

October 9, 2019

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California Department of Food and Agriculture  
Division of Measurement Standards  
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*Submitted via email to: [dms@cdfa.ca.gov](mailto:dms@cdfa.ca.gov)*

**Re: Comments on the Third Set of 15-Day Modifications to the Electric Vehicle Fueling Systems Proposed Rulemaking**

Dear Mr. Ferris and Mr. Schnepf,

The California Electric Transportation Coalition (CalEETC), the Electric Vehicle Charging Association (EVCA), ABB Inc., and EVgo respectfully submit the following comments regarding the Division of Measurement Standards (DMS) third set of 15-day modifications to the proposed rulemaking for electric vehicle charging stations, released on September 18, 2019. We sincerely appreciate DMS' collaborative spirit over the last two years in discussing these proposed regulations with stakeholders to both ensure proper consumer protections and address the challenges of charging station providers in complying with the regulations.

CalEETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. CalEETC supports and advocates for the transition to a zero-emission transportation future as a means to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change. CalEETC's board of directors includes: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, and the Southern California Public Power Authority. Membership also includes manufacturers of zero-emission vehicles in all weight classes, electric vehicle charging station providers, and other industry leaders supporting transportation electrification.

EVCA is a non-profit trade association representing nine electric vehicle service providers (EVSPs), software and equipment manufacturers, and installation and maintenance providers. EVCA's mission is to advance the goal of a clean transportation system in which the market forces of innovation, competition, and consumer choice drive the adoption of electric vehicles (EVs) and deployment of charging infrastructure.

ABB Inc. is an electrification and automation technology leader with over 12,000 DC fast and high-power EV chargers deployed around the world.

EVgo, headquartered in Los Angeles, is the largest and most reliable public fast charging network, with over half of its network in California.

California has goals to deploy 1.5 million zero-emission vehicles (ZEVs) and 250,000 EV charging stations, including 10,000 DC fast chargers, by 2025.<sup>1</sup> California also has a goal of deploying 5 million zero-emission vehicles by 2030,<sup>2</sup> which will require even further scale-up of the charging infrastructure for electric vehicles. The state has 4,328 public L2 charging stations, and 637 public direct current fast charging (DCFC) stations.<sup>3</sup> The California Energy Commission recently indicated that there will remain a large gap in needed charging infrastructure, even in light of known charging infrastructure funding from multiple public and private sources.<sup>4</sup> We have a long way to go to meet California's zero-emission vehicle and fueling goals, as well as the air-quality and climate-change targets underpinning these goals. In order to drive adoption of plug-in electric vehicles and meet these targets, we need to drastically increase the amount of publicly accessible, easy-to-use charging stations.

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<sup>1</sup> Former Governor Edmund G. Brown Jr. Executive Order B-16-2012 set the goal of placing 1.5 million zero-emission vehicles on California's roads by 2025. Former Governor Edmund G. Brown's Executive Order B-48-18 set the goal of 250,000 electric vehicle charging stations, including 10,000 DCFC charging stations, by 2025. In addition, the Charge Ahead California Initiative, [SB 1275 (De León), Chapter 530, Statutes of 2014] set the goal of placing 1 million zero- and near-zero-emission vehicles into service on California's roads by 2023.

<sup>2</sup> Former Governor Edmund G. Brown Jr. Executive Order B-48-18 set the goal of 5 million zero-emission vehicles on California's roads by 2030.

<sup>3</sup> Data from [www.afdc.energy.gov](http://www.afdc.energy.gov). Accessed on September 20, 2019. This does not include non-public stations or Tesla stations, and represents 16,641 public L2 charging *connectors* and 1,818 public DCFC charging *connectors*.

<sup>4</sup> Brecht, Patrick and Jacob Orenberg. 2019. *2019-2020 Investment Plan Update for the Clean Transportation Program*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2018-005-LCF-REV. <https://efiling.energy.ca.gov/getdocument.aspx?tn=229103>. P. 59. ["Energy Commission staff, utilizing NREL's EVI-Pro modelling, estimates that the sum of existing charging ports and charging ports funding across all state funding programs will result in 161,000 charging ports by 2025, leaving a gap of approximately 89,000 charging ports by 2025."]

As we scale to meet the state’s goals for climate and transportation electrification, we also understand and appreciate the necessity for DMS to adopt standards for this electric vehicle supply equipment (EVSE or charging stations) in order to protect consumers and ensure that purchasing electricity as a transportation fuel is straightforward and simple. We also recognize and support DMS’ goal to improve EV drivers’ understanding of what they are paying for, and to improve standardization of this process. To that effect, we encourage DMS to ensure that the regulations are straightforward and simple, and do not cause confusion in the marketplace, impose undue costs, or slow the progress of the ZEV market. We also encourage DMS to track the implementation of these regulations, once adopted, to ensure they are achieving the desired intent and not causing negative market impacts for EVSPs, site hosts, or EV drivers.

In this spirit, we offer the following brief comments for your consideration.

**1. We support the revised compliance timelines for existing AC and DC EVSE.**

The signatories to this letter appreciate and support the modifications made in the third set of 15-day changes regarding AC and DC EVSE effective dates. The revised proposal requires:

- AC EVSE installed prior to January 1, 2021 to comply with the requirements by January 1, 2031. AC installed on or after January 1, 2021 to comply with the requirements upon installation.
- DC EVSE installed prior to January 1, 2023 to comply with the requirements by January 1, 2033. DC EVSE installed on or after January 1, 2023 to comply with the requirements upon installation.

The State of California, utilities, and other entities have spent millions of dollars putting in the current network of charging stations and the state must drastically increase the amount of publicly accessible charging stations to meet its ZEV, air quality and climate change targets. Spending public, ratepayer, or other limited funds to replace or retrofit existing stations in the near-term before the end of the useful life of these stations, instead of on installing new stations, would hinder the state’s ability to achieve these targets. For these reasons, we support the revisions made to the compliance timelines for AC and DC fast charging stations and thank DMS for their understanding that the preservation of existing infrastructure is necessary to help California meet its ambitious goals.

## 2. DMS should allow for flexibility with how information must be provided to consumers.

Sections S.2.4.1., S.2.4.2., and S.2.7. would require an EVSE to be able to display specified information *on each face*. This is contrary to our understanding of the intent of these provisions and we believe DMS has the authority to clarify the applicability and display requirements for the regulation.

As indicated in our prior letters, we support flexibility with providing information to customers, particularly regarding requirements for existing EVSE. For example, the requirements in these provisions could be provided to the customer via an EVSP's cell-phone application, in addition to non-screen labeling on the EVSE, instead of via a digital display on the face of the EVSE or on a kiosk serving multiple EVSEs.<sup>5</sup> The current 15-day language dictates a single method of display, which we believe inhibits innovation and could negatively impact the customer experience.

## 3. EVSE Value of Smallest Unit

The requirement that the smallest unit of indicated and recorded delivery of an EVSE be no greater than 0.0005 MJ or 0.0001 kWh should be modified to 0.05 MJ or 0.01 kWh, or at a minimum 0.005 MJ or 0.001 kWh. Given that the most stringent required accuracy in the proposed regulations is 1.0%, the regulations themselves do not support using the proposed smallest unit because the station is not required to conform to this level of accuracy.

Further, the requirement itself provides a level of precision greater than for gasoline. Gasoline stations provide three decimal places or the equivalent of 1/1,000th of a gallon. One kWh provides an equal car driving range of about 1/10th of a gallon of gas, which means the proposed requirement of displaying 0.0001 kWh is equivalent of 1/10,000th of a gallon of gasoline: four decimal places.

Importantly, there is limited value to EV drivers to see the proposed level of precision, and it may in fact confuse consumers who are familiar with gas stations. Additionally, manufacturers and operators currently do not indicate this many decimal places to customers via charger screens, mobile phone applications, or other methods of display, and the cost to equip stations with this capability is not supported by the value to consumers.

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<sup>5</sup> EVSPs (the electric vehicle service providers) should continue to be responsible for monitoring and displaying charging session and billing information for customers, as would be required by the proposed regulations and per the proposed tolerances.

4. Several questions remain as to implementation, and DMS should hold a stakeholder workshop to discuss implementation and answer questions.

We commend DMS for their willingness to take meetings with stakeholders to discuss the draft regulations. However, much uncertainty remains as to how the regulations will be implemented. For example, it remains unclear as to what testing methodology will be incorporated, and how counties will enforce the regulations. Once promulgated, we recommend that DMS hold a public meeting where stakeholders may ask remaining questions, discuss implementation details, and seek further clarification on next steps for this regulation. Such a meeting with industry, counties, other state agencies, and members of the public all in the same room would help to resolve many unanswered questions and promote common understanding.

## 5. Conclusion

We appreciate the changes DMS proposed in the third 15-day proposal, particularly regarding compliance timelines, which will help preserve much of the progress already made by utilities, electric vehicle service providers, and California state agencies. Thank you for your consideration of our comments throughout this process. Please do not hesitate to contact us if you have any questions or would like to discuss further.

Sincerely,

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