



State of Oregon Department of Environmental Quality

Comments

Clean Fuels Program Expansion Electricity Workshop

This document is a compilation of written comments received in response to the Electricity Workshop that was held on Feb. 10, 2022.

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February 25, 2022

Oregon Department of Environmental Quality
700 NE Molnomah St, Suite 600
Portland, OR 97232

Comments in Response to Feb 10, 2022 Electricity Workshop

We would like to thank DEQ Staff for hosting these public workshops and for providing helpful background materials and key questions for consideration.

ChargePoint is one the world's largest electric vehicle (EV) charging networks and solution providers with more than 150,000 Level 2 and direct current fast charging (DCFC) stations on its network today. ChargePoint works with major employers, municipalities, utilities, fleet operators, real estate developers, and individual drivers to deploy and operate charging stations across North America and Europe.

RE: Considering Changes to Crediting Residential Charging

ChargePoint appreciates the sentiment raised during the February 10 Electricity Workshop (“the Workshop”) that DEQ should be exercise caution when considering changes to how residential EV charging is credited under the Clean Fuels Program (“CFP”) in consideration of potential abuses to what constitutes a “workplace” or a “take home fleet”. The current reinvestment approach to residential credit proceeds can be effective at providing additional support to hard to electrify areas and overburdened communities, two important areas to address on the path to transportation electrification. However, for true take-home fleets where the fleet company’s main product/service is transportation (transportation network companies, local delivery fleet companies, etc.) and a substantial share of fleet fueling (i.e., charging) takes place at a single-family residence, we view the use case and economics to be materially different. Whereas the current “pay-it-forward” approach is balanced in that all drivers contribute roughly evenly to the credit proceeds and those proceeds are reinvested in a way that roughly benefits all EV drivers, fleet cars represent a disproportionate share of vehicle miles travelled and charging per vehicle therefor do not benefit proportionately from general reinvestment. Moreover, because fleet cars tend to drive and emit more GHGs per vehicle, there should be heightened interest in converting these vehicles to electric to reduce emissions. On a per vehicle conversion basis, this constitutes a lower cost of abatement.

There is momentum for fleets to electrify today, however electrification still poses non-trivial upfront costs to fleet operators. The market-based structure of the CFP lends itself well to business investment in decarbonization: businesses can estimate fueling volumes over time, convert those volumes to credits, and monetize said credits in a way that fits its business’ needs. However, without access to the credit market, take home fleet companies are not able to tap into this potentially important source of financing. For these reasons, we strongly urge DEQ staff to consider opening up residential crediting to true (take home) fleet companies. We would be glad to convene a coalition of take-home fleet companies to discuss this further with staff, including the nuances of how such a pathway could work.

We do appreciate the staff time required to implement and manage the CFP and acknowledge that this may be an extra burden to staff. We respect staff’s decision to weigh the administrative costs of this change in the decision-making process.



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Thank you for considering our comments. We look forward to continued participation in the Rulemaking.

Sincerely,

A handwritten signature in black ink that reads "Evan Neyland".

Evan Neyland
Manager, Clean Fuels Programs

Clean Fuels Program
Department of Environmental Quality
700 NE Multnomah St., Suite 600
Portland, OR 97232

February 28, 2022

RE: Clean Fuels Program Expansion - Electricity Workshop Comments

DEQ Clean Fuels Program staff,

Thank you for the opportunity to comment following the Department of Environmental Quality (DEQ)'s Clean Fuels Program (CFP) Expansion Electricity Workshop. We submit for your consideration feedback regarding the materials and conversation from the meeting, and look forward to continued discussion at future Rulemaking Advisory Committee meetings. Thank you in advance for your consideration.

Considering changes to crediting residential charging

We appreciate the opportunity to weigh in on potential changes to residential credits. In general, our organizations support program options that best incentivize transportation electrification, avoid double-counting, and maximize administrative ease for implementing the program.

With those overarching priorities in mind, we are wary of changes to the residential credit claiming hierarchy that would add administrative complexity to the CFP—and potentially burden residential customers—without evidence that these changes would provide substantial value-add in terms of advancing transportation electrification.

The current residential credit claiming hierarchy results in the value of the credits being distributed back to benefit residential customers. If fleet or commercial vehicle owners and operators start to claim a portion of residential credits, they retain all of the CFP benefits while the residential customer class assumes all of the current and future costs associated with serving that load. In addition, changing the current residential credit claiming hierarchy to allow fleet or commercial vehicle owners and operators to claim a portion of residential credits could further incentivize a take-home fleet or commercial vehicle model which places the majority of the costs and potential risks on residential customers. It would be valuable to assess the potential risks to residential customers before incentivizing this approach.

At the same time, we recognize that fleet owners bear the brunt of the up-front costs of purchasing and maintaining the vehicles, and that allowing residential customers to claim credits for electric vehicles parked at home residences could disincentivize companies from investing in electric vehicles in the first place.

With these considerations in mind, one potential option for DEQ to consider would be to transfer a small portion (5-10%) of the utility aggregated credits to residential customers, in the form of a workplace

charging reimbursement. DEQ may identify fleet and commercial vehicles charging at a residential location and allocate the credits to the appropriate person identified in OAR 340-253-0330 (2).

Development of new energy economy ratios for ground service equipment

We appreciate the continued conversation around the potential for new Energy Economy Ratios (EERs) to be established for electrified airport service ground equipment. This equipment most often runs on diesel, impacting workers and increasing the overall carbon intensity of air travel. In addition, there have been occasions when Oregon has unfortunately become a dumping ground for dirtier equipment as a result of stronger regulations for diesel emissions in neighboring states. The Clean Fuels Program provides an important opportunity and leverage point for airlines to make it attractive for companies to put clean equipment at airports in Oregon. We are happy to work collaboratively with DEQ and interested parties to address any barriers to entry into the program so that clean and efficient equipment is placed in Oregon.

Regarding the question of whether there should be a single EER or multiple EERs for all electrified ground service equipment, we support comments made on behalf of the Port of Portland that having a single value would be easiest in terms of logistics and ease of implementation. Further, it is our understanding that within the capabilities of charging equipment and monitoring systems, there's an ability to distinguish between gasoline and diesel, as desired. We are familiar with the study showing that EERs do not vary significantly between vehicle types, and recommending that EERs for each fuel type be averaged to provide a generic EER for all ground service equipment.¹ Our groups would be open to an average EER, if DEQ deems that would be accurate enough. We urge DEQ to choose the option that provides maximum assurity and defensibility of the program.

Regarding the question of who should generate the credits for this application, we understand that with multiple airlines coming and going from various gates within the airport throughout the course of a given day, there is a need for standardization. This means that it would likely make the most sense for the airport to install common, standardized chargers, so that there is uniformity and airlines are not faced with a patchwork quilt of different equipment.

Moreover, for the CFP to be successful in incentivizing airlines (which typically do not have much of a local presence) to make conversions, there need to be effective incentives and credit sharing. We support comments made on behalf of the Port of Portland that providing credits for both the charging owners and for the airlines' benefit is the path with the most potential to encourage this transition to cleaner airline equipment, and look forward to future conversations with the Rulemaking Advisory Committee and DEQ to determine how this would work in practice.

Lastly, we recognize that a one-size-fits-all approach to developing and implementing new EERs for ground service equipment may not serve smaller airports. In addition to the feedback received from the Port of Portland, we urge DEQ to consult with and consider input from smaller airports to ensure the program effectively incentives electrified ground service equipment across Oregon's airports.

¹ Port of Portland, eGSE Energy Economy Ratio Development, January 2022:
<https://www.oregon.gov/deq/rulemaking/Documents/cfp2022EWpdxStudy.pdf>.

Sincerely,

Victoria Paykar
Oregon Transportation Policy Manager
Climate Solutions

Carra Sahler
Staff Attorney
Green Energy Institute at Lewis & Clark Law School

Nora Apter
Climate Program Director
Oregon Environmental Council



February 18, 2022

Clean Fuels Program Staff
Department of Environmental Quality
Submitted Via Email:

Re: Clean Fuels Program Expansion 2022

DEQ Clean Fuels Program Staff:

We greatly appreciate the opportunity to comment on topics raised during the Clean Fuels Program (CFP) expansion electricity workshop.

During the workshop, Oregon Department of Environmental Quality (DEQ) staff presented background on how CFP credits are generated when residential electric vehicles are charged. Under OAR 340-253-0330 (Credit Generators: Electricity), electric utilities are the default credit generator for residential charging. The utility as the default credit generator has worked very well in ensuring investments to accelerate transportation electrification (TE). While there may be a limited case for separate clean fuels crediting related to work-related residential charging in the future, we do not believe these changes are necessary or adequately vetted at this time.

Consumer-owned utilities continue to develop targeted programs with our CFP credit revenue that further our local climate goals and encourage EV adoption. Using CFP resources, we have dramatically increased the percentage of electric vehicles (EVs) in our service territories and have used CFP revenue to fund projects including, but not limited to, free public charging stations, rebate programs for the installation of

Level 2 charging stations, educational materials, support, and EV promotional events, and an online calculator allowing customers to see fuel savings from the purchase of EVs.

Investor-owned utilities have used CFP revenue from residential charging to fund electric school buses, technical assistance, grants for electric vehicle chargers around the state, public outreach about electric vehicles, and development of emerging EV technologies.

We believe that the workshop proposals to alter the existing residential charging framework are likely premature and administratively complex for both for the proposed credit generator and DEQ. We urge DEQ to retain the utility as the backstop/default generator when charging is occurring at a residence regardless of vehicle ownership or whether a residence doubles as a workplace. To do otherwise would create compliance challenges that could undermine what has been a very successful partnership resulting in meaningful carbon reduction for the Oregon.

Thank you for your consideration. Please feel free to reach out if you have questions.

Respectfully,

Eugene Water and Electric Board
Pacific Power
Oregon Peoples Utility Districts Association
Portland General Electric
Oregon Rural Electric Cooperatives
Oregon Municipal Electric Utilities Association



Date: February 25, 2022

RE: Comments to DEQ Electricity Rulemaking 2022

From: FlexCharging, Ken Nichols, Regulatory and Policy Director

Summary

FlexCharging supports the change in CFP program rules that would allow fleet owners and businesses to earn the CFP credit for charging at residences. Response to questions below.

I am a Director at Flexcharging, a native Oregonian, and longtime participant in the energy and utility industry in the state and Pacific Northwest. FlexCharging is a technology firm based in the Pacific Northwest with customers in US and Australia. We offer utilities, fleets, governments, and EV owners data services and managed Charging through existing vehicle telematics. We share the vision Oregon and DEQ has to lower the carbon emissions in the state's transportation sector. Our mission is to improve charging to reduce carbon and cost, and provide data analysis and programs that help our clients plan and invest in infrastructure, rates, and programs that support their customers and citizens.

We've made comments to CFP in the past, both written and spoken, supporting 1) more accurate CFP credit calculations for EV Charging, 2) the use of hourly charging data from Chargers and Telematics to more accurately calculate the CI, and 3) Rules that would allow aggregators to represent EV owners to calculate and provide CFP credits to EV owners who buy and fuel their vehicles.

Questions related to Take-home fleet vehicle charging

We support commercial and governmental vehicle purchases and charging at employee residences and to avoid double counting. FlexCharging is working on a program now that tracks data and incentives for TNC (Transportation Network Company) drivers to use EVs, e.g., Lyft and Uber. A rule change that would allow TNC drivers to get the CFP credits would encourage them to use EVs instead of ICE vehicles. Marketing the added benefit of CFP credits may be done by a variety of parties, e.g., telematics vendors, and OEMs, which will get more fleets and businesses considering EVs, which supports increased transportation electrification.

- **Who should generate the credits for these commercial or governmental vehicles?**

The data validation should be competitive and DEQ should have approved reporting entities like they do for networked EVSEs. California has allowed OEMs and telematics vendors to validate LCFS credits. Since some residences do not have communicating chargers, relying on telematics data would allow for broader participation and vehicle specific data. FlexCharging solution has location data, so can geofence data at locations that are residential, or not public chargers.

If you follow the non-residential workplace charging provisions that apply to workplaces and other locations, the owner of the charger would generate the credits.

- **Is the owner or lessor of the vehicle paying for a charger at the residence?**

Fleet and business owners can buy chargers at residences, but they don't have to because of the various EV telematics data solutions available. Examples include fleet software companies that use OBD devices, e.g., Samsara, Verizon, Assetworks; OEMs; and Telematic vendors, e.g., FlexCharging, and BTR Energy. We recommend that DEQ not specify a specific type of data source or reporting entity, but require data validation to meet standards acceptable to DEQ. The data source and aggregation should be competitive and DEQ should have a data validation method like they do for EVSE. The fleet owners should make the choice. California is allowing and validating EV Charging kWh from all of the examples above. Making this a competitive choice also allows reporting entities to offer other services to fleet and business EV owners, e.g., mileage and location tracking, SOC, insurance and safety data, smart charging, etc.

- **How would the amount of electricity being used to charge the vehicle be recorded and documented? How would DEQ get the reporting?**

Fleet and Business owners would use FREs that are EVSE or telematics. If EVSE they must be able to identify the VIN using charger at residence. If Telematics then FRE then Telematics would have to demonstrate charging outside of 220 meters of a registered public charger, or 110 meters of a residential location. See LCFS guidance 19-03 for details on residential EV Charging data.¹ Another one of the many benefits of telematics-based data source is they know GPS coordinate locations of the charge. We are unaware if DEQ tracks the GPS coordinates of registered public chargers. If this location data is available it should be simple for telematics vendors to exclude VIN use of public chargers. DEQ could audit when accepting FREs, and do periodic audits throughout the year. The LCFS guidance 19-03 provides an explanation for the geofencing values, see Appendix A.

In addition to the capabilities above, FlexCharging has Fleet owners input location addresses for all possible charging locations, and can then verify the amount of charging that occurs at specific locations. This is also helpful in reimbursing employees that are paying for the electricity to charge at their house.

- **How would DEQ remove that vehicle from its residential charging calculations?**

Fleet and Business owners would register all VINs with DEQ that might be take home or charged at a residence. These VINs would then not participate in the residential charging calculations used for residential charging credit to Electric Utility or Backstop and incremental aggregators.

- **Is the owner or lessor of the vehicle reimbursing the employee for the cost of the electricity?**

This would be a fleet or business owner decision. If I was an employee and charging my fleet vehicle at home, I would want to be reimbursed. The charging amount at a residence can be accurately tracked by VIN using telematics, or less accurately with chargers, i.e., the charge station can't verify what VIN car is charging during a charge session.

If you follow the residential charging provisions, the electric utility would generate the credits.

- **How would the amount of electricity being used to charge the vehicle being documented? Typically, for residential charging, CFP uses default daily average charging assumptions that are based on private owners and would not necessarily apply for work vehicles.**

¹ https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/guidance/lcfsguidance_19-03.pdf

Fleet and business owners should identify VINs they own and may charge at residences. These VINs would be removed from the current residential charging calculations that use daily averages.

- **Could the owner of the fleet recover all/part of the credits or the value of the credits from the utility? Would additional requirements in the regulation needed to address this?**

It is an unnecessary step to have fleet and business owners recover credits from the utility. The rules would subtract fleet or business owned VINs from the utility credit calculation.

Fleets would use DEQ approved fuel reporting entities (FRE), e.g., chargers, telematics, OEMs, to validate quarterly CFP credits. The fleet owners would enter into commercial arrangements with FREs that provided good service at a good price. In other words, the CFP credits would be to the fleet owners and FRE would charge a service fee. Giving fleet owners this choice also lets them choose vendors that provide other services than just CFP credit generation, e.g., mileage and location tracking, SOC, insurance and safety data, smart charging, etc.

- **Is there another entity that should generate the credits?**

Yes, Businesses would use DEQ approved fuel reporting entities (FRE) and credit generators, e.g., chargers, telematics, OEMs, to validate and generate periodic CFP credits, e.g. quarterly. The fleet owners would enter into commercial arrangements with the fuel reporting entities (FRE) to provide good and relevant service at a good price. Giving business owners this choice lets them choose FREs that also provide other relevant services than just CFP credit validation, e.g., mileage and location tracking, SOC, insurance and safety data, smart charging, etc. Fleet owners may have more than one FRE and credit generator, e.g., EVSE and telematics providers.

- **Should this provision only apply to vehicles that are registered with DMV as part of a fleet? How would DEQ know where the vehicles are charging?**

We think the rule should allow all EVs registered to OR DMV by a business. To register as a fleet with DMV a business must have at least 50 cars. This would be too restrictive to benefit the many small businesses that use vehicles for work.

Do Fleets and businesses have a requirement for using EV-based revenue to advance electrification? (was not asked)

In California, revenue from EV-based credit generation is not merely general revenue, it must be used to advance electrification. LCFS credit revenue can be used to offset EVSE equipment, telematics, maintenance, infrastructure, electricity costs and administrative costs.

Questions related to What if your residence is your workplace?

More and more businesses are being operated out of homes.

- **Similar to the situation above, who should generate the credits for electric vehicles that are used for those businesses?**

DEQ should only allow VINS registered to a business who uses an approved CFP fuel reporting entity (FRE) that interfaces with DEQ. This will reduce the number of entities that DEQ has to manage. The data aggregators will validate CFP credits, may buy and retire RECs to improve CI, and manage the revenue to their fleet and business vehicle owners. If you add up residential smart chargers, and potential telematics vendors, DEQ might expect 12 to 15 FREs to

If you follow the non-residential charging provisions that apply to workplaces, the owner of the charger would generate the credits which would be the homeowner in this case.

- **How would you determine what charging is for work purposes as opposed to personal purposes? Do the vehicles need to be used for work purposes only?**

If EV is registered to a business then charging at home location should be assumed for business. DEQ could also ask the reporting entity that represents the business to ask for percentage of business use versus personal use.

- **Since the electricity used for personal purposes is currently calculated using a default daily average amount of charging, would that need to be adjusted? And if so, how would that be done?**

Fleet and business owners should identify VINs they own and may charge at residences. These VINs would be removed from the current residential charging credit calculations that use daily averages.

- **The reporting entity would need to be able to report charging at that specific residential workplace and not charging elsewhere.**

DEQ can require that reporting entity provide data only at residential location. Chargers could do this for residences, and telematics can also identify charging at a specific location. For home businesses they would need to identify their home address.

- **Would individual vehicles need to register with DEQ in order to ensure that credits would not be double counted?**

No, each business owner would choose a DEQ approved data aggregator to represent their charging CFP credit calculation and management. Given the number of communicating home residential chargers, and telematics vendors, DEQ might have about 15 or so data aggregators or reporting entities representing fleet and business owners.

- **If you follow the residential charging provisions, which is DEQ's current interpretation, the electric utility will continue to generate the credits. Is there another entity that should generate the credits?**

Yes, Businesses would use DEQ approved data aggregators, e.g., chargers, telematics, OEMs, to validate periodic CFP credits, e.g. quarterly. The fleet owners would enter into commercial arrangements with data aggregators that provide good and relevant service at a good price. Giving business owners this choice lets them choose vendors that provide other relevant services than just CFP data validation, e.g., mileage and location tracking, SOC, insurance and safety data, smart charging, etc.

Extra: Managed Charging by time of day for Grid Emissions Reductions

We would like DEQ to consider adding a Smart Charging feature to the CFP program for the next Rulemaking.

California has a program that allows FREs, both EVSE and Telematics, to provide hourly data for kWh charging that could reduce the CI of grid charging. As DEQ knows, the CI of grid power changes throughout the day, and can be very different based on season, generation mix, and demand. The CARB program allows FREs to submit EV charging data broken down by hour in each of the quarterly reporting periods. Each quarter has a different CI for every hour of the day. This CI calculator is a representation of hourly CI values for that particular quarter. This "Smart Charging" feature can reduce the baseline CI that is used to determine LCFS credits, and the RECs that must be bought and retired to move CI to zero.

FlexCharging managed charging

FlexCharging provides this hourly charging data, and even provides our own carbon calculator to our customers.

FlexCharging integrates realtime locational emissions data from Watttime into their respective data and charging service platforms. The platform has the ability to optimize charging based on lowest emissions. Some of our current customers use this feature on their own. However, most of the time this feature is unknown or not used regularly, so we run incentivized programs to first make EV owners aware of the feature and second to get their commitment to use it on a daily basis.

Depending on the location and time of year, the CI can vary dramatically. Figure 1 is FlexCharging statistics that show up to a 25% reduction in EV Charging emissions based on monthly optimized charging data. This starts to add up with tens of thousands of EVs in use, and increased renewable integration.

Figure 1 Emissions reduction with Optimized Vehicle Charging - FlexCharging



CO2 Summary: CO2 Optimized Charging vs. Plug-In Charging

State	Avg. CO2 Savings % From PlugIn					
	Oct	2020 Nov	Dec	Jan	2021 Feb	Mar
California	4.0%	2.9%	4.7%	8.8%	4.4%	9.4%
	1.9%	5.2%	1.7%	4.8%	0.4%	1.2%
	5.1%	3.8%	8.6%	15.1%	2.8%	6.4%
	0.7%	0.9%	2.2%	0.8%	6.1%	0.6%
Utah	15.4%	15.0%	22.4%	9.4%	14.2%	9.5%
Washington	15.4%	13.1%	15.1%	9.4%	18.2%	18.5%
			4.9%	8.8%	16.8%	18.8%



Clean Fuels Program Staff
Oregon Department of Environmental Quality (DEQ)
VIA Email

February 25, 2022

RE: NW Energy Coalition's comments regarding the Clean Fuels Program Expansion 2022 Rulemaking Electricity Workshop on February 10, 2022.

The NW Energy Coalition (NWECC) appreciates the opportunity to comment on the Clean Fuels Program Expansion 2022 Rulemaking. These comments are in response to the Electricity Workshop on February 10, 2022.

Periodically reviewing the Clean Fuels Program (CFP) rules and their impact can be a constructive process to identify potential issues and pathways to address them. Two new items related to crediting residential charging were introduced to stakeholders at the Electricity Workshop. In response to the Electricity Workshop discussion, NWECC offers the following input and recommendations.

The current residential credit claiming hierarchy results in the value of the credits being distributed back to benefit residential customers. If fleet or commercial vehicle owners and operators start to claim a portion of residential credits, they retain all of the CFP benefits while the residential customer class assumes all of the current and future costs associated with serving that load. In addition, changing the current residential credit claiming hierarchy to allow fleet or commercial vehicle owners and operators to claim a portion of residential credits could further incentivize a take-home fleet or commercial vehicle model which places the majority of the costs and potential risks on residential customers.

With this in mind, NWECC recommends DEQ:

1. Maintain the current credit claiming hierarchy outlined in OAR 340-253-0330 (2) and (3).
2. Identify fleet and commercial vehicles charging at a residential location and allocate the credits to the appropriate person identified in OAR 340-253-0330 (2).

Please let us know if we can provide any additional input.

Respectfully submitted,

Annabel Drayton
Policy Associate
NW Energy Coalition



February 21, 2022

Ms. Cory-Ann Wind
Oregon Clean Fuels Program Manager
Oregon Department of Environmental Quality
700 NE Multnomah St #600
Portland, OR 97232
2022cfp@deq.state.or.us

via cfp comments

**Subject: Clean Fuels Program – Electricity Workshop
Port of Portland Comments and Recommendations**

Dear Ms. Wind;

The Port of Portland (Port) appreciates the thoughtful discussion on aircraft electric ground support equipment (eGSE) energy economy ratios (EERs) and refining the electric ocean-going vessel (eOGV) definition during the February 10, 2022 DEQ Clean Fuels Program Electricity Workshop and offers the following comments and recommendations;

Comment #1: eGSE EERs. Based on a study conducted on behalf of the Port, C&S Companies recommended two EERs; an EER of 2.73 for diesel-replacing eGSE and an EER of 3.56 for gasoline-replacing eGSE. A question was raised about how to apply EERs to GSE that are not replacing existing equipment. One suggestion was to consider using a weighted average of the EERs based on the current ratio of diesel versus gasoline GSE at PDX. A limited inventory of GSE provided by some airlines in 2017 shows that 1) all pushbacks are diesel powered, and 2) baggage tugs and belt loaders are a significant mix of both gasoline and diesel units, the relative percentage of which changes when airlines procure and retire equipment. Because fleet mixes evolve and with the difficulty of obtaining fleet information, using a weighted EER average is not practical nor particularly accurate. Using an average of the diesel and gasoline EERs should be sufficiently accurate for the relatively small portion of new electric baggage tugs and belt loaders that do not replace older equipment.

Recommendations

- For eGSE that replace existing equipment, the Port recommends that DEQ use the EERs for gasoline and diesel that were developed by C&S Companies.

- For the relatively few electric baggage tugs and belt loaders that do not replace a legacy piece of gasoline- or diesel-powered equipment, the Port proposes that DEQ use an EER of 3.15, the average of the gasoline and diesel EERs.
- The Port proposes that DEQ use the diesel EER OF 2.73 for all pushbacks that do not replace existing equipment.

Comment #2; eOGV definition. DEQ is considering limiting the eOGV definition so that the provision only applies to larger vessels with category 3 engines. The Port believes that it is important that more types of vessels and engines be included in the Clean Fuels Program to promote electrification of the types of vessels and engines that have the greatest shore-to-vessel electrification opportunities in Oregon. Category 3 marine diesels with per cylinder displacements at or above 30 liters, are mainly propulsion engines on large ocean-going vessels (OGV) that are used only when the vessel is under way. Category 1 and 2 marine diesel engines are used as stand-alone generators for auxiliary electrical power on many types of vessels. For certain types of OGVs, shore power is an opportunity for these auxiliary generators to be shut down while the vessel is at berth. Category 1 and Category 2 marine diesel engines are also used to provide propulsion power on many kinds of harbor craft; including tugboats, pushboats, supply vessels, and fishing vessels. Shore power is typically feasible for these types of vessels when they have a home base where they always moor.

Recommendation

- To promote electrification in the marine sector where there is the greatest opportunity, the Port recommends that the Clean Fuels Program rules include smaller vessels and Category 1 and 2 engines.

Thank you for your consideration of these recommendations. Please feel free to contact me if you need further information.

Sincerely,
Port of Portland

David J Breen

David Breen
Manager, Env. Air Quality, Energy, & Aviation Noise

February 28, 2022

Oregon Department of Environmental Quality (DEQ)
Oregon Clean Fuels Program (CFP)

Re: Comments on Clean Fuels Program February 10, 2022 Electricity Workshop

Dear CFP Team:

Thank you for this opportunity to comment on the materials and discussion related to the Clean Fuels Program expansion and electricity issues (albeit a bit beyond your requested submission date). Please find several comments below. For clarifications or questions, please contact Julie Witcover.

Sincerely,

Julie Witcover, Ph.D.

Assistant Project Scientist, Policy Institute for Energy, Environment, and the Economy
University of California, Davis, California, USA

-
- *EERs for Electric Ground Support Equipment at Airports.* I have no specific comment on the proposed EERs or two studies supporting them to add to the interesting discussion at the workshop, but to the extent that DEQ has guidelines on which it assesses data sufficiency, it would be useful to have that in the public sphere, or for DEQ to develop guidelines, as more cases arise, to provide a reference for new applications.
 - *Take-Home Fleet EVs.* Use of LCFS credits to enable business vehicle transition to cleaner fuels aligns with the principle already in place in the CFP underpinning the advanced EV credit provision. Discussion during the meeting raised a number of scenarios, however, that highlighted the difficulties of a 'one-size-fits-all' approach to structuring this provision, at least in its early stages. As noted by others in the workshop, implementation would require a clear definition of what constitutes a fleet vehicle, and ensuring that only vehicles in substantial use for the business would be included would prioritize the cases for which there is most to be gained. Metered data would provide more accuracy, which is important especially given that work vehicles would be expected to have different charging patterns than others. The suggested check against the residential EV VIN list to guard against double-counting is a reasonable approach, provided provisions also address how to treat a vehicle that is used for both work and personal purposes, and ensure that only charging at home for work is being credited. If the fleet owner generates the credit, DEQ might suggest interested parties devise a proposal that would cover the questions of metering, and how to ensure that,



analogous to work charging, that the employee is not paying for the electricity used at work, for further stakeholder discussion. The case of TNCs, brought up in the workshop, seem important to include in the consultation, given their growing prominence and high vehicle mileage. Perhaps DEQ could institute data-gathering steps that would help with the crafting of robust provisions for this situation in the future. In short, the complexities and variation possible in this situation create opportunities to incentivize the lower carbon fuel transition but also potential for double-counting or “mis-assigning” credits (e.g., to businesses that should be residential, or vice versa). For these reasons, a “go-slow and carefully” approach towards designing any provisions at this point would help safeguard program environmental integrity; supplemental actions to improve understanding and tracking of the variety of take-home vehicle scenarios would help inform any future provisions.

- *Work-from-Home EVs.* In the first instance, DEQ might consider limiting crediting to situations where the EV is part of a clearly defined fleet, even if the home is the workplace. In this way, cases involving substantial use of the vehicle for work could be prioritized. As in the “take-home fleet EV” case, crediting based on dedicated metering for work use and DEQ registration would provide accuracy and help avoid double counting. A data-gathering exercise could help shed light on the situations that additional provisions would need to address to broaden coverage, the potential equity implications from allowing additional EV benefits for those who work from home not available to those who cannot, and whether the approach would be possible within DEQ administrative realities.