	Activation Date	Active Ports
EVB0193	B16418195	Los Angeles County (DCFS)	30-May-18	1
EVB0272	B17322878	Los Angeles County (DCFS)	30-May-18	1
EVB0455	B17324059	Los Angeles County (DCFS)	30-May-18	1
EVB0075	B16418152	Los Angeles County (DCFS)	30-May-18	1
EVB0062	B16418110	Los Angeles County (DCFS)	2-Aug-18	1
EVB0096	B16418135	Los Angeles County (DCFS)	30-May-18	1
EVB0390	B17323905	Los Angeles County (DCFS)	2-Aug-18	1
EVB0077	B16418161	Los Angeles County (DCFS)	30-May-18	1
EVB0079	B16418102	Los Angeles County (DCFS)	2-Aug-18	1
EVB0402	B17323917	Los Angeles County (DCFS)	30-May-18	1
EVB0080	B15418149	Los Angeles County (DCFS)	30-May-18	1
EVB0100	B16418140	Los Angeles County (DCFS)	30-May-18	1
EVB0082	B16418150	Los Angeles County (DCFS)	30-May-18	1
EVB0083	B16418156	Los Angeles County (DCFS)	30-May-18	1
EVB0081	B1547614	Los Angeles County (DCFS)	30-May-18	1
EVB0396	B17323911	Los Angeles County (DCFS)	30-May-18	1
EVB0093	B16418136	Los Angeles County (DCFS)	30-May-18	1
EVB0068	B16418153	Los Angeles County (DCFS)	30-May-18	1
EVB0076	B16418148	Los Angeles County (DCFS)	30-May-18	1
EVB0078	B16418154	Los Angeles County (DCFS)	30-May-18	1