August 27, 2024

Honorable Chair Liane Randolph and Honorable Board Members California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Re: SUPPORT Proposed 15-day Change Amendments to the Low Carbon Fuel Standard Regulation

Submitted to https://ww2.arb.ca.gov/applications/public-comments

Dear Chair Randolph and Honorable Board Members:

The Electric Vehicle Charging Association (EVCA) and CalETC appreciate this opportunity to SUPPORT the Low Carbon Fuel Standard (LCFS) regulation and provide feedback for the California Air Resources Board (CARB) Board member consideration. This letter largely supports the proposed draft regulation order on August 12 version (called 15-day changes) and provides some suggested modifications for consideration to the non-utility provisions. We also appreciate the tremendous effort and accessibility of CARB staff during the extensive public process leading up to this hearing.

EVCA is a not-for-profit trade organization of twenty leading EV charging industry member companies and two zero-emission autonomous fleet operators. The association was established in 2015 to comprehensively represent the entire EV charging value chain and provide a collective industry voice for decision makers.

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, the Northern California Power Agency, and the Southern California Public Power Authority. Our membership also includes major automakers, manufacturers of zero-emission trucks and buses, developers and operators of charging stations and other industry leaders supporting transportation electrification. CalETC supports and advocates for the transition to a zero-emission transportation future to spur economic growth, fuel diversity and energy independence, ensure clean air, and combat climate change. Please note that the views and comments reflected in this letter represent the positions of the CalETC board of directors and some, but not all, of the members of CalETC.

Over the past 10 years, the LCFS has been tremendously successful in supporting the transition from petroleum to cleaner transportation fuels including electric fuel. Clean low-carbon fuels

have replaced a percentage of petroleum and, in doing so, have reduced climate change pollutants as well as a myriad of air and toxic pollutants that adversely impact communities. The LCFS has served as a catalyst for billions of dollars of investments in clean fuels and infrastructure.

We have been participating in staff workshops for several years and have had several constructive conversations with staff in that time. We very much appreciate their accessibility and commitment to LCFS.

Summary: We very much appreciate the substantial 15-day changes proposed on August 12 to the step-down in CI intensity in Tables 1 and 2 and to the light-, medium-and heavy-duty vehicle fast charge infrastructure (FCI) programs. We have some additional recommendations to the FCI programs below. We also support the August 12 proposed amendments to the fixed guideway and forklift provisions. However, we are disappointed that no changes were made in response to our recommendations regarding the verification provisions, especially since much of this program duplicates the existing regulations from the California Department of Food and Agriculture (CDFA), Division of Measurement Standards (DMS), and we make specific recommendations below on verification.

Recommendations:

1. *EVCA and CalETC opposes the proposed requirements for parties to pay for visits to individual charging stations by third-party verifiers to check for accuracy at public and private charging stations for light -, medium-, and heavy-duty EVs and incremental residential credits when reviewing quarterly fuel transaction reports*. Instead, we recommend parties pay for desk-top reviews by third-party verifiers at central data locations that do not duplicate existing accuracy regulations established by the California Department of Food and Agriculture's Division of Measurement Standards and the California Public Utilities Commission (CPUC) and that generators of small numbers of non-residential credits be exempted from these requirements.

   The proposed regulation requiring site hosts to pay for third party verifiers for metered incremental residential credits, non-residential, and FCI credits for charging of light duty EVs and eMHDVs will result in high costs and a chilling of market development by site hosts, automakers, and charging developers. Section 95501 (b)(3) seems to indicate that site visits to each facility with a charging station is required (we see no mention of risk assessments or sampling affecting the number of site visits in the proposed regulation). We believe this requirement represents a massive time investment and cost for extraordinarily little benefit.

   Metered electricity fuel credit generators are widely distributed, unlike other fuel providers that generate LCFS credits. Electricity is also economically regulated, unlike other transportation fuels. While there are approximately 10,000 gasoline / diesel

stations in California, electricity is fundamentally different, with already 10,000 public DCFC, about 90,000 public level 2 charging stations, many thousands of fleet charging stations, and nearly one million residential charging stations. Soon these numbers will need to grow by a factor of eight or nine, as the ACC II, ACT, ACF and other regulations ramp up their compliance requirements. The sheer number of charging stations and their distributed nature makes travel to even a fraction of these an exorbitant cost.

Additionally, this requirement is not needed as EDUs have meter accuracy requirements that cover tens of millions of meters in private and commercial locations and a process to deal with inaccuracy complaints.[1] Moreover, the California Department of Food and Agriculture's Division of Measurement Standards (DMS) regulates EV chargers for metering accuracy as well as many other consumer protection requirements,[2] and inspections to enforce this regulation are conducted by each California county's Department of Weights and Measures and paid through device registration fees paid to the counties.[3] Adding a requirement for site hosts to pay for third-party verification for data that is already aligned with the proposed measurement accuracy requirements in §95491.2(a)(1)(B) in Appendix A-2 Proposed Regulation Order[4] may cause smaller fleets or properties like multifamily residences to forego participating in the LCFS program and the sectors CARB more broadly wishes to support. We recommend that the new LCFS does not require site visits to the charging stations and defers to existing CPUC and DMS metering accuracy regulations.

Requiring third party verification for residential metered charging is particularly concerning, as there are already hundreds of thousands of EVs being reported to CARB in order to generate incremental residential LCFS credits with kWh measurement via EV telematics or a charging station. Conducting site visits to even a fraction of those sites will be tremendously expensive. It is also unclear how the verifier would check the EV's telematics data and engage with the EV owner. We see no corresponding benefit and recommend that site visits by a verifier to the EV or residential charger not be required.

[1] Utility Meters are certified to ANSI C12 standards by Nationally Recognized Testing Labs (NRTLs). Here is a SMUD example on meter accuracy. For example, https://www.smud.org/-/media/Documents/Going-Green/EVs/Engineering-Specification-T017---Electric-Vehicle-Chargers-Rev-0---3-6-18.ashx. And https://www.smud.org/-/media/Documents/Rate-Information/Rates/Rule-2-17.ashx Utilities have processes to respond to high bill complaints and this can be escalated to the CPUC's Consumer Affairs Branch: https://www.cpuc.ca.gov/consumer-support/file-a-complaint/utility-complaint.

[2] https://www.cdfa.ca.gov/dms/pdfs/regulations/EVSE-OAL_EndorsedLetter-and-FinalText.pdf

[3] https://www.cdfa.ca.gov/dms/docs/publications/2023/2023_Combined_BPC.pdf

[4] https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/appa-2.pdf

EVCA and CalETC propose that for incremental residential credits, FCI credits, and non-residential charging of light, medium- and heavy-duty EVs, the only requirement is for desk top reviews to be done by third-party verifiers to check the accuracy of the calculations, except where a risk-based assessment reveals a reasonable concern about accuracy.

EVCA and CalETC appreciate that the proposed regulation allows for a deferment in verification for small entities with fewer than 6,000 credits per year, but we do not think this goes far enough for the many small locations that are just entering LCFS. We recommend that any entity with fewer than 2,000 credits per year be exempted from all verification and that those applicants with 2,001 to 6000 metric tons of credits per year be eligible for deferment of paying for a verifier to visit the central data location. Our intent is to avoid a chilling impact that verification requirements will have on recent and new sites and to have a better cost -benefit ratio for these sites. Fleets, workplaces, multifamily buildings, grocery stores, small utilities and other businesses are often just one or two locations, and only generating a handful to a few thousand credits per year.[5] We believe our proposal is reasonable to prevent the costs of verification from removing the financial benefits of generating credits or even discouraging the adoption of charging stations so needed to make ACC II, ACT, ACF, Innovative Clean Transit, Clean Miles Standard, Zero-Emission Airport Shuttle and other regulations effective.

Also, as noted below, we are recommending that many emerging EVs in agriculture, airports, mining, and recreation be allowed to be in LCFS immediately. We recommend these new TE end-uses be subject to the same deferment and exemption thresholds as listed above, and any site visits be determined by a risk-based assessment that considers whether there is a reasonable risk of inaccuracy from the meter or charging equipment itself rather than the calculations and reporting.

Finally, CARB staff indicated that base residential credits should not count toward a 6,000-credit cap for deferment of verification (or our proposed 2,000 credit cap for exemption). However, the current regulation language simply references credits in the LCFS Reporting Tool and Credit Bank & Transfer System (LRT-CBTS). Almost all of the utilities' LCFS credits come from base residential credits calculated by CARB (and therefore not subject to verification). However, the current LCFS LRT-CBTS does not differentiate between a utilities base residential credits and other metered credits. CARB should clarify that only credits subject to verification count towards the credit cap for deferment or exemption.

[5] Medium and heavy-duty trucks and buses are often generating several thousand credits annually when they are starting out.

2. *EVCA and CalETC largely support the proposed heavy-duty vehicle FCI program but request a few additional changes.*

For all the reasons listed in our February 20, 2024 letter, we support the following amendments proposed in the 15-day changes:

- Extending the HD-FCI program's application deadline to December 31, 2035 rather than December 31, 2030
- Extending the minimum distance from an existing or pending electric vehicle Federal Highway Administration Alternative Fuel Corridor to five miles instead of one mile
- Lowering the minimum kW per charger from 250 kW to 50 kW
- Removing the cap of 10 chargers per site
- Increasing the limit at one address from 10 MW to a higher number and adding a 20 percent of overall program cap on any single company
- Matching the credit life for the FCI and hydrogen refueling infrastructure (HRI) programs at 10 years rather than having different lifespans for the two programs
- Clarifying the payment requirements
- Modifying the access requirements
- Not requiring certain connectors
- Allowing load management technologies such as battery energy storage

Recommendations:

a. Allow zero carbon intensity electricity just like the proposed HRI program. The proposed 15-day change regulation gives preferential treatment to hydrogen stations over electric vehicle charging stations when assigning the CI for capacity credits. Hydrogen stations utilizing the HRI pathway receive a CI of the "Company-wide weighted average CI for dispensed hydrogen during the quarter or 0 g/MJ, whichever is greater." DCFC stations utilizing the FCI receive a CI of the "California average grid electricity carbon intensity" regardless of whether the EV charging company is dispensing low-CI electricity such as retiring 0 CI renewable energy credits (RECs) for generating non-residential charging credits. We encourage CARB to harmonize the CI definition for calculating HRI and FCI credits as "Company-wide weighted average for dispensed hydrogen / electricity during the quarter or 0 g/MJ, whichever is greater."

b. Allow the same formula calculating credits for FCI as for HRI. The formula for a shared HD-HRI station includes a 50% factor and for a private HD-HRI station a 25% factor. However, the formula for FCI is much lower: an FSE at a shared HD-FCI charging site has a 20% factor and an FSE at a private HD-FCI charging site has a 10% factor. We recommend that CARB more fully harmonize the HRI and FCI programs by having these factors be the same for both programs or, at minimum, be more similar than proposed.

c. Clarify language around reservations at shared sites. The current definition of a shared site states that a "shared HD-FCI site cannot be reserved for one HDV fleet for more than 12 hours each day…" This site-level restriction is reasonable to ensure sites are not effectively private. Language elsewhere in the draft states that "[t]he FSEs at a shared HD-FCI charging site cannot be reserved for one HDV fleet for more than 12 hours each day." It is our understanding that the prohibition on reservations over 12 hours applies at the site level, rather than the individual FSE level, but the language is not entirely clear. FSE-level restrictions would conflict with fleet needs and undercut the effectiveness of this provision. Some fleet customers at shared, multi-fleet depots will want dedicated stalls so they can optimize usage throughout the day with multiple charges. The sites are still shared and serving multiple fleets even if an anchor tenant may want to reserve some stalls for more than 12 hours. We request confirmation that longer reservations on individual FSE are allowed so long as the overall site remains shared and serving multiple fleets.

d. Include land costs for new sites as an eligible initial capital cost, as these stations are extremely difficult to site and new locations are often needed. It is difficult and expensive to find suitable sites for truck charging due to scarcity of land in urban areas (owning or 10-year leases), zoning restrictions, lease restrictions and, most importantly, the challenge in finding 5-20 MW (sometimes more) of grid capacity. The Venn diagram overlap of these needs is small. Land costs for public charging locations and shared charging depots for HD FCI are very significant and should be included in Section 95486.4(b)(4)(I).

e. Clarify what is meant by networking requirements. CARB proposes a networking and communication requirement we request clarification around the data to be shared and the rationale. The proposed language states "Each FSE must be networked and capable of monitoring and reporting its availability for charging." This can be read to require public reporting of availability, which would not necessarily be relevant for shared chargers such as those found in multi-fleet charging depots with defined customers and reservations.

f. Establish a 5% cap on prior quarter deficits, especially in the early years. The HD-FCI program is limited to 2.5% of the previous quarter deficits. At 2025 deficit levels, we estimate this would support as little as 635 MW of capacity from HD FCI credits, depending on utilization, uptime, and other assumptions.[6] According to the CEC's AB 2127 analysis, the state will need about 2,900 MW of charging from eHDVs by 2025 and 11,600 MW of charging from eHDVs by 2030.[7] Additional

[6] This calculation was derived leveraging the formulas from Appendix A-2 Proposed Regulation Order, section § 95486.3.(b)(2)(G) and section § 95486.3.(b)(5)(G) with the following assumptions: previous quarter deficits = 8,082,115 MT (based on CARB CATS model 2025 forecast); shared MHD-FCI charging site model selection; 85% uptime; and 5% utilization.

[7] The California Energy Commission's AB 2127 report uses the HEVI-load model to forecast the number of depot and public chargers required for MHD charging under the AATE3 primary scenario. This forecast predicts the

support is needed to attract the scale of private capital required, particularly at this nascent stage of the market with less than 1,000 HD trucks and vans on the road and with both fleets and OEMs citing infrastructure as a primary limiting factor.

We recommend increasing the 2.5% cap on prior quarter deficits, particularly in the early years of the program, to kickstart the zero-emission truck market especially for near-term trucks applications in the drayage, short-haul, medium-haul, and delivery segments. As momentum builds, CARB might consider reducing the cap in a future rulemaking. We recognize that there are tradeoffs and that the "right" cap depends on perspective. However, we are at a critical launch point for both ACT and ACF and believe a higher cap – we recommend 5% based on the above need - is warranted to begin deploying a network that will enable the market to take off. Solving the chicken-and-egg infrastructure problem by using FCI to build infrastructure in advance of vehicle adoption is critical to the success of ACF, ACT and the Scoping Plan.

California will need to deploy charging infrastructure in advance of vehicle deployment to keep pace with the need to install over 50 HD chargers per day every day through 2030.[8] HD FCI is a crucial tool to encourage charging infrastructure deployment in advance of vehicles – thereby removing a frequently cited barrier to electrification overall and ACF in particular. Encouraging the early adopters (e.g., shared depots and some fleets) to build the infrastructure to accommodate full electrification is critical even if the initial vehicle deployments are lower. This will help expedite the time frame for increasing the fleet's adoption rate of electric trucks. In the near future, turnaround time for new electric truck orders will be measured in weeks and the lack of infrastructure will delay adoption. Helping fleets move early will allow them to quickly add to their fleet after gaining comfort with the technology.

As mentioned above, the state will need about 11,600 MW of HD charging by 2030 but we estimate the proposed HD-FCI will only provide about 600 MW. The

number of chargers and their respective power ratings that will be required in 2025 and 2030, as seen in Appendix-H, Table H-1. The sum of the total MHD charging capacity based on this forecast was calculated to be 2,900 MW and 11,600 MW by 2025 and 2030, respectively, by taking the sum-product of the number of chargers and their respective power rating.

[8] Based on the more recent CEC AB 2127 report available at: https://www.energy.ca.gov/publications/2023/second-assembly-bill-ab-2127-electric-vehicle-charging-infrastructure-assessment, to support medium- and heavy-duty plug-in electric vehicles, California will need about 109,000 depot chargers and 5,500 public chargers for 155,000 vehicles in 2030, and 256,000 depot chargers and 8,500 public chargers for 377,000 vehicles in 2035. **For 2030:** 114,500 chargers divided by 2146 days (from today) = 53 chargers a day through 2030 needed. What is the baseline of current chargers? 2000? that would bring it to fifty-two chargers a day. **For 2035:** 264500 chargers divided by 3972 days - 67 chargers a day; if we assume a baseline of 2000, then 66 a day through 2035.

chart below also illustrates the size of the need for DC charging infrastructure and the pace of installation needed.[9] Our analysis above is the same as our February 20 letter and does include medium-duty EVs and that may justify lowering a 5 percent cap in a future rulemaking.

In addition to our recommendation for a 5% cap of prior quarter deficits on HD-FCI, we see a need to clarify the 15-day change language so that it applies only to HD FCI and not to the overall FCI program. We recommend the following: *"If estimated potential FCI credits from all approved HD-FCI FSEs exceed 5.0 ~~2.5~~ percent of deficits in the most recent quarter for which data is available, the Executive Officer will not approve additional FCI pathways for HD-FCI FSEs and will not accept additional HD-FCI applications until estimated potential FCI credits for approved HD-FCI FSEs are less than 5.0 ~~2.5~~ percent of deficits."* The second underline is intended to remove confusion as to which category the cap applies. There may be other places where amendments are needed to distinguish between FCI and HD-FCI.

Table 27 - HEVI-LOAD Infrastructure Results for 112,000 BEVs in 2030 and 289,000 BEVs in 2035[105]

Charger Power Level	2030			2035		
	Number Chargers (% Depot / % Public)	Charging Energy (%)	Charging Time (%)	Number Chargers (% Depot / % Public)	Charging Energy (%)	Charging Time (%)
19; 25 kW	9,509 (100 / 0)	2.74	21.69	24,638 (100 / 0)	2.29	19.94
50; 75 kW	12,174 (87 / 13)	7.56	37.45	31,529 (88 / 12)	6.46	36.38
100; 150 kW	33,558 (96 / 4)	29.15	2.42	90,599 (97 / 3)	27.34	2.85
225; 250; 300 kW	12,257 (82 / 18)	20.17	23.71	31,362 (85 / 15)	19.10	24.40
350; 450; 500 kW	9,882 (83 / 17)	18.92	9.20	25,190 (86 / 14)	18.19	10.10
750; 900; 1,000; 1,050 kW	1,112 (0 / 100)	7.77	5.46	2,499 (0 / 100)	8.88	6.25
1,200; 1,400; 1,600 kW	1,498 (0 / 100)	13.69	0.07	3,809 (0 / 100)	17.73	0.09
Total	79,990 (88 / 12)	100	100	209,626 (90 / 10)	100	100

g. Phase in the restriction "the FSE must dispense electricity in a given quarter to generate FCI credits." We recognize the concern that sites with no electricity dispensed for many years are poor locations, and this should be discouraged. However, the 15-day change is written not at the site level, but at the charger

[9] https://ww2.arb.ca.gov/sites/default/files/2022-01/Draft_2022_State_SIP_Strategy.pdf

(FSE) level. We respectfully request this requirement be amended to be at the site level. Alternatively, we recommend phasing the requirement in after a grace period of at least one year to account for the fact that widespread truck deployment may lag infrastructure development, which is exactly the problem that FCI can address. The intent of the FCI program is to encourage development of DCFC ahead of the need in order to solve the chicken and egg problem, so low utilization of sites is expected in the early years of the launch of electric HDVs. As a result, the current language is too restrictive and poses operational issues for operators of fleets, shared depots and truck stops.

h. Allow the executive officer to grant exceptions to the 5 miles from corridor limit. Because of the difficulty in finding sites for shared and public charging for eHDVs (see comments above), we respectfully request additional flexibility on siting locations by allowing the executive officer to grant exceptions. The commercialization of new technology is always challenging, and unforeseen circumstances should be expected as it may turn out to be hard to find sites within five miles of a corridor especially if they require 10 MW to 40 MW of power.

3. EVCA and CalETC largely support the proposed light- and medium-duty vehicle FCI program but request a few additional changes.

For all the reasons listed in our February 20, 2024 letter, we support the following amendments proposed in the 15-day changes:

- Increasing the MW per site limit (per address) from 1 MW to 2.5 MW
- Removing the geographic limits
- Increasing the cap of prior quarter deficits from 0.5 percent to 2.5 percent
- Allowing private access stations to qualify (e.g. robotaxis, ride sharing vehicles)
- Matching the credit life for the FCI and hydrogen refueling infrastructure (HRI) programs at 10 years rather than having different lifespans for the two programs
- Allowing stations installed after 2022 to apply
- Modifying the payment requirements
- Dropping the connector requirements
- Allowing load management technologies such as battery energy storage

Recommendations

a. Allow less than 24-hour access if the executive officer approves. We believe flexibility is needed as not all situations meriting exceptions may be covered by a permitting authority. There may be good reasons in some urban areas (e.g., safety) where less than 24-hour access is warranted on a case-by-case basis. In addition, the 15-day changes appear to have made it easier for placing public-

access DCFC in cities and towns to serve EV drivers who live in apartments and condominiums and where the DCFC is placed in locations such as curbside of a street or in public, non-profit or private parking lots. Building charging at multifamily residences is a well-recognized challenge and placing level 2 chargers on site is not always attractive or in many cases even possible. CARB has an opportunity with this LD FCI program to address this problem by encouraging DCFCs at nearby locations that will work not only for residents of apartments and condominiums but also for residents of single-family homes in denser urban areas where off-street parking is limited. The 24-7 requirement for public access should, at minimum, be slightly modified so that non-profit, government and private locations with one or two DCFCs that serve the community do not run into problems with rights-of-way laws. For example, a site such as a church or a bank needs to close their parking lot for at least one day a year in order to not lose their property rights. Ideally, CARB should also accommodate, through an exception process, other times that access could be blocked for a few hours (e.g., neighborhood festivals).

b. Allow zero carbon intensity electricity just like the proposed HRI program for LMD FCI. The proposed 15-day change regulation gives preferential treatment to hydrogen stations over electric vehicle charging stations when assigning the CI for capacity credits. Hydrogen stations utilizing the HCI pathway receive a CI of the "Company-wide weighted average CI for dispensed hydrogen during the quarter or 0 g/MJ, whichever is greater." DCFC stations utilizing the FCI receive a CI of the "California average grid electricity carbon intensity" regardless of whether the EV charging company is dispensing low-CI electricity such as retiring 0 CI renewable energy credits (RECs) for generating charging (FCI) credits. We encourage CARB to harmonize the CI definition for calculating HRI and FCI credits as "Company-wide weighted average for dispensed hydrogen / electricity during the quarter or 0 g/MJ, whichever is greater."
c. Allow the same formula calculating credits for FCI as for HRI. The formula for a public LMD-HRI station includes a 50% factor and for a private LMD-HRI station a 25% factor. However, the formula for FCI is much lower: an FSE at a public LMD-FCI charging site has a 20% factor and an FSE at a private LMD-FCI charging site has a 10% factor. We recommend that CARB more fully harmonize the HRI and FCI programs by having these factors be the same for both programs or, at minimum, be more similar than proposed.
d. Extend the new LD FCI application deadline to 2035. We recommend that this program's application deadline be extended to 2035 and not sunset in 2030. We are in a challenging phase of light duty EV adoption as the market needs to capture more skeptical mainstream buyers to meet the "hockey stick" ramp inherent in the ACC II requirements. The light duty FCI remains a very elegant and desirable tool to address the chicken-and-egg problem of how to accelerate EV infrastructure and EV adoption. Without the changes we recommend to the light duty FCI the pace of DCFC build-out could dramatically slow which makes

meeting ACC II much more challenging. Now is not the time to scale back this program. CARB can take a no-regrets approach to supporting the light-duty fast charging market by adopting a 2.5% cap with no geographic restrictions. While the addition of more credits into the market can lower credit prices several factors can counter this including the new acceleration mechanism.

e. Clarify that that staff's intent in the 15-day package is for there to be four 2.5% caps for four categories: (LMD-FCI combined with the current light duty FCI, HD-FCI, LMD-HRI combined with the current light duty HRI, and HD-HRI). The current language is a little confusing because the current FCI program (public light duty) and proposed LMD FCI programs run concurrently as explained in the 15-day change notice. The use of the generic term "FCI" varies throughout the proposed regulatory language sometimes referring to the legacy FCI program and other times to the new FCI programs for LMD and/or HD DC charging. We ask that the final regulation language not use the term FCI by itself to refer to the legacy program, but rather be more specific, such as using the term "light-duty FCI" to refer to the legacy (current program. For example, one way to make the language clearer, is the following: ***If estimated potential FCI credits from all approved light-duty FCI and LMD-FCI FSEs exceed 2.5 percent of deficits in the most recent quarter for which data is available, the Executive Officer will not approve additional FCI pathways for LMD-FCI FSEs and will not accept additional LMD-FCI applications until estimated potential FCI credits for approved light-duty FCI and LMD-FCI FSEs are less than 2.5 percent of deficits.***

f. Clarify what is meant by networking requirements. CARB proposes a networking and communication requirement we request clarification around the data to be shared and the rationale. The proposed language states "Each FSE must be networked and capable of monitoring and reporting its availability for charging." This can be read to require public reporting of availability, which would not necessarily be relevant for shared chargers such as those found in multi-fleet charging depots (e.g. robotaxis and ride share vehicles) with defined customers and reservations.

g. Include land costs for new sites as an eligible initial capital cost, as these stations are extremely difficult to site and new locations are often needed. It is difficult and expensive to find suitable sites for truck charging due to scarcity of land in urban areas (owning or 10-year leases), zoning restrictions, lease restrictions and, most importantly, the challenge in finding 5-20 MW (sometimes more) of grid capacity. The Venn diagram overlap of these needs is small. Land costs for public charging locations and shared charging depots for HD FCI are very significant and should be included in Section 95486.4(b)(4)(I).

4. *EVCA and CalETC support the proposed carbon intensity targets in Table 1 and Table 2 (e.g., 30% in 2030 and 90% in 2045) including the 9% step-down in the first year.*

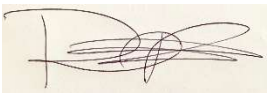
EVCA and CalETC applaud staff for aligning the proposed Tables 1 and 2 requirements with CARB's Scoping Plan vision and providing industry and stakeholders with the certainty needed for LCFS to be successful to planners, implementers, and investors.

Currently the LCFS is overperforming as the carbon intensities are too easy for the market to meet, leading to low credit prices that are undermining investment in electric cars, trucks, buses, and charging infrastructure, as well as infrastructure for other low-carbon fuels. Multiple models support increasing the stringency of the LCFS to a minimum 30 percent reduction in carbon intensity by 2030. It is essential that the stringency be increased expeditiously and be implemented as soon as possible to ensure the LCFS continues to contribute substantially to the state's clean air, climate change, and zero-emission transportation requirements and goals. The LCFS has been a highly successful program as part of a broad package of regulations and incentives to address climate change. For the LCFS program to continue to be successful, the annual compliance requirements on regulated parties should be strengthened and extended. Currently, the LCFS credit market suffers from credit oversupply issues. When the 2030 standard was adopted, the CARB Board made it clear the standard could be adjusted if market circumstances called for adjustment. CARB must expeditiously address this market supply issue; increasing the overall stringency of the LCFS regulation is one way to accomplish this.

Regarding the need for a 9 percent step down, the credit bank is currently on track to have 30 million credits or more by the end of 2024. A step down of 7% is likely to reduce the bank by approximately six million credits, which is not enough of a drawdown to stabilize the market. That is why EVCA and CalETC support a strong step down of at least nine percent, which is likely to reduce the bank by sixteen million credits. A nine percent step down is the best and most efficient way to quickly relieve this glut in credits and get the market back on track so that it can efficiently incentivize low carbon fuels and reduce emissions.

We appreciate the opportunity to comment on these important changes to the LCFS regulation. Thank you for your consideration.

Regards,



Reed Addis
Governmental Affairs
Electric Vehicle Charging Association

Laura Renger, Executive Director
California Electric Transportation Coalition

cc: Rajinder Sahota
Matthew Botill
Jordan Ramalingam