CalETC
California Electric Transportation Coalition

July 5, 2018

Honorable Chair Nichols and Honorable Board Members California Air Resources Board

Sent via email

Re: Item 18-3-3, Proposed 15-day Modifications to Amendments to the Low Carbon Fuel Standard Regulation and to the Regulation on Commercialization of Alternative Diesel Fuels

Dear Honorable Chair Nichols and Board Members:

CalETC appreciates this opportunity to provide comments on the 15-day modifications to the Low Carbon Fuel Standard regulation. We also appreciate the tremendous effort and accessibility of CARB staff during the extensive public process leading up to this hearing.

CalETC 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. CalETC is a non-profit association committed to the successful introduction and large-scale deployment of all forms of electric transportation including plug-in electric vehicles of all weight classes, transit buses, port electrification, off-road electric vehicles and equipment, and rail. Our 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. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, and other industry leaders supporting transportation electrification.

CalETC supports the LCFS, a program that has been successful thus far in reducing the carbon intensity of California's transportation fuel. Given the near-total dependence on oil in the transportation fuels sector, the LCFS is essential to both diversify the transportation fuels sector and reduce emissions from carbon-based fuel.

CalETC supports the current program design with utilities generating "base" LCFS credits for residential charging and returning the value of those credits to electric vehicle drivers. CalETC and the utilities are committed to continue working with stakeholders and regulators to improve the programs supported by utilities LCFS credit revenue. We share the commitment to accelerate the market for electric vehicles and support the Administration and Legislature in meeting the state's transportation electrification goals. The utilities are uniquely positioned to work with administration and legislature to invest the LCFS credit value, they are either local public entities, as is the case with publicly-owned utilities, or they are economically regulated, as it is the case with investor-owned utilities.

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Summary of CalETC's comments

CalETC largely supports the proposed 15-day modifications the LCFS draft regulation order, with the notable exception of the provisions on multi-unit dwellings and removal of an EDU exemption. CalETC also proposes important amendments to the DC fast charging capacity credit, the exemption for EDUs and two other sections. Regarding statewide point-of-purchase new electric vehicle rebates, we support the need for additional to-be-determined amendments in the second 15-day modification process in August 2018.

1. CalETC opposes the 15-day modification replacing EDUs as the 1st in line to generate "base" credits for residential charging at multi-unit dwellings.
2. CalETC suggests several amendments the 15-day modification allowing capacity credits for direct current fast charge stations (DCFC). We suggest modifications based on key principles: discouraging overbuilding of charging stations or siting at poor locations; encouraging more funding from station developers; and providing CARB with more flexibility to adjust to market conditions
3. CalETC opposes the 15-day modification removing an important exemption from EDUs who receive base or incremental credits for non-metered (estimated) residential charging and proposes alternative amendment language.
4. CalETC opposes the 15-day modification that increases the California grid-average carbon intensity to 95.54 grams per MJ $CO2_e$. We request this 15-day modification be deleted as CARB staff works with stakeholders to correct the errors in this increased CI value.
5. CalETC supports the 15-day modification allowing other types of electric vessels and non-road equipment that do not earn credits today (due to lack of an EER) to be able to earn credits under the revised LCFS through a Tier 2 application process. CalETC also continues to request that the LCFS be amended to create a default, conservative EER for electric marine vessels and non-road equipment.
6. CalETC supports the 15-day modification requiring non-EDU electricity fuel credit generators to meet similar requirements placed on EDU electricity fuel credit generators.[1] CalETC requests this section be amended to require the electricity fuel LCFS credit generator provide the owner of the fuel supply equipment (FSE)[2] basic information about the LCFS program and value of LCFS credits.

CalETC supports the remaining 15-day modifications pertaining to electricity fuel in the LCFS. We believe CARB staff has continued to improve implementation of the LCFS and better calculate the benefits of electricity as a transportation fuel.

[1] See 95483 (c) (3)(C) and § 95491 (d)(3)(A) in the 15-day modifications
[2] I.e., the charging station

CalETC Comments on 15-day Modifications to the March 2018 LCFS Draft Regulation Order

CalETC appreciates this opportunity to comment on the proposed LCFS amendments. Our comments focus on the first six electricity-related provisions listed above.

CalETC Opposition or Requested Further Modifications to 15-day Modifications

1. *CalETC opposes the 15-day modification removing EDUs as the 1st in line to generate "base" credits for residential charging at multi-unit dwellings; the modification effectively takes away LCFS credit value that is currently allocated to EDUs.*[3]

   The CARB Board gave clear direction to staff in support of a statewide point-of-purchase new vehicle rebate (POP rebate) funded with LCFS residential base credit revenue. Taking away the utilities' access to multi-unit dwelling credit value directly conflicts with the Board direction, creating uncertainty in the revenue stream needed to fund a POP rebate program and/or limiting the POP rebate program to only Californians who do not live in multi-unit dwellings. Uncertainty in the revenue stream to fund the POP rebate program would reduce the effectiveness of the POP rebate program, particularly at a time when the state and the utilities are committed to making electric vehicles available to all, including those residing in multi-unit dwellings. Excluding Californians who reside in multi-unity dwellings from the POP rebate program raises equity concerns. It is imperative to increase access to electric vehicles for residents of multi-unit dwellings, and the POP rebate program is intended to help accomplish this imperative. However, if LCFS residential base credits associated with multi-unit dwellings do not support the POP rebate program, the POP cannot reliably support POP rebates for residents of multi-unit dwellings. A successful POP rebate program requires sufficient revenue and should be accessible to all Californians, whether or not they live in a multi-unit dwelling.

   Residents in multi-unit dwellings benefit from charging where they live, as do electric vehicle drivers who live in single-family homes. The LCFS program should not distinguish residential credit value, and the benefits offered by that residential credit value, based on the type of residence and electric vehicle driver occupies. CalETC respectfully requests the LCFS provisions on this topic return to the text shown in the 45-day notice in March 2018.

2. *CalETC suggests several amendments the 15-day modification allowing capacity credits for direct current fast charge stations (DCFC). We suggest modifications based on key principles: discouraging overbuilding of charging stations or siting at poor locations; encouraging more funding from station developers*; *and providing CARB with more flexibility to adjust to market conditions*

   CalETC directionally supports the 15-day modifications on capacity credits for public-access DC fast chargers[4].

[3] See Section 95483 (c)(1) and (2), section 95481 (a),

We recommend amendments to the 15-day modifications in support of these key principles:

a) Encourage smaller DC fast chargers (e.g., 50 kW) to the same degree as larger ones (e.g., 150 kW)
b) Encourage use of public-access DC fast chargers
c) Ensure the potential value of infrastructure credits generated do not exceed the capital costs of the DC fast chargers
d) Allow charging access rules for DC fast chargers to be led by CARB's upcoming regulations in 2018 to implement SB 454 on charging station access (not by LCFS amendments)
e) Provide CARB with limited flexibility to adjust to market needs and allow, if needed, larger DC fast charge stations up to 3 MW
f) Provide CARB with limited flexibility to provide capacity credits for public–access DC fast chargers at good locations (e.g., urban areas) that only allow access for as little as 16 hours a day
g) Encourage the building of DC fast chargers in the early years of the capacity credit (e.g., 2019-2022)
h) Require county weights and measures certification in a later rulemaking.

CalETC does not have specific amendments but rather proposes solutions to address the problems in the 15-day modifications and achieve the principles above:

a) CalETC believes there is not a large difference in cap-ex cost between 50 kW and 150 kW DC fast chargers. That is why we do not support the provision in the 15-day modifications that would provide 3 times more capacity credits to a 150 kW DC fast charger than a 50 kW one. Specifically, CalETC suggests the 15-day modification's formula for DC fast charge capacity credits be changed to be more cost-based for chargers between 50 and 150 kW (e.g., allowing about 25-50 percent more capacity credits to a 150 kW DC fast charger than a 50 kW one).
b) CalETC believes the 15-day modifications would allow DC fast chargers to be built and be used (or used a little), and yet still receive the same capacity credits as stations with heavy use. This is because the kWh credits are subtracted from the capacity credits, so chargers receive the same amount of DCFC credit no matter their use. CalETC believes that capacity credits should address up-front cost issues with DCFC and that throughput (kWh) credits should address on-going costs (e.g., demand charges and maintenance). CalETC believes it is important to avoid this type of incentive that encourages less use of the station, and requests that the 15-day modifications allow for capacity and throughput (kWh) credits to be additive (e.g., not part of the capacity

[4] A DC fast charger for purposes of LCFS is defined as a parking space or stall that is served by DC fast charge equipment (over 50kW) that has one or more DC connectors to the EV. See section 95486.2 and related definitions.

credit formula). CalETC also notes that some smaller DCFC stations (e.g., 25 kW curbside) charging should only be receiving throughput (kWh) credits, as they do today.[5]

c) CalETC believes the 15-day modifications may result in credit value exceeding the cap-ex costs of developing DC fast chargers, and thus do not encourage enough funding from developers. Specifically, CalETC suggests the potential value of infrastructure credits generated should not exceed the capital costs of the DC fast chargers.

d) CalETC does not support the provisions in the 15-day modifications on DC fast charger access and requests these provisions be deleted. Instead, the CARB Board in October 2018 is expected to vote on new regulations (per SB 454) to regulate charging station access for both AC and DC charging stations, so this issue will be addressed very soon. CalETC believes it is appropriate to not have conflicting CARB regulations in this area and the CARB regulations per SB 454 have been going through extensive process with industry and other stakeholders (e.g., invite-only meetings and public workshops). The 15-day modifications on credit card access and related provisions have not gone through a similar process and, and, as a result, are not appropriate given the circumstances.

e) CalETC believes it is important for CARB to have the flexibility to adjust to market conditions in the DC fast charge market. Specifically, CalETC does not support the 1.5 MW cap on sites with DC fast chargers. Even today there are exceptions in urban areas where sites are hard to find or along the busiest intercity freeway corridors. CalETC requests amendments that would allow CARB to approve a package of applications for DC fast charge sites between 1.51 and 3.0 MW (limited to no more than 10 percent of incremental DCFC sites that receive capacity credits).

f) CalETC requests that CARB staff have more flexibility in allowing good locations for DC fast chargers. This is especially important in urban areas where perfect locations that will allow 24-7 access are very hard to find. Specifically, CalETC requests the final LCFS rule allow for up to 10 percent of the sites either 1) the requirement or station access be 16 hours for 363 days per year (or similar) or 2) develop an exception process, e.g., the Executive Officer could be given authority to approve credit generation at sites that do not meet the criteria above based on access considerations.

g) CalETC supports the concept of limiting DC fast charger credits to 2.5 percent of all deficits but is concerned that this also encourages a slow start to the program, 2.5 percent of deficits in the early years is much less than in the later years (e.g., 2023-2025). To encourage a faster start to the program, CalETC requests amendments that would allow the 2.5 percent cap to cover an average for all seven years (2019-2025) and allow up to 3.5 percent of deficits each year in the early years (e.g., 2019-2022).

[5] And this is another reason for making sure there are stand-alone throughput credits that are not part of the DCFC capacity credit formula. Note: these smaller stations along with private stations do not earn capacity credits under the 15-day modifications, but do earn the kWh type of LCFS credit.

h) CalETC requests deletion of the requirements on DC fast chargers to be certified by county weights and measures at this time. CalETC believes this requirement can be added in future rulemakings after the state adopts the certification standards and when the counties are trained and ready.

3. *CalETC opposes the 15-day modification language that removes an important exemption from EDUs who receive base or incremental credits for non-metered (estimated) residential charging and proposes alternative amendment language.*

   CalETC opposes removing this EDU exemption[6] because it is infeasible for EDUs who receive estimated base residential credits or estimated incremental credits linked to green tariff to provide the fuel supply equipment name, address and GPS coordinates. In both cases, this information is unknown. Providing a federal employer identification number (FEIN) for the EDU is possible however. And for estimated incremental credits linked to green tariff it is possible for the EDU or CCA to provide proof of EV registration and a link to a green tariff account.[7]

   CalETC suggests instead the following edits:

   § 95483.2. LCFS Data Management System:
   (A) *General Requirements.* All FSE registrations must include:
   1. Federal Employer Identification Number (FEIN) for the entity Registering.~~,~~
   2. ~~n~~Name of the facility at which FSE is situated, street address, latitude, and longitude of the FSE location.
   ~~2~~ 3. Name and address of the entity that owns the FSE, if different from the entity registering the FSE.

   (B) *Specific Requirements by Fuel Type.*
   * * * * *
   5. Fuel reporting entities for non-metered residential EV charging and fixed guideway systems are exempt from subsection (A)~~1.~~ 2 and (A) 3 above. The LRT-CBTS will assign FSE IDs for reporting purposes based on the information provided in the LRT-CBTS account registration form.

4. *CalETC opposes the 15-day modification that increases the California grid-average carbon intensity to 95.54 grams per MJ $CO2_e$. We request this 15-day modification be deleted as CARB staff works with stakeholders to correct the errors in this CI value.*

   Working with the Electric Power Research Institute, CalETC evaluated the 15-day modified grid-average carbon intensity. We believe there are errors in the calculation of the 95.54 grams. For example, the CARB staff calculations incorrectly assign upstream emissions and

[6] See section 95482.1(b)(5) on page 15 of the 15-day modifications
[7] See section 95491(d)(3)(A)(6) and section 95481 (a)

the geothermal power plant emission calculations are too high. CalETC will continue to work with staff on this complex topic to develop a more accurate number.

5. *CalETC supports the 15-day modification allowing other types of electric vessels and non-road equipment that do not earn credits today (due to lack of an EER) to be able to earn credits under the revised LCFS through a Tier 2 application process. CalETC also continues requests that the LCFS be amended to create a default, conservative EER for electric marine vessels and non-road equipment.*

CalETC encourages CARB staff to develop an EER[8] for the marine, airport, mining, agricultural and material handling industries, these industries could benefit from this provision and further the state's energy diversity and LCFS goals. CalETC also continues to recommend CARB staff create a temporary, default, conservative EER for electric vessels and non-road equipment. A conservative, default EER would allow for broader engagement in the LCFS program. A temporary, default EER would not impede efforts to engage in the Tier 2 application process and the Tier 2 EERs would improve upon the temporary default EER in future years.

6. *CalETC supports the 15-day modification requiring non-EDU electricity fuel credit generators to meet similar requirements placed on EDU electricity fuel credit generators.[9] CalETC requests this section be amended to require the electricity fuel LCFS credit generator provide the owner of the fuel supply equipment (FSE)[10] basic information about the LCFS program and value of LCFS credits.*

CalETC believes that credit generators for non-residential and residential charging should have substantially similar requirements and believes the proposed amendments to § 95483 (c)(3)(C) and § 95491 (d)(3)(A)[11]in the 15-day modifications achieve this goal. In addition, CalETC also supports the 15-day modifications that allow the owner of the fuel supply equipment (FSE) for non-residential charging to designate another party to take on the role of credit generator,[12] but further request that the designee also be required to provide the FSE owner with a clear, high level explanation of the LCFS program, its value to the EVSE owner and why CARB has created the LCFS regulation. See CalETC's April 23 comment letter for additional reasons why CalETC supports these changes (e.g., better consumer and site host experience, protecting against fraud).

<u>15-day LCFS Modifications Supported by CalETC</u>

1. CalETC supports the 15-day modification language that clarifies that the allocation of base residential charging LCFS credits may only go to electric distribution utilities (EDUs) and that

[8] See Section 95483(c)(7), section 95486.1(a)(2), section 95488.7(a)(3) and section 95491(d)(3)(I)
[9] See 95483 (c) (3)(C) and § 95491 (d)(3)(A) in the 15-day modifications
[10] I.e., the charging station
[11] See pages 12 and 91 of the 15-day modifications.
[12] See section 95483 (c) (3)(C) on page 12 of the 15-day modifications.

other parties may not claim these credits or use the reporting tool for CA statewide average electricity carbon intensity (CI).[13]

2. CalETC supports the 15-day modification language that clarifies that ships plugged in at berth and electric cargo handling equipment may now earn LCFS credits.[14]
3. Assuming the LCFS regulation returns the reporting exemption for EDUs on base and incremental residential charging credits,[15] CalETC supports the 15-day modification language that would allow EDUs to generate incremental residential credits for non-metered electricity linked to customers with green tariffs if no other party is claiming these credits.[16]
4. CalETC supports the 15-day modification language that specifies that deficit generators "may not borrow or use credit from anticipated future carbon intensity reductions", but credit generators may do so.[17]
5. CalETC supports the 15-day modifications that result in EDUs receiving LCFS credit allocations for base residential charging credits quarterly instead of yearly.[18]
6. CalETC supports the 15-day modification[19] that makes reporting optional for EDUs that are reporting metered electricity to generate base residential charging credits.
7. CalETC supports the additional 15-day modifications (e.g., provisions on smart charging, non-residential charging, low-carbon intensity charging, credit transfers, meter calibration, return of benefits).[20]

Thank you for your consideration.

Regards,

Eileen Wenger Tutt, Executive Director
California Electric Transportation Coalition

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[13] In the 15-day modifications, see section 95491 (d)(3)(A)6. (Fuel Transactions and Compliance Reporting) on page 92 and section 95483 (c)(1) and (c)(2) (Fuel Reporting Entities) on pages 10 and 11.

[14] See section 95483(c) (5), section 95483.2(b)(8), section 95481 (a),and section 95486.1(a) in the 15-day modifications

[15] See comment 3 above.

[16] See section 95486.1 (c)(2)(A)(1), section 95491(d)(3)(A) and section 95481 (a).

[17] See section 95487(a)(2)(B) on page 37 of the 15-day modifications.

[18] See section 95491(d)(3)(A)(1) in the 15-day modifications

[19] Section 95483.2 (b)(8)(B)(4) on page 15 in the 15 day modifications

[20] For example, see section 95483(c)(1)(B), section 95481(c)(1)(B), section 95488.1(b), section 95488.5 (e) and (f), section 95483(a)(3), section 95487, section 95488.8(i), section 95491.1(c)(1)(G), section 95488.5(f)