

August 27, 2024

Honorable Chair Liane Randolph and Board Members
Low Carbon Fuel Standard Program
California Air Resources Board
1001 I St., Sacramento, CA 95814

Re: Proposed 15-Day Amendments to the Low Carbon Fuel Standard Regulation -
EV Charging at Multifamily Residences

Dear Chair Randolph and Members of the Board:

SWTCH respectfully submits these comments on the proposed 15-day amendments to the Low Carbon Fuel Standard ("LCFS") Regulations. LCFS has long-been one of California's most effective decarbonization tools. SWTCH appreciates the opportunity to comment in support of expanding the non-residential LCFS credit to include multifamily properties, and recommends two modifications to the current proposal below. SWTCH offers corresponding language amendments in the Appendix.

1. Expand LCFS credit generation to all multifamily residences, regardless of parking arrangement; and
2. Allow for a desktop review process to streamline credit verification.

These minor but meaningful modifications to the current proposed LCFS rules will increase and accelerate equitable access to electric vehicle ("EV") charging, further decarbonizing California's transportation fuels.

About SWTCH

SWTCH is a leading provider of EV charging and energy management solutions for multifamily, commercial, and workplace properties in California and across North America. SWTCH's end-to-end solution optimizes EV charging usage and manages load to benefit drivers, property owners, and the grid. With the support of U.S. state and Canadian clean fuel standards, SWTCH has deployed more than 15,000 chargers across North America, with a strong focus on equitable access. SWTCH's charging management platform is built upon a foundation of open communication standards and interoperability to prevent stranded assets and to ensure future flexibility, scalability, and innovation.

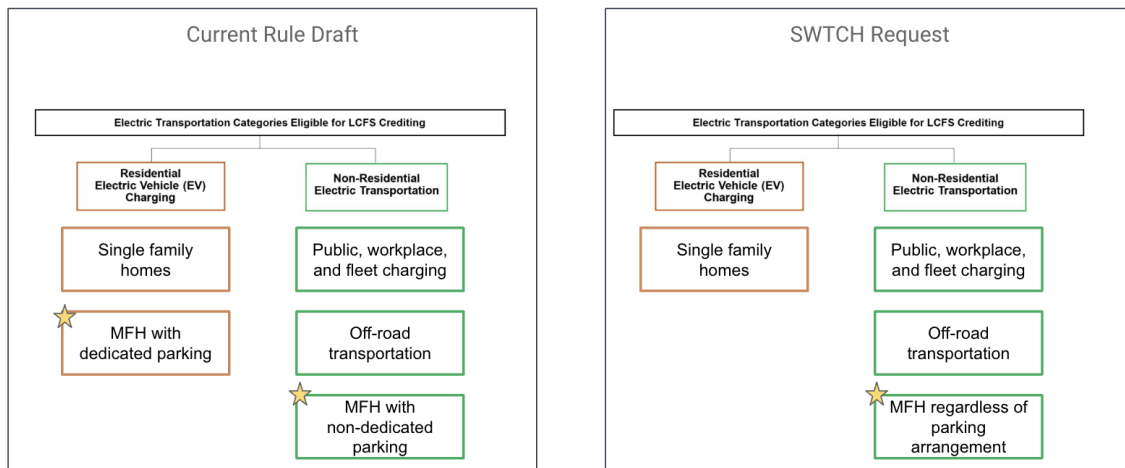
Comments

1. Support: Non-residential LCFS credits for chargers at multifamily properties.

SWTCH supports the amendment proposal to categorize shared multifamily residential ("MFR") charging stations as non-residential for LCFS credits. This change will enable electric vehicle supply equipment ("EVSE") owners and developers to claim

credits. This, in turn, will encourage more multifamily properties to deploy chargers and create new financing opportunities that reduce the cost of charger deployment for property owners. This proposal presents a powerful new tool to offer the convenience of home charging for residents of multifamily housing and address the gap in charger access for these residents compared to Californians living in single-family homes.

Recommendation: SWTCH recommends categorizing all multifamily chargers as non-residential for generating LCFS credits, regardless of whether EV chargers are shared or reserved.



Proposed changes from CARB’s Current Rule Draft (as of January 2, 2024) in the box on the left, and SWTCH’s recommendation on the right.

SWTCH appreciates the Current Rule Draft’s proposed expansion of multifamily residences to be eligible to claim LCFS credits. SWTCH respectfully encourages CARB to consider not only shared chargers as non-residential, as is proposed in the current draft, but also include chargers serving reserved or dedicated parking spaces. As SWTCH details below, when it comes to station ownership, shared infrastructure, and split decision-making authority, multifamily residences with reserved parking face similar barriers to charger deployment as shared MFR and other non-residential properties. Indeed, when considered through these lenses, reserved MFR parking has little in common with the type of charging one generally considers to be “residential,” i.e. a charger installed in a garage or driveway of a detached single-family house.

- Station ownership. Even when charging equipment serves reserved spaces, it is often purchased, installed, and maintained by the property owner or by a third-party owner-operator charging network, as a service for residents. Therefore, when the station owner and the station user are not the same

entity, LCFS credits should be allowed to be claimed by the station owner-operator to defray the costs of managing and maintaining the investment.

- Shared infrastructure. Residents of multifamily housing commonly struggle to install their own reserved chargers due to the shared nature of electrical infrastructure. It is often infeasible for a single reserved space in a separated parking area to install a charger without significant construction and electrical work, which may include adding new electrical service, conduit, trenching, and upgrading a panel. This raises costs beyond what a single resident may be willing to pay and creates a need for an entity - the property owner or third-party owner-operator charging network - to make the investment to own and operate stations on behalf of residents, justifying broader eligibility for LCFS.
- Split decision-making authority. Regardless of the parking arrangement, the shared nature of electric service upgrades for multifamily residences splits decision-making responsibilities across many stakeholders. Expanding LCFS eligibility to include reserved chargers would enable more streamlined and holistic decision making process that flows from a single entity making investment decisions. This will more effectively encourage and incentivize investment in stations on behalf of residents despite the challenges.

SWTCH perspective on Staff Rationale:

In its Rationale for the proposed amendments, CARB Staff offers compelling reasons why expanding non-residential credits to include MFR chargers will be beneficial:¹

1. *“Because the current regulatory text broadly designates all crediting for residential charging to the EDUs [Electrical Distribution Utilities], or to the entities who can register individual vehicle identification numbers, rather than to EV supply equipment owners, the latter may not have as strong and direct an incentive to develop more EV supply equipment at MFRs [Multifamily Residences] as could be most optimal and impactful.”*

SWTCH concurs with Staff’s first reason that allowing all EV supply equipment [EVSE] owners at MFRs to generate non-residential credits, regardless of parking arrangement, will immediately create a strong incentive to finance and deploy EV chargers at multifamily properties. For non-residential crediting, EVSE owners at MFRs can and often do designate credits to third-party charging networks to help finance projects.

¹ California Air Resources Board. “Appendix E Purpose and Rationale for Low Carbon Fuel Standard Amendments.” Proposed Amendments to the Low Carbon Fuel Standard Regulation, 2 January 2024, Page 16, https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/lcfs_appe.pdf.

Oregon and Washington’s clean fuel standards are structured such that non-residential credits are generated for multifamily housing (greater than four units) and the charging station owner can designate another entity to generate credits on their behalf such as a charging network operator. This arrangement also allows charging network operators to leverage charging data to seamlessly participate in LCFS credit tracking, reporting, and verification relative to utilities or other entities.

2. *“Enabling further charging infrastructure at multifamily residences allows for development in mixed-use zoning and eliminates confusion on charger eligibility.”*

SWTCH concurs with Staff’s second reason that mixed-use multifamily residences will benefit from the draft rules. As EV charging expands into mixed-use multifamily residences with commercial and retail spaces, LCFS crediting will accelerate EV charging offerings at these locations. However, SWTCH is concerned that restricting credits based on parking arrangements would pose challenges to data collection, tracking, verification, and reporting based on the current proposed amendment. SWTCH disagrees with the premise that the proposed amendment “eliminates confusion on charger eligibility”. Parking space allocations can frequently change from reserved to shared or vice versa based on property management or even tenant preference. Bifurcating shared vs. reserved chargers will unnecessarily add administrative complexity and uncertainty that will pose challenges both for CARB and for those generating the credits.

3. *“More strongly supporting the development of chargers at multifamily residences also encourages car sharing and harmonizes current utility rate and incentive programs.”*

In response to Staff’s third reason, SWTCH notes that parking arrangements are not factored into current multifamily EV charging utility rates and incentives. For example, Pacific Gas and Electric recommends multifamily buildings with EV chargers enroll in an Business EV Rate Plan based on electricity demand (kilowatts); there is no mention of whether parking arrangement determines whether a customer will be on a Residential or Business EV rate.² Southern California Edison offers two rebates for multifamily EV chargers - a New Construction Rebate and Small Site Rebate - that don’t define eligibility based on reserved or non-reserved parking space

² Pacific Gas and Electric. “Electric Vehicles (EV) rate plans.” <https://www.pge.com/en/account/rate-plans/find-your-best-rate-plan/electric-vehicles.html#evBizRates>.

status.³ These are just a few of the rates and incentive programs that major California investor-owned utilities offer to EV drivers at different types of multifamily buildings regardless of parking arrangement.

SWTCH shares Staff's perspective about the benefits of treating MFR chargers as non-residential. However, despite acknowledging these benefits, the proposed amendment excludes reserved chargers from being considered as non-residential, for reasons that are unclear. Perhaps it is simply assumed to be self-evident that *"Chargers at reserved parking spaces are reserved for residences and therefore would still be considered 'residential' charging."* Upon deeper analysis, as discussed above, the characteristics of reserved MFR chargers are much more similar to shared non-residential chargers than to actual residential chargers.

2. Recommend: Allow for a desktop review process to streamline credit verification.

To help streamline the verification process, SWTCH recommends that CARB allow for a desktop review process in lieu of requiring in-person site visits for annual verification services. The large and growing amount of charging infrastructure spread across the state makes in-person site visits infeasible from a personnel resource and budgeting standpoint. Indeed, in-person verification is largely unnecessary. Allowing for flexibility through a desktop review process both provides a more effective way to assess the risks of misreporting and enable CARB to focus on the integrity of the data that is transmitted electronically. This would allow a focus on ensuring data integrity through matching reported data from charging networks.

In Closing

SWTCH supports the proposed amendment to treat shared multifamily residential chargers as non-residential. This is a partial but incomplete step forward. SWTCH respectfully urges CARB to treat all MFR chargers as non-residential, regardless of whether the parking arrangement is shared or reserved. Making this change will more effectively incentivize further deployment of MFR chargers. It will also have the added benefit of being administratively simpler and more uniform to implement. Additionally, SWTCH respectfully urges CARB to allow for remote desktop credit verification. This is a less costly and more efficient approach than requiring in-person site visits.

SWTCH applauds Chair Randolph, Members of the Board and CARB staff's commitment to reforming and improving the LCFS program. We appreciate the opportunity to comment on these matters and look forward to working with CARB and other stakeholders on these important topics. If you have questions or if I can provide more information on our responses, please contact me at ben.brint@swtchenergy.com or 415.535.8444.

³ Southern California Edison. "Charge Ready." <https://www.sce.com/evbusiness/chargeready>.

Respectfully,

A handwritten signature in black ink that reads "Ben Brint". The signature is written in a cursive, slightly stylized font.

Ben Brint
Policy Manager, Western U.S.
SWTCH

Appendix - Proposed Language Changes

Tracking page and documents:

https://ww2.arb.ca.gov/rulemaking/2024/lcfs2024?utm_medium=email&utm_source=govdelivery

Additions are underlined. Deletions are ~~struck~~.

Section/Page	Comment Category	Change Type	Language
Pg. 38 95483 (c)(1)	MFH credit generation	Deletion	95483(c)(1) Residential EV Charging. For on-road transportation fuel supplied for electric vehicle (EV) charging in a single-family residence, or at dedicated or reserved parking at a multifamily residence , the following entities are the credit generators:
pg. 48 95483 (c)(2)(A)	MFH credit generation	Deletion	95483(c)(2)(A) For electricity supplied for non-residential EV charging, including chargers at multifamily residences that are not limited to serving dedicated or reserved parking spaces , the owner of the FSE is eligible to generate the credits.
Pg. 243 95491.1 (c)(1) (F) and 95491.1 (c)(1)(J)	Verification	Additions	<p>95491.1 (c)(1) The monitoring plan must contain the following general items and associated references to more detailed information:</p> <p>...</p> <p>(F) Clear identification of all measurement devices supplying data necessary for reporting pursuant to this subarticle, including identification of low flow cutoffs as applicable, with descriptions of how data from measurement devices are incorporated into the submitted report; <u>this provision does not apply to data reported in the LRT-CBTS for generating credits for EV charging;</u></p> <p>...</p> <p>(J) The dates of measurement device calibration or inspection, and the dates of the next required calibration or inspection, <u>if applicable;</u></p>
Pg. 251 95500 (c)(1)	Verification	Addition	95500 (c)(1) Applicability. Entities submitting Quarterly Fuel Transactions Reports under this subarticle that include the following transaction types must obtain

			<p>the services of a verification body accredited by the Executive Officer for purposes of conducting verification services, including required site visit(s) <u>if applicable</u>. The scope of verification services would be limited to the following transaction types, including associated corrections submitted in annual reports under this subarticle...</p> <p>...(E) For the following electricity-based transaction types:</p> <ol style="list-style-type: none"> 1. EV Charging except as specified under 95491(d)(3)(A) <u>and</u> 95491(d)(3)(B).
Pg. 252 95500 (c)(2)(A)	Verification	Comment	<p>95500(c)(2) (A) Annual Verification. The entity required to contract for verification of Quarterly Fuel Transactions Reports must ensure a transactions verification statement is submitted annually by August 31, beginning in 2021 for 2020 data, to the Executive Officer for the prior calendar year of data unless specified otherwise in sections 95500(c)(2)(B) or 95500(c)(2)(C).</p> <p>Comment: This section establishes the verification schedule starting in 2021 for 2020 data. There is no start date for verification proposed for entities newly subject to verification. It is unclear whether this schedule is intended to apply to new entities subject to verification, which would be highly challenging, if not impossible, to implement. We recommend language that clarifies a verification schedule starting in 2027 for 2026 data.</p>
Pg. 257 95501 (b)(1)(A)	Verification	Addition	<p>95501(b)(1)(A) Information from the fuel pathway applicant, pathway holder, or reporting entity. Such information must include all the following:</p> <p>...</p> <ol style="list-style-type: none"> 3. Description of the specific methodologies used to quantify and report data, as required in this subarticle, which are needed to develop the validation or verification plan, including but not limited

			<p>to calibration procedures and logs for measurement devices capturing site-specific data, <u>if applicable</u>;</p> <p>...</p> <p>5. Information about the entities in the supply chain upstream and downstream of the fuel producer that contribute to site-specific CI data, including a list of feedstock suppliers and contact names with physical addresses, <u>if applicable</u>;</p>
Pg. 258 95501 (b)(1)(B)(2)	Verification	Addition	<p>95501(b)(1)(B) Timing of verification services. Such information must include:</p> <ol style="list-style-type: none"> 1. Dates of proposed meetings and interviews with personnel of the entity required to contract for verification services; 2. Dates of proposed site visits, <u>if applicable</u>; 3. Types of proposed document and data reviews and, if applicable, how quarterly review is planned in the context of an annual verification requirement; 4. Expected date for completing validation or verification services.
Pg. 258 95501 (b)(2)	Verification	Addition	<p>95501(b)(2) Planning Meetings with the Entity Required to contract for Verification Services. The verification team must discuss with the entity contracting for verification services the scope of the verification services and request any information and documents needed for the verification services.</p> <p>The verification team must create a draft sampling plan and verification plan prior to the site visit <u>if applicable</u>. The verification team must also review the documents provided, and plan and conduct a review of original documents and supporting data for the verification services specified in section 95501.</p>
Pg. 259 95501 (b)(3)	Verification	Addition	<p><i>95501(b)(3) Site Visits.</i> At least one lead LCFS verifier accredited by the Executive Officer on the verification team must, in addition to one visit to validate an application, annually visit each facility; and, if different from the fuel production</p>

			<p>facility, the central records location for which the records supporting an application or report subject to verification are submitted. Site visits, included voluntarily as part of a quarterly review, may not substitute for the required site visit for annual verification services, which must occur after all LCFS data for the prior calendar year has been submitted to the Executive Officer and attested to.</p> <p><u>For electricity-based transaction types as identified in 95500 (c)(1)(E), site visits are not required for verification of electricity reported in Quarterly Fuel Transaction Reports if such electricity can be demonstrated to have been provided by devices possessing certification under the California Type Evaluation Program (CTEP), National Type Evaluation Program (NTEP), a similar standard for certifying charging meter accuracy at a lower or equivalent error tolerance, or devices that the California Department of Food and Agriculture Division of Measurement Standards has determined shall be required to possess CTEP certification at a future date pursuant to CCR Title 4, §4001 and §4002.11.</u></p>
Pg. 259 95501 (b)(3)(A)	Verification	Additions	<p>95501(b)(3)(A) During site visits <u>or via virtual means, if applicable</u>, the verification team member(s) must carry out tasks that, in the professional judgment of the team, are necessary, including the following:</p> <ol style="list-style-type: none"> 1. Review supporting evidence used to develop reports listed in section 95500 submitted to the Executive Officer; 2. Interview key personnel, such as process engineers, metering experts, accounting personnel, and project operators, as well as staff involved in compiling data and preparing the LCFS reports; 3. Review and understand the data management systems and accounting practices used by the entity to acquire, process, track, and report LCFS data. The verification team member(s) must evaluate

			<p>the uncertainty and effectiveness of these systems;</p> <p>4. Directly observe production equipment, <u>if applicable</u>, confirming diagrams for processes, piping, and instrumentation; measurement system equipment; and accounting systems for data types determined in the sampling plan to be high risk;</p> <p>5. Assess conformance with measurement accuracy requirements specified in this subarticle for measurement devices that do not meet criteria for financial transactions meters <u>or do not possess certification by a body described in 95501 (b)(1)(B)(3)</u>, assess the reasonableness of temporary measurement methods, assess conformance with the monitoring plan, and assess conformance with data capture requirements specified in this subarticle, if applicable.</p> <p>6. Review financial transactions to confirm complete and accurate reporting.</p>
Pg. 263 95501 (b)(5)(D)(5)	Verification	Addition	<p>95501(b)(5)(D)(5) Reviewing meter and analytical instrumentation measurement accuracy and calibration for consistency with the requirements of this subarticle; <u>this provision does not apply to data reported in the LRT-CBTS for generating credits for EV charging that demonstrates device certification under 95501 (b)(3).</u></p>