Smart Charging Technologies

Greetings,

Please find Smart Charging Technologies comments attached.

Best Regards,

Ma'n Altaher

Rachel Assink
Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

August 29th, 2022

RE: Smart Charging Technologies LLC Comments on proposed Clean Fuels Program (Ch. 173-424 WAC)

Dear Ms. Assink,

Smart Charging Technologies (SCT) is a high-tech firm focused on developing innovative IoT energy management and monitoring products and services for the motive industry. As one of the largest aggregators of energy credits for industrial transportation equipment, SCT offers energy credit management services, including managing the LCFS program administered by the California Air Resources Board (CARB) and the CFP program administered by the Oregon Department of Environmental Quality (ODEQ).

SCT appreciates Department of Ecology Staff's commitment to well-organized stakeholder meetings with ample opportunities for public input. We look forward to further discussion during upcoming workshops.

Our comments are related to the following sections:

- WAC 173-424-220 Designation of Fuel Reporting Entity for Electricity
  1. (5) Electric forklifts
  2. (6) Electric transport refrigeration units (eTRU).
  3. (7) Electric cargo handling equipment (eCHE).
- WAC 173-424-140 General requirements, (3) Credit aggregator requirements, (b) Designation of aggregator: (ii) Aggregator designations may only take effect at the start of the next full calendar quarter after ecology receives such notice.
- WAC 173-424-540 Calculating Credits and Deficits (2) Calculation method for fixed guideway vehicles and electric forklifts: For electricity used to power fixed guideway vehicles on track placed in service prior to 2023 and forklifts from model year 2023 and earlier, credit and deficit generation must be calculated by
- WAC 173-424-540 Calculating credits and deficit (2)(b) Calculating energy in mega joules by multiplying the amount of fuel by the energy density of the fuel in Table 3 under WAC 173-424-900;
- WAC 173-424-630 Determining the carbon intensity of electricity. (5) Offsite renewable electricity. RECs must be generated by an electric generator that was placed into service after 2023;
- Table 4. Washington Energy Economy Ratio Values for Fuels in Vehicles

- "WAC 173-424-220 Designation of Fuel Reporting Entity for Electricity"

As a general comment, we believe that the way the above proposed regulations are specified are somewhat confusing. For some electricity applications, the vehicle/equipment owner is given first right to generate credit; while for others, the charging equipment owner is given the first right to generate credit. From our experience, this is prone to conflicts between potential beneficiaries (owner vs. operator). It is also subject to a cumbersome registration process when having to register the vehicles/equipment, the metering equipment, and having to update these lists at periodic reporting. *We believe that a more streamlined, easy to administer regulation is achievable by giving the first right to generate credits to the charging equipment owner.* Even though California's LCFS and Oregon's CFP have regulations similar to Washington's proposed regulations (hereabove), Canada's recently (June 2022) adopted Clean Fuel Regulation gives the first right to generate credits to the charging site host. Reference is made to Canada's Clean Fuel Regulations article "Electricity — charging-site host 101(1)". This is SCT's foremost preference.

As for the detailed comments:

1. "(5) Electric forklifts.
(a) For electricity used as transportation fuel supplied to electric forklifts, the fleet owner is the fuel reporting entity and the credit generator. The forklift owner must annually notify in writing to the forklift operator that:
(i) The owner is generating credit for the amount of electricity the operator uses for the electric forklifts.
(ii) The estimated or actual annual credit revenue the owner gets for the use of electricity in the forklift."

Comment: We advocate for the entity that has the accurate meter reading of the dispensed electricity to be the fuel reporting entity and the credit generator. This avoids cumbersome settlement arrangements and potential conflicts, between the fleet owner and the operator, that may result from the proposed rule hereabove.

More specifically, we propose the following wording taken from the Oregon DEQ Notice of Proposed Rulemaking, June 29, 2022, Clean Fuels Program Expansion 2022 Rulemaking:
"(5) Electric Forklifts. For electricity used to power forklifts, the forklift fleet owner may generate the credits. If the forklift is being operated by a person other than the owner, the owner may generate the credits if they have detailed usage and charging data, otherwise the operator of the forklift may generate the credits." Where "Operator" may be defined as the entity that runs the eForklifts, the entity that owns the facility, or the entity that owns the electric-charging equipment.

2. "(6) Electric transport refrigeration units (eTRU).
(a) For electricity supplied to the eTRU, the owner of the eTRU fleet owner is the fuel reporting entity and the credit generator."

Comment: the following reasons make us question the above requirement:

First, we see obvious drawbacks to the proposed regulation that gives the first right to generate credits to the eTRU owner:

- Considering eTRUs mobility across many warehouses, where the eTRUs are stationary and going thru loading/unloading or overnight charging, the entity that bares the cost of electricity used to power the eTRU is the charging equipment infrastructure owner. It is only fair that the entity that bares such cost is allowed to recover it in a hassle-free manner by being the credit generator. Otherwise, it becomes a major challenge for the infrastructure owner, where the eTRU is stationery and charging, to recover the cost of charging (electricity cost and operating costs) from the, potentially many, eTRU owners.

- Currently the plugs' location is at the loading decks, in which the eTRU will be plugged in for loading and unloading, but the eTRU may need to move to the back parking area and can't stay plugged in there. The facility owner has no incentive to have chargers in the back parking area. And many times, these eTRUs will be setting there with cargo overnight running diesel.

- There are additional complexities due to requiring owners to register eTRUs at every facility they stop at. For example, an eTRU owner has 150 eTRUs visiting 12 facilities. This means there must be 1800 registration records; many of them just to capture a single or few visits per facility. This is prone to errors and hard to manage. Not to mention the charging claims, from each location and for each eTRU, the eTRU owner must submit each quarter. It is not practical for the owner to register each eTRU at each facility they visit and prevents effective participation of eTRUs.

Second, eTRUS mobility scenarios are very similar to non-residential charging, eOGV, and eGSE, where these vehicles may visit many facilities/charging stations. For these applications, the charging infrastructure owner gets the benefit of generating CFP credits. Reference is made to (WAC 173-424-220: (3) Nonresidential electric vehicle charging (a). (8) Electric power for ocean-going vessel (eOGV) (a), (9) Electric Ground Support Equipment). We see no reason why eTRUs are any different.

Third, reference is made to The Global Cold Chain Alliance ("GCCA") letter to CARB on potential changes to the Low Carbon Fuel Standard ("LCFS") Program, section II. E-TRU CHARGING CREDITS. GCCA, an alliance of 1,100 member companies in 85 countries, made the argument for having "the incentive of LCFS credit generation is best placed at the facilities where eTRU will require an electricity supply, such as the cold-storage warehouses operated by GCCA members."

Finally, it is worth mentioning again that other regulatory bodies are moving in the direction of having the "Charging Site Host" to be the credit generator for electricity transportation applications. Reference is made to Canada's Clean Fuel Regulations article "Electricity — charging-site host 101(1)".

For all the above, we strongly advocate having the charging equipment owner have the first right to generate credits from eTRU charging.

3. "(7) Electric cargo handling equipment (eCHE).
(a) For electricity supplied to eCHE, the electric [cargo] handling equipment owner is the fuel reporting entity and the credit generator.
(b) The eCHE owner must annually notify in writing to the eCHE operator that:
(i) The owner is generating credit for the amount of electricity the operator uses for the cargo handling equipment owner.
(ii) The estimated or actual annual credit revenue the owner gets for the use of electricity in the cargo handling equipment owner."

Comment: We advocate for the entity that has the accurate meter reading of the dispensed electricity to be the fuel reporting entity and the credit generator. This avoids cumbersome settlement arrangements and potential conflicts, between the eCHE owner and the operator, that may result from the proposed rule hereabove.

More specifically, our first preference is to use the rule proposed by Oregon DEQ Notice of Proposed Rulemaking, June 29, 2022, Clean Fuels Program Expansion 2022 Rulemaking: "(7) Electric Cargo Handling Equipment. The owner of the electric-charging equipment may generate the credits."

Our second preference is to use wording similar to the eForklifts rule proposed by Oregon DEQ Notice of Proposed Rulemaking, June 29, 2022, Clean Fuels Program Expansion 2022 Rulemaking: For electricity used to power eCHEs, the eCHE owner may generate the credits. If the eCHE is being operated by a person other than the owner, the owner may generate the credits if they have detailed usage and charging data, otherwise the operator of the eCHE may generate the credits. Where "Operator" may be defined as the entity that runs the eCHE, the entity that owns the facility, or the entity that owns the electric-charging equipment.

- "WAC 173-424-140 General requirements, (3) Credit aggregator requirements, (b) Designation of aggregator: (ii) Aggregator designations may only take effect at the start of the next full calendar quarter after ecology receives such notice."

  Comment: This requirement delays credit generation for two whole quarters compared to regulation in California and Oregon. Currently for example, Q1 reporting is due end of Q2, CARB and DEQ allow registration for Q2 up to 45 days after Q1 reporting, which is middle of Q3. In addition, CARB LCFS 95483.2(b)(2)(C) and DEQ CFP 340-253-1005 (6)(c) do not have restrictions as to when the Aggregator designations take effect. As a results aggregator designation could be submitted in middle of Q3 and still be eligible for Q2 reporting. We believe this is an un-necessary restriction that un-justifiably delays credit generation.

- "WAC 173-424-540 Calculating Credits and Deficits (2) Calculation method for fixed guideway vehicles and electric forklifts: For electricity used to power fixed guideway vehicles on track placed in service prior to 2023 and forklifts from model year 2023 and earlier, credit and deficit generation must be calculated by:"

  Comment: This "model year 2023 and earlier", excludes electric forklifts placed in service prior to 2023 from the EER multiplier, this means a smaller number of credits (FL EER 3.8). This is very restrictive compared to LCFS (prior 2011) and CFP (FG prior 2012, FL prior 2016). We understand the goal of additionality in this regard, but we also think that it is equally important to incentivize equipment owners, by allowing the use of the EER multiplier for older equipment (e.g. 2018 onwards) to generate credits, provided new equipment purchases are made in the first two years of the program. We advocate to be more considerate of the need to incentivizing equipment owners and giving the CFP program a good jumpstart.

- "WAC 173-424-540 Calculating credits and deficit (2)(b) Calculating energy in mega joules by multiplying the amount of fuel by the energy density of the fuel in Table 3 under WAC 173-424-900;"

Comment: The above requirement does not specify how to determine the amount of fuel (electricity). CARB LCFS 95491(d)(3)(E) & DEQ CFP 340-253-0640 (2)(f) allows determining the quantity of electricity used by eForklifts either as measured per FSE, or as estimated using CARB approved methodology, due to the nature of operation and structured shift format that makes it easy to calculate the energy. We encourage the program in Washington to follow the same rules.

- WAC 173-424-630 Determining the carbon intensity of electricity. (5) Offsite renewable electricity. RECs must be generated by an electric generator that was placed into service after 2023;

  Comment: This "placed into service after 2023" excludes electric generators placed in service prior to 2023 from the RECs generation. This means such ***incentive*** would not be useful till at least two years, the minimum period of time necessary to plan, build, and operate an electric generator. We understand the goal of additionality in this regard, but we also think that it is equally important to provide ***incentive*** schemes that stakeholders can utilize immediately, by allowing the use of RECs from electric generators placed into service prior to 2023 (e.g. 2018 onwards) and make 2025 the effective date for the 2023 restriction. This will also highlight the demand for RECs in the first few years, which will entice investors to consider new electric generators investments. We advocate to be more considerate of the need to incentivizing stakeholders and investors, and giving the new CFP program a better chance to hit the ground running.

- Table 4. Washington Energy Economy Ratio Values for Fuels in Vehicles

  Comment: Missing EER value for Electric Ground Support Equipment and Electric Ocean-Going Vehicles.

Thank you very much for your time and consideration as you review these comments. We welcome the opportunity for further clarification and discussion of our comments.

Best Regards,

Khalid Rustom, PhD.
General Manager, Energy Program