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on CEC Workshop

Additional submitted attachment is included below.



February 5, 2021

California Energy Commission
Dockets Office MS-4
Re: Docket No. 20-FDAS-01
1516 Ninth Street
Sacramento, California 95814-5512

Submitted to on-line portal: <https://efiling.energy.ca.gov/Ecomment/Ecomment.aspx?docketnumber=20-FDAS-01>

Re: Comments on the CEC Staff Workshop on SB 49 Flexible Demand Appliance Standard

The California Electric Transportation Coalition (CalETC) appreciates the opportunity to provide feedback on the CEC's December 14, 2020 workshop on the proposed Flexible Demand Appliance Standard (FDAS). We greatly appreciate the time and effort it took to organize this workshop and the thoughtfulness of the presentations.

CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, contribute to clean air, and combat climate change. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation. Our Board of Directors includes representatives from: Los Angeles Department of Water and Power, Pacific Gas and Electric, Sacramento Municipal Utility District, San Diego Gas and Electric, Southern California Edison, Southern California Public Power Authority, and the Northern California Power Agency. In addition to electric utilities, our membership includes major automakers, manufacturers of zero-emission trucks and buses, electric vehicle charging providers, autonomous electric vehicle fleet operators, and other industry leaders supporting transportation electrification.

We respectfully request that electric vehicles (EVs) and electric vehicle supply equipment (EVSE) not be included in the proposed FDAS for the following reasons:

- 1. The California Air Resources Board (CARB) is already sending GHG price signals, which is what the FDAS envisions for EVs and EVSEs, and CARB is doing so in a technology and business model neutral way.**

In 2018, CARB's Low Carbon Fuel Standard (LCFS) created incremental electricity credits for residential and non-residential charging for smart charging and low carbon intensity electricity.¹ These credits send greenhouse gas (GHG) reduction and price signals and provide financial value to all types of consumers without requiring a specific communication protocol or business model.

¹ See LCFS regulation sections 95483(c)(1)(B), 95486.1(c)(2), and 95491(d)(A-C).

This technology-neutral approach is also consistent with SB 676 (2019)² which directs the CEC and CPUC to not favor one technology over another for vehicle grid integration (VGI). For residences, up to one ton per year of additional GHG can be reduced with either type of incremental LCFS electricity credit, and, at today's LCFS credit prices, this is worth about \$200 per year. CalETC recommends keeping the LCFS credit prices as the GHG price signal for EVSEs or EVs, and not adding another price signal in the proposed FDAS because this would double count the same GHG reductions.

2. Large utilities in California are also already sending very significant price signals to EVs and EVSEs.

In recent years all the large investor-owned utilities and many of the publicly owned utilities have introduced optional rates for residences and commercial customers that are very attractive to EV customers compared to default time-varying rates. These time-varying optional rates are typically designed with EVs in mind and are some of the most innovative in the nation. For example, they often can lower the cost of charging at home by seven to ten cents per kWh, encourage charging in the middle of the day to use renewable power, and demonstrate many new ways to lower demand charges for EVs charging at commercial locations. In addition, for residential EV drivers who now receive the recent statewide Clean Fuel Reward (from utility LCFS funds), utilities can use the addresses of these EV drivers to increase enrollment by EV drivers on their residential time varying rates designed for EVs.

3. VGI is a particularly complex topic that is already being regulated and funded by the CEC, the California Public Utilities Commission (CPUC), CARB, and the US Department of Energy (USDOE).

In addition to the above mentioned LCFS credits there are many other very active and well-funded initiatives on VGI that demonstrate how complex VGI is and that it is best handled in these other proceedings:

- a. SB 676 provides direction for both the CEC and CPUC on VGI. The CPUC in D-20-12-029 has implemented its SB 676 directives and adopted:
 - i. a broad definition of technology neutral VGI,
 - ii. a new 10-year statewide strategy for VGI with reporting requirements,
 - iii. the need to identify cost-effective VGI approaches by funding studies, pilots, and large demonstrations³ and rejected a large-scale program or mandates, and,
 - iv. the ability for the large investor-owned utilities to propose up to \$45M in funding for the studies, pilots, and large demonstrations discussed in the decision.
- b. The CPUC also recently:

² [Bill Text - SB-676 Transportation electrification: electric vehicles: grid integration.](#)

³ D-20-12-029 funds up to \$45M in studies, pilots, and large-scale demonstrations.

- i. Adopted funding for TE resiliency projects by the investor-owned utilities over the next decade and beyond (D-20-12-027) including allowing more V2B and V2G projects⁴ to be funded.
 - ii. Made progress on allowing interconnection for AC and DC bidirectional charging with off-board inverters and allowing pilots for interconnection of AC bidirectional charging with on-board EV inverters in D-20-09-035 and plans an additional decision in 2021. See the CEC's recent January 2021 workshop on V2B for more details on the progress with these technologies.⁵
 - iii. Is considering allowing V2B and V2G technologies to be eligible in the Self Generation Incentive Program (SGIP) as part of the 2020 SGIP rulemaking (R-20-05-12).
 - c. The CEC's EPIC program is funding many VGI programs and outlined more proposed programs in two January 2021 workshops.⁶
 - d. The 5-agency VGI Working Group met with over 100 industry stakeholders to make preliminary progress on determining the cost-effectiveness of hundreds of VGI use cases and identified over 90 possible policies to explore. The final report of the VGIWG from June 2020 identified many next steps to finish its work and the CPUC in D-20-12-029 allow funding for this effort to continue.
 - e. The CEC plans additional workshops in Q1 2021 to update California's interagency 2014 VGI roadmap.
 - f. CARB is working on updating its LCFS regulation in 2021 and possibly updating its regulation on payment at public charging stations.⁷
 - g. The 2020 omnibus spending bill that was signed in December 2020 has funds for VGI programs at USDOE.⁸
4. **As discussed in other CalETC letters to the CEC, cloud aggregators handle many different proprietary and open standards for VGI, and other electricity end uses. This technology neutral approach is consistent with SB 676 directives and should be allowed to continue.**

In several letters to the CEC in 2020 and 2021, CalETC has emphasized that a technology and business model neutral approach is working today for smart thermostats and smart inverters, has

⁴ Vehicle-to-building, -home, or -microgrid projects do not export to the grid but are bi-directional charging while vehicle-to-grid projects interconnect and export to the grid with bidirectional charging.

⁵ See <https://www.energy.ca.gov/event/workshop/2021-01/staff-workshop-vehicle-building-v2b-resilient-backup-power>

⁶ For example, GFO-20-304 and GFO-19-306. Recent CEC workshops are available at [Staff Workshop - Vehicle-to-Building \(V2B\) for Resilient Backup Power \(ca.gov\)](#) and [Rescheduled - Staff Workshop on Electric Program Investment Charge Interim Investment Plan 2021-2022 \(ca.gov\)](#)

⁷ Note VGI financial transactions can be closely related to payment transactions at charging stations which are regulated by CARB under [Electric Vehicle Supply Equipment \(EVSE\) Standards | California Air Resources Board](#).

⁸ [H.R.1158 - 116th Congress \(2019-2020\): Consolidated Appropriations Act, 2020 | Congress.gov | Library of Congress](#). See sections 8081, 3201 and 3202.

shown to work for smart charging, and is consistent with SB 676's approach. This model for smart network charging allows customers and charging provider to select self-managed charging⁹ or some type of automated charging using communication networks from automakers, charging providers, microgrids or building energy management systems. This competitive approach also puts downward pressure on prices and encourages innovation by using cloud aggregators that can use many types of open and proprietary communication standards. Cybersecurity also can be maintained with this approach, and utilities would receive communication signals from the aggregator via either IEEE 2030.5 (Rule 21 compliant) or Open ADR 2.0b.

For all the above reasons, CalETC recommends not including EVs and EVSEs in the proposed FDAS. Thank you for considerations of our comments and do not hesitate to contact me at kristain@caletc.com if you have any questions.

Best regards,

A handwritten signature in blue ink, appearing to read 'KAC', with a long horizontal flourish extending to the right.

Kristian Corby, Deputy Executive Director

⁹ For example, DC fast charge providers typically prefer using stationary storage and/or solar for load management to better serve EV drivers' needs rather than requiring networked smart charging. At homes, some EV drivers prefer to keep costs low through responding to time varying rates and/or purchasing lower kW charging stations.

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