

Oregon Clean Fuels Program Expansion 2022

Summary Electricity Workshop

Date: Feb. 10, 2022, 1 p.m. – 3 p.m.

Location: Zoom Webinar

RAC Members in attendance

- Maya Kelty, 3 Degrees
- John Thornton, Clean Future
- Michael Graham, Columbia Willamette Clean Cities Coalition
- Mason Murphy, Confederated Tribes of the Umatilla
- Nick Staub, Ed Staub
- Jason Heuser, EWEB
- Floyd Vergara, National Biodiesel Board
- Jana Gastellum, Oregon Environmental Council
- Jana Jarvis, Oregon Trucking Association
- Greg Alderson, PGE
- David Breen, Port of Portland
- Sam Wade, RNG Coalition
- Jeremy Martin, Union of Concerned Scientists
- Jessica Spiegel, Western States Petroleum Association
- Jim Verburg, WSPA
- Kent Hartwig, REG, Alternate
- Martina Steinkusz, Renewable Hydrogen Association, Alternate
- Tom Umenhofer, Western States Petroleum Association, Alternate

DEQ staff/facilitators in attendance

- Cory-Ann Wind, Clean Fuels Program Manager
- Bill Peters, CFP Markets Analyst
- Kiara Winans, CFP Pathways Specialist
- Stephanie Summers, CFP Reporting Specialist
- Jamie Damon, Senior Facilitator
- Gillian Garber-Yonts, Facilitation Team

List of handouts and presentation notes

- Agenda
- Presentation
- Electricity Workshop Memo



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Department of
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Quality

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Program web page:

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Agency web page:

www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Time	Topic
12:45 p.m.	Webinar Setup and Login
1 p.m.	Welcome and Introductions
1:10 p.m.	Review Agenda
1:20 p.m.	Presentation and Discussion: Electricity
2:20 p.m.	Wrap-Up
2:30 p.m.	Public Comments
2:45 p.m.	Next Steps
3 p.m.	Adjourn meeting

Welcome and Introductions

Jamie Damon, Lead Facilitator, welcomed the RAC members and the audience to the DEQ Clean Fuels Program Electricity Workshop. She shared brief instructions on using the zoom webinar platform, reviewed the meeting agenda, shared an overview of the meeting guidelines, and provided instructions to the public on sharing their comments and questions during the meeting.

Committee Business

Jamie Damon covered the meeting ground rules and the agenda. Cory-Ann Wind, Clean Fuels Program Manager, introduced herself as well as the Clean Fuels Program Project Team. She provided an overview of the Clean Fuels 2022 Program Expansion Timeline document and reminded attendees that this would be the second of three workshops on special topics that would not be included in the regular RAC meetings.

Adding Electric Ground Support Equipment

Kiara Winans shared that the workshop topics would include discussion around a new EER for electric ground support equipment (eGSE) and correcting the ocean-going vessel definition. Kiara began by sharing the background and context for adding electric ground support equipment and provided an overview of data and data requirements. Next, she indicated the specific equipment types considered in the proposed electric ground support equipment category. The following are questions and comments received on the section discussion questions. Responses are from DEQ staff.

Comment: As far as logistics and implementation, having a single value would make it easier. Within the capabilities of monitoring systems, there is the ability to distinguish between use by electric vehicles and to identify predecessors. The analysis we submitted shows the similarity between different three different diesel types. I would put it back to DEQ as far as what makes the most sense in terms of defensibility for the program. For ease of implementation, a single value would be best. We can single out each one by how we set up charging.

Question: I do not know much about how they are used. Do certain types of eGSE have their dedicated chargers?

Response: All three can use the same type of charging system. The difference is pushbacks require more power and dual chargers. The baggage tugs and belt loaders have a single plug.

Question: Can you track how much fuel is going to each vehicle?

Response: DEQ staff are assessing current technologies available, programming options, charging logs, etc., to determine the accuracy of tracking specific equipment and their baseline fuel and other specifics about what is charging.

Question: What if we have cases where equipment doesn't have a predecessor?

Response: Each equipment type has a baseline fuel type it would be replacing, such as gasoline or diesel, which is considered in the analysis for determining EER. DEQ received some information from airlines about the split between gas and diesel. However, there is some uncertainty in the baseline for each equipment type. For example, the same pushback (a kind of equipment) can be fitted with a diesel or gasoline generator. DEQ staff has not thoroughly investigated potential additional equipment that doesn't have a predecessor.

Comment: We have noticed that school bus fleets are moving towards using more gasoline.

Comment: I don't see any trends. The only way you might distinguish more broadly is to look at standard use rates and fuel burn, and then how much fuel is distributed annually in gas vs. diesel.

Response: There is extensive data used to determine an EER value, but there will be variations from that data. Review of EERs and data used to support an EER is part of a continuous review process. As DEQ staff indicated, currently, tracking is a challenge. Still, there are advancements in improved accuracy for tracking. Also, it is important to remember that the data presented when reporting on an EER is subject to review under the current regulation.

Comment: We have been heads down looking at different scenarios and are considering the complexities of multiple airlines with dedicated and shared gates. We are currently dealing with issues where airlines are switching gates. We are considering an option for the airport to supply standard chargers so when things move around, we have uniformity. The port owning the chargers and looking at ways for airlines to benefit is what we see as the most successful path.

Question: Is this discussion just about airport equipment, or is it about other types of equipment as well? Will the decisions made in this case carry over to other types of equipment, or is this specific to airline equipment and chargers?

Response: Currently, this conversation is about ground support equipment at airports. There are several established EERs, and we are talking about proposed EER values for eGSE because it is a new category for the DEQ's CFP. That credit generator designation does exist in regulations already.

Comment: I think a single EER value seems to be the easiest to track. Who cares if you get new equipment as long as you are using it? Also, I like the idea that the credit generator is the charger's owner.

Question: Is this applicable to rail? I am thinking of a passenger train with layovers in Eugene before going to Seattle. I believe they use diesel. If there was an electrical piece, is it applicable to rail?

Response: The current discussion is focused on the ground support at airports.

Comment: I am speaking on behalf of the League of Women Voters. The discussion has been around PDX. Does this also apply to smaller airports in Oregon? I think that broad categories would be a better choice for them.

Response: That is a good question. DEQ staff are aware that smaller airports may not have the same resources as PDX, which is part of the consideration. This is something the agency is following up on.

Comment: I am with TTS Charging. With regard to being able to track predecessors, our chargers track the make, model, year, and kilowatts to charge when vehicles plug into a unit. When we install a station at a business, we don't charge anything for maintenance for the carbon generators. We try to maintain the carbon offset. A small airport that may not have the resources to install chargers could still have the units.

Response: Thank you for this feedback.

Comment: I have a trucking company, and we sell over 100 trucks a year into the eGSE industry. There has been a tremendous shift away from diesel. The diesel vehicles have a complicated emission system. Airports will only buy diesel if they have no choice because they don't go far or fast enough to clean themselves.

Refining the eOGV definition

Kiara Winans introduced the topic. The following are questions and comments posed by the RAC members and public attendees. Responses are provided by DEQ staff.

Question: The smaller engines are already included, is that correct?

Response: The rule would include larger vessels, not smaller or medium, for consistency with the data used to support building out the EER for this application. Anything below these needs to go to "tier 2" for approval or review.

Comment: I think that as far as the engines that will benefit, I don't know if those are 30 liters or greater.

Comment: The proposed definition limits and excludes many vessels using shore power. I suggest you establish eligibility using shore power in place of diesel engines that EPA categorizes as C1, C2, or C3 because that gets at the issue. As we look at some of the applications, it is challenging to capture data. There is a real or perceived burden associated with going through third party verification and annual verifications for low volume.

Comment: I support what was said. In Portland Harbor, some operations can take advantage of shore power, including push boats and tugboats.

Considering Changes to Residential Credits

Bill Peters introduced the topic. The following are questions and comments received by the RAC members and public attendees. Responses are provided by DEQ staff.

Question: Is there a way to meter at home charging? I have been told the draw is different than other home appliances.

Response: Sometimes EV charging equipment will have a reader that can report back to the employer. It is also the case that the vehicle will keep track of charging and may have GPS data to show how much it was charged and where.

Question: Don't you run into privacy issues?

Response: We don't get that data now. We would need to get it if we were going down this path.

Question: Are you referencing passenger vehicles?

Response: Some would be pickup trucks and parcel delivery vehicles that could be sent home with employees.

Comment: I have a situation where someone who drives a truck for me and owns two Teslas. In that case, he would use the same charger for his cars and my truck. I think it would have to be specific to the vehicle tracking and not charger tracking.

Response: Yes, that is a complication. It might be the case that the employee owns the chargers, and the business doesn't have access. It might be cleaner to get data from the vehicle itself.

Comment: The issue might be that currently, a lot of the charging is paid for, and if not, I would have to reimburse the driver. So it goes a step further than the credit.

Question: I am wondering if there is a risk here to create an incentive to reclassify residential vehicles as commercial vehicles? We don't want people to collect value that someone else could.

Response: Yes, that was the primary thought. There are a lot of employees that take their vehicle home. Not all chargers would need to be located at work, it would be more of a dispersed system. To take advantage of the at home charging lessens the investment the fleet needs to make.

Comment: My thought is over the long term, we expect the premium for EV to fall. From my perspective, we don't want to lock in this subsidy; we want to use this to get more people into EVs, not create windfalls for people already participating in the program.

Comment: I have a couple of ideas. First, unless CFRs have changed, government vehicles wouldn't count because they can't be taken home. For reporting, one could report by vehicle or charger. Reporting by the charger would be easiest for the company. If they have to report by the vehicle, the company would get credit generators and provide additional credits to have employees charge from home.

Comment: I think this raises a lot of questions that have not been identified yet. How would this interact with advanced crediting available to public fleets and incremental crediting, which is available to residents. What really is a fleet vehicle or business vehicle charging at home? I think it will be important to be clear here. While there could be value in providing CF credits for fleet charging, it is not without opportunity cost.

Comment: I think a fleet vehicle is owned by a company or organization that is loaned out. The vehicle isn't registered to the resident, just charged there.

Question: I am with Northwest Energy Coalition. If these are residential customers, wouldn't the residence take on costs? If so, we should look at returning the value of credits to residents. Are there any technology restrictions with charging residentially for medium and heavy-duty vehicles?

Response: We will have to track that as the fleet evolves. Level 2 charging is what dryers charge at. Fast chargers would require a more significant investment.

Comment: If we saw a scenario that was heavily utilized where there was take home fleet charging, wouldn't those costs be distributed across residential customer costs?

Response: We would like to see comments on that.

Question (stakeholder): In a webinar I recently watched, there was a model with take-home medium and heavy-duty chargers. Is there a commonly available business model and charging equipment needed for medium and heavy-duty vehicles at a residence?

Comment: You can't plug medium and heavy-duty vehicles into a wall charger. The energy requirements are much more significant. I don't think this is an issue of charging at home vs. charging at a fleet location. There is a question about whether the grid can handle heavy-duty electric trucks.

Comment: When you have a company vehicle going to a residence to be charged, the residence is taking the cost. If the vehicle is owned by the company, a lot of the incentive is the lower cost of electric fuel. If the residents were to generate credits, it would disincentivize companies. If all the benefits were up front then it wouldn't be an issue. The person who bears the cost should get the benefit.

Response: Due to limited staff resources, we have tried to limit the number of entities in the program. If we were in a situation where individuals were registering to generate credits at home we would have many thousands of people reporting. That has been one of the rationales for trying to have it be a utility.

Comment: One of the most interesting cases for carving out residential credits is CNCs. A decent amount of that charging would happen at home. Given the structure of the program, we could estimate VMT and kilowatt throughput and convert that to credits. You could get a somewhat accurate revenue source.

Question: I apologize for asking such a basic question, but what is the difference between base credits and incremental credits?

Response: Credits are generated on differences between the fuel and the fuel it is replacing. That delta is what the base credits are, the number of credits you generate by switching.

Comment: There are apps that can check your mileage between business and personal travel. To avoid that tracking you could give all credits up front for the life of the vehicle, then for every year you get an average.

Response: That is an area we are trying to think through. That is similar to what we offered with advance crediting. In that rulemaking, concerns were shared that vehicles move around a lot.

Question: Do we know how many of these businesses we are talking about and how many credits?

Response: We are not sure. There are shifts in work patterns because of Covid. Unfortunately, DEQ does not have a good way to quantify that. Let us know if you know one.

Comment: The fleet owner should be allowed to report. I think accurate data is better than average data. I think you can report documents that establish vehicle use. You could use an application code to track, then remove it.

Comment: This could be done by mileage.

Response: If they are charging at a station, you allow the station owner to generate credits. We want to avoid double counting.

Comment: Sometimes there is a sense that we handle residential charging differently because of the lack of data. That is not my view. We want to ensure we don't let access to data move funds out of the pool for residential electrification. If I became a consultant, would I be able to generate credits? It doesn't seem like that is serving an important policy purpose. If I switch to a job where I do lots of driving, that could be a

policy case where that makes sense. I don't think it should never be done, but it should be examined to see if it is pulling credits from another pool.

Comment: That is the question that got me. If it were a work-based type model where the fleet owner gets credits, does this incent electric vehicles or not? We want to make sure we don't double count. That is the biggest question for me. Does this help accelerate the transition to electric vehicles?

Comment: Has DEQ received any request from a resident seeking to claim credits in this residential workplace scenario? Is it a significant number of requests?

Response: Under 10. In the 2017 rulemaking, this was a significant topic. However, it has not been a large number of people. Maybe we should consider whether the impact and the administrative burden has changed. I would like to reiterate the comments about take-home fleet vehicles. Is charging going to be classified under the residential customer? I am thinking about the long-term incremental costs and ways to bring that value back to residential customers as a whole. We will provide follow-up comments.

Comment: The big question is whether the juice is worth the squeeze. It may be. It sounds to me like there is administrative complexity. In some cases, there may be value for larger fleets. I urge DEQ not to add too much administrative complexity to the program unless there is added value.

Comment: I was a volunteer tax preparer. When Uber and Lyft drivers filed their income tax, they had to distinguish between business and personal mileage.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.