



August 27, 2024

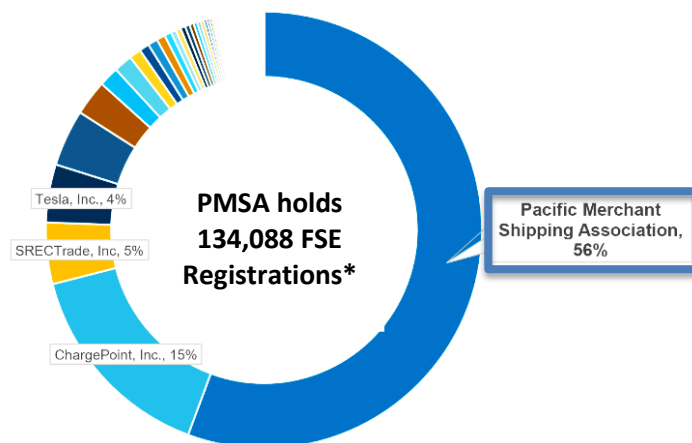
Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  
Submitted electronically to: <https://ww2.arb.ca.gov/lispub/comm/bclist.php>

**Comments: Low Carbon Fuel Standard Proposed Amendments 15-Day Notice (August 12, 2024)**

On behalf of the members of the Pacific Merchant Shipping Association (PMSA), we appreciate the opportunity to provide comments on the proposed amendments to the Low Carbon Fuel Standard (LCFS) Program, as modified in the 15-Day Notice amendments published on August 12, 2024. PMSA represents ocean carriers and marine terminal operators at California's public ports. In this capacity, PMSA also directly participates in the LCFS program on behalf of its member companies, facilitating the implementation of credit generation resulting in the broad and comprehensive support of LCFS by the maritime industry.

PMSA is strenuously Opposed to the proposed third-party verification amendments. The proposed third-party verifications may trigger PMSA and PMSA-member companies to no longer participate in LCFS. Instead, we propose an Alternative Verification Process.

***PMSA is the single largest program Fuel Supplying Equipment (FSE) registerer statewide.*** On behalf of our members, we hold over 134,000 individual registrations today, representing over half of all registrations. As the single largest LCFS program participant, we respectfully request due and proper consideration of the concerns regarding the impacts of the proposed amendments. Frustratingly, PMSA was unsuccessful in speaking with CARB staff on these specific concerns after many attempts to schedule a meeting at the publication of these latest 15-day amendments.



\*134,088 FSE Registrations as of August 2024. Based on the latest publicly available FSE registration data (Q1 2022), PMSA holds the most FSE registrations in California, at approximately 56%. PMSA's registration percentage has very likely grown due to continued new registrations. PMSA may register 3,000 – 5,000 new FSEs *every quarter*.

As the single largest LCFS program FSE registrant, PMSA is committed to the success of LCFS. And, on behalf of the maritime industry, we remain eager to grow and expand our participation in the LCFS program. But, we cannot expand our participation if we lose member participation due to the costs and administrative constraints of the third-party verification.

**Third-party Verification for eCHE, eOGV and eTRUs is Unnecessary, Potentially Unfeasible, and Diminishes Monetary Benefits**

We cannot overstate how strongly we *Oppose the proposed Third-Party Verification requirements*.

As PMSA already utilizes the most accurate and reliable data sources for reporting electrical usage available, *third-party verification is simply unnecessary for eCHE, eOGV, and eTRU transactions*. PMSA is gravely concerned that the proposed third-party verifications for these specific transactions are still incorporated in the Amendments. These are wholly unnecessary, extremely expensive, wasteful, and counter-productive. These additions to the overhead cost of LCFS program participation and administration are significant, and will unduly impact the maritime sector, reduce the monetary benefit of participation in the LCFS program, and undermine the intent of the LCFS program itself.

Third-party verification would add unsurmountable new costs to program participants whilst *resulting in no emission reductions or any air quality benefits whatsoever*. The only parties which will benefit from this proposal are the consultants who will recognize a new business venture.

No clear and compelling justification exists for obligating third-party verification for these particular maritime categories because PMSA already utilizes the most accurate and reliable data sources for reporting electrical activity. In most instances, PMSA utilizes reliable meter readings for equipment on dedicated circuits provided by the utility. In the few instances where utility meter data is not available, PMSA collects power consumption data directly from on-board telematic systems. All data collected over the course of the program is always available, and always has been available for CARB audit and review upon request, at PMSA's expense. Third-party verification of these data sources would not improve the existing high level of data quality or unparalleled availability of original data CARB staff on demand or available for audit.

PMSA respectfully urges CARB not to place new overhead and administrative costs on its own successful program participants for no known purpose. No current program deficiencies have been identified that would have prompted this need and there is no justification made for the proposed third-party verification for this equipment. PMSA strongly urges the removal of the proposed third-party verification requirements for eTRU, eCHE, and eOGV activities.

While we are unaware of any benefits of this proposal, the proposed expansion of third-party verification requirements will result in significantly increased costs and administrative complexity for our participation in the LCFS program. Diminishing the benefits of program participation, without meaningfully improving the quality of the data gathered, is counter-productive. The eTRU, eCHE, and eOGV category third-party verification proposal specifically impacts the maritime sector, unreasonably targeting the one sector that generates the single greatest

source of credits, and which has an unblemished multi-year track record, as PMSA has complied and successfully participated in the program since its inception.

The activities for eCHE, eOGV, and eTRU can be considered a closed loop system, whereas the ownership and operator are one of two parties: the vessel carrier and the marine terminal, both being PMSA members. This equipment is used when a vessel arrives at berth and is plugged in by the marine terminal operator (eOGV), then electric cranes and cargo handling equipment moves the cargo on terminal (eCHE), and when the container is carrying perishable cargoes and food, they are kept cool by an attached transportation refrigeration unit that is immediately plugged in (eTRU). Exporting activities occur in the opposite direction. This practice is consistent and reliable. The electrical infrastructure is energized by a public utility powered by the grid, and measured on dedicated meters, which are captured on utility bills, and/or on-board telematics. Yet again, *PMSA utilizes the most accurate and reliable data sources available for electrical activity.*



Further, unlike eCHE and eOGV, the many thousands of pieces of eTRU equipment in the PMSA registry are not based at only one specific facility and must be individually registered for each use every quarter. In the case of eTRUs, they are generally owned by the vessel carrier, and operated and plugged into the grid by the marine terminal whilst onshore to ensure a proper temperature for vital commodities. To even be eligible to participate in our eTRU program, the equipment owner must be able to provide PMSA with access to the critical, complete, and precise telematics data. The LCFS regulation already requires a new registration with a unique identifier based on the location, in this case, which marine terminal that this piece of equipment is imported or exported through. Currently, *PMSA can register 3,000 – 5,000 new FSE every quarter*, mostly eTRUs, only because we can generate the immense amount of data necessary to participate in the program. These data could not be more accurate, thanks to telematics, and, due to their mobile nature, *third-party verification is not even possible for eTRU equipment*. For third-party verification site visits the accredited verifier could view nothing on a site visit but an empty plug and meter.

Similar concerns persist with eOGVs as well, as nothing but the shore power plug and meter could be viewed by a third-party verification site visit. The vessel that plugged-in and that generated the credit would be long gone and half a world away before a third-party verification site visit could occur.

No specific rationale for third-party verification is offered as justification in Appendix E, “Purpose and Rationale of Proposed Amendments for the Low Carbon Fuel Standard Requirements.” As no deficiency is identified with respect to existing eTRU, eCHE, and eOGV activities, which are not currently subject to third-party verification, no justification is asserted. The proposed amendments are seemingly based solely on the generic claim that CARB must ensure “...electricity and hydrogen associated transaction types are held to the same standard of data

quality through third-party verification.” (Appendix E, page 117). But eTRU, eCHE, and eOGV activities already exceed these data quality standards. While it is claimed that “data assurance needs” for these sources cannot be met with the staffing capacity of CARB (Appendix E, page 117), as noted, there is no current program defect compelling third-party verification for all transaction types, and if audits of existing program data is necessary, it would occur at PMSA’s expense.

Electricity activities as a whole only accounted for approximately one quarter of the total 2022 annual LCFS credits. Imposing additional burdens on future potential data needs is counter-productive to LCFS program goals because they impose outsized additional costs on current electrical uses of eTRU, eCHE, and eOGV. In fact, as the number of PMSA-registered electricity transactions continues to grow, the per unit costs of LCFS administrative burdens should actually *decrease* for participants and for CARB. But, as proposed, ironically, any increased administrative burden for CARB staff would only exist by CARB’s own making: by amending Section 95500(c)(1) to include the fuel transaction types in question. And, as a result, both the state and regulated, participating community would find their administrative costs increased. Unfortunately, the third-party verification proposal does nothing but increase the administrative burden and costs for participants. As far as we can ascertain, *this proposal would only benefit consultants as accredited verifiers* who would be exercising the verification effort. And CARB will be presented with no better data than it already receives now.

As such, PMSA proposes the following three small revisions to the proposed language to address this challenge:

§95500 c(1)E *Verification of Quarterly Fuel Transactions Reports.*

For the following electricity-based transaction types: [...]

~~2. eTRU Fueling;~~

~~3. eCHE Fueling;~~

~~4. eOGV Fueling;~~

### **No Clear Estimate of Total Third-Party Verification Expenses for Aggregated Participants is Provided**

The regulated community and the Board should be provided some sense of the added costs to participating in LCFS as a result of these amendments. But, given the lack of specifics, neither the CARB Board nor the regulated community can reliably calculate the total cost and expense of third-party verification, because no estimates are provided. What all parties should be able to acknowledge is that it is certainly significant. *These unknown costs may reasonably prompt our member companies to no longer participate in LCFS; we appeal to CARB to not undermine its own highly effective program.*

Due to the many questions which remain as to what would be required for electrical transactional verifications, the costs to an FSE aggregator such as PMSA could be staggeringly high relative to the quantity and value of the credits generated. For instance, PMSA may register 3,000 – 5,000 new FSEs every quarter. Even if it were possible for every single one of these new registrations and the data generated to qualify for an LCFS credit to have third-party verification, and hypothetically if each third-party verification cost \$200, that would *increase our administrative costs as FSE registrants by up to \$1,000,000 per quarter*. This administrative overhead would eclipse the net value of participating in the program.

As PMSA works on behalf of its member companies to administer and aggregate credit generation at multiple facilities and seaport locations in California, these many unknown variations in site visits could significantly alter expenses incurred. For example, would a physical site visit to every terminal at the ports where a charger is installed to be required? Or, is a site visit to the company or administrator headquarters sufficient? The total cost per annual visit has been estimated at \$100,000 - \$150,000, not including plan preparation, review and other administration services required for verification. A \$150,000 expense per year and/or per visit, is also not insignificant and would render the LCFS program impractical for PMSA and its members, undermining the LCFS program's effectiveness.

These funds, which *would otherwise be utilized for expanding electrical capacity and purchasing zero-emissions equipment and infrastructure*, would instead either result in foregone participation in LCFS altogether, or be eaten up as overhead costs to administer the program. In practical terms, this \$150,000 per visit could instead fund approximately six heavy-duty eCHE chargers at the ports every year, directly championing the goal of 100% zero-emission cargo handling operations.

*Eligibility for Less Intensive Verifications* for the electrical transactions in question may be possible per Section 95500(h); however, questions remain on what these “less intensive verification services” even entail for the following two annual verifications. If site visits are still to be required, the expenses would not be reduced, regardless of “intensity.” While in some instances it might be reasonable to require one initial site visit to the company or administrator headquarters for the first annual electrical transaction verification, even in such a scenario, *no subsequent site visits should be necessary*.

#### **Electrical Transaction Third-party Verifications Would be Challenging Timing Wise, and May Result in a Barrier to Credit Generation Altogether**

PMSA also has concerns regarding the timing and the frequency of reviews, as they may restrict access to credit generation. The schedule of quarterly reviews as part of annual verification obligation remains unclear. And with the annual compliance reports due April 30<sup>th</sup>, it remains uncertain if the August 31<sup>st</sup> deadline for the Validation or Verification statements is feasible due to the availability of Accredited Verifiers that do not yet exist, or the immense amount of generated activity and registrations that PMSA experiences.

If quarterly reviews and site visits are to be required, there may very well be insufficient time for a third-party to complete their work to meet the deadlines for LCFS credit generation in a specific quarter. Third-party verification for eCHE, eOGV, and eTRU transactions may cause Annual and Fuel Transaction Reporting delays, thereby threatening credit generation and associated proceeds, further undermining the intent of the LCFS program.

Complicating matters even more, in many instances, utility data is already only made available with very limited time remaining prior to required submittal timelines to CARB. On several occasions, we find it already problematic to meet the quarterly deadlines – even before any introduction of an additional third-party into the mix. We know of no portion of the proposed amendments that would provide us with an additional grace period for the submission of potential credits beyond the deadline because of an inability of a third-party verification to be completed on time.

Once again, the practical considerations for eTRUs represent the biggest concern. Even if a Verifier could see an individual eTRU from time-to-time, the immense quantity of eTRU activity and continuous FSE registrations would make the timely verifications and submittal of these data for credits each quarter exceptionally problematic.

**Alternative Verification Process Proposal for Maritime Credit Generating Activities**

As noted, PMSA is already collecting immense volumes of accurate data that we process every quarter to demonstrate our industry's commitment to utilizing greener fuels and an effective LCFS program. We are very confident in our FSE registrations as well as the quarterly and annual fuel transactions and proceeds reporting. As such, and to demonstrate goodwill, PMSA proposes an *Alternative Verification Process* for eTRU, eCHE, and eOGV activity at publicly owned seaports.

Electrical transactions are already identified by CARB as needing less intensive checks, as outlined in §95501(h) *Eligibility for Less Intensive Verifications*, where those entities submitting only electricity transactions may obtain less intensive verification services for two annual verifications of their Quarterly Fuel Transactions Reports. The *Alternative Verification Process* fits with this policy, with less frequent verifications and site visits due to the high assurance of the data and collection process. As a matter of policy, subsequent site visits should not be required for any data collected via a meter, utility bill, and/or directly from on-board telematic systems.

This *Alternative Verification Process* would be similar to an initial in-depth audit, with additional site visits throughout program implementation, at the Executive Officer's discretion. Specifically, eTRU, eCHE, and eOGV activity at publicly owned seaports would be subject to one initial Planning Meeting, similar to §95501(b)(2), and one Site Visit, similar to §95501(b)(3), to view the meters and electrical plugs, as well as a document review at the administrator headquarters. A Validation or Verification Statement would be submitted by the Accredited Verifier, similar to §95501(c)(3), to the Executive Officer. The administrative costs of this program would be borne by PMSA, as the FSE registrant. PMSA proposes adding §95501(i) *Alternative Verification Process* describing this audit program.

As relayed previously, we are unaware of any specific data reliability or other issues that exist with the current process for eCHE, eOGV, and eTRU. CARB staff have not identified any deficiencies which necessitate amendments. PMSA welcomes a discussion of those issues, should they arise. PMSA is also always ready to host a specific tour or demonstration at any time for CARB staff at a marine terminal in order to demonstrate the industry's reliable data collection methods. FSE data will always remain available as needed, based on operations and the data collection mechanism utilized. Avoiding costly third-party verification, but creating new verification pathways, achieves this outcome.

This proposal would be circulated and adopted in this current rulemaking, as a component of the next 15-day comment period for this current rulemaking in which the Third-party Verification is removed for eCHE, eOGV, and eTRU. PMSA's proposal for the *Alternative Verification Process* would provide CARB with the assurance it seeks, while limiting program costs for the participating maritime community. We commit to collaborating with CARB staff on creating this program language.

**In Future Amendments to LCFS, CARB Should Work With the Maritime Industry to Consider Alternative Transportation Fuels for Ocean-Going Vessels**

*The maritime industry seeks to decarbonize shipping; CARB should work with the maritime industry to assess how LCFS can support this endeavor.* There are many green fuels of interest for maritime applications, including hydrogen, Bio- and e-methanol, E-ammonia, and Bio-LNG, among others. Adoption will ultimately depend on advances in fleet technology and the capacity to secure green fuels at a scale and cost that makes them competitive. (For example, see [Decarbonising Ocean Shipping | Maersk](#)) There have been recent California Green Corridor Pledges that may well catalyze the scalability of these green fuels; providing offtake certainty for fuel providers and vessel operators the assurance fuels will be available to power their vessel investments in key ports. These partnerships endeavor to decarbonize over the next 30 years and LCFS could provide an excellent opportunity to spur production and investments.

PMSA notes that hydrogen and Bio-LNG are already included as a transportation fuel to which LCFS applies (§95482 a(4) and (6)). The LCFS program could be amended to apply to Bio- and e-methanol, E-ammonia, and Bio-LNG. §95482 d(2) *Exemption for Specific Applications* would be required to be amended to specifically allow these fuels to be utilized by ocean-going vessels, as well as amended definitions under §95481 for Ocean-Going Vessels and Transaction Types.

Moreover, when CARB adopted the “Control Measure for Ocean-Going Vessels At Berth” in 2020 to “reduce oxides of nitrogen (NOx), reactive organic gases (ROG), particulate matter (PM), diesel particulate matter (DPM), and greenhouse gas (GHG) emissions from ocean-going vessels” (§93130.1), it opted to specifically endorse LCFS to apply to vessels utilizing alternative transportation fuels with low carbon intensities. The regulation includes this provision:

§93130.5 g (4) *CARB Approved Emission Control Strategy*. “Strategies that use a fuel with a CARB Low Carbon Fuel Standard certified pathway may apply a reduction to CO<sub>2</sub>E by the factor of the carbon intensity of the fuel to the carbon intensity of the standard fuel [...]”

The vessel carriers of today have made transformative and novel sustainability pledges in the endeavor to decarbonize ocean shipping. Significant investments of capital in new vessels of the future to operate on new greener fuel options have been made. While not included in these 15-day amendments, California should partner with the maritime industry in future LCFS amendment rounds to adopt policies that support alternative fuel development efforts across the globe.

We appreciate the opportunity to provide comments regarding the LCFS 15-Day amendments. PMSA strongly urges CARB to reject the proposed third-party verification requirements for eTRU, eCHE, and eOGV transactions. Discussion of additional fuel types for oceangoing vessels with the maritime industry in future amendment rounds is also eagerly recommended. We welcome facilitating an ongoing conversation with CARB on these matters, especially as it relates to electric equipment activity by our members.

CARB  
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Please feel free to reach out to me at 562-432-4048 or by email at [jmmoore@pmsaship.com](mailto:jmmoore@pmsaship.com) should you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jacqueline M. Moore". The signature is written in dark ink on a light-colored background.

Jacqueline M. Moore  
Vice President

cc: Hon. Liane Randolph, Chair, Air Resources Board  
Members, Air Resources Board  
Steve Cliff, Executive Officer  
Matthew Botill, Division Chief  
Heather Arias, Division Chief