State of Oregon Department of Environmental Quality

Draft Fiscal Impact Statement

Dec. 1, 2020 Clean Fuels Program Electricity 2021 Rulemaking Advisory Committee Meeting

Background

The policy objective of the Department of Environmental Quality (DEQ) in developing and proposing that the Environmental Quality Commission (EQC) adopt the Clean Fuels Program (CFP) Electricity 2021 Rulemaking is to increase greenhouse gas emissions reductions by advancing methods to accelerate the generation and aggregation of clean fuels credits by utilities in order to advance transportation electrification. DEQ will also consider proposing changes or additions to the regulations that will further incent the generation and aggregation of electricity credits to a broader range of stakeholders including both public and private sector fleets.

Summary of proposed changes

Encouraging New Types of Electric Vehicles

1. **Add new energy economy ratios**: Energy economy ratios (EERs) are necessary to accurately account for the difference of efficiencies between two engine types. EERs compare an alternative vehicle fuel technologies to their gasoline or diesel counterparts and are specific to a category of vehicle. DEQ is proposing to add two new categories of EERs – for electric cargo handling equipment and for electric ocean-going vessels. This proposal will allow these categories of equipment to generate credits in the CFP.

2. **Delegate authority to DEQ to approve new EERs:** The current regulation requires that new EERs be adopted by the EQC through rulemaking.

   DEQ is proposing that the EQC delegate authority to DEQ to approve new EERs. The process would mirror the Tier 2 fuel pathway process in that an applicant would have to request the new EER and submit information to support the application. The process would also include a public comment period consistent with a rulemaking to ensure that stakeholders have the opportunity to examine the underlying assumptions and operating conditions specified in the issuance of an EER-adjusted carbon intensity (CI) value. This EER-adjusted CI is specific to the applicant and cannot be used by any other party until sufficient information supports a new categorical EER that could then be adopted by the EQC through a rulemaking. The addition of this delegated process will greatly decrease the amount of time it takes for a new applicant to receive an EER and begin generating credits for the new type of electric vehicle.

3. **Allow new forklifts to generate displacement credits:** Displacement credits are given to a more energy efficient alternative fuel vehicle relative to a less-efficient gasoline or diesel vehicle. Displacement credits are currently awarded to various types of electric vehicles including fixed light rail, streetcar, and the aerial tram. When forklifts were added to the regulation, displacement credits were not awarded because there was insufficient evidence of what the electric versions of forklifts were replacing.

   Oregon has seen an increasing population of electric forklifts, especially in the warehouse distribution sector and DEQ is now proposing to grant displacement credits to forklifts that have been placed in service since 2016 to further encourage the transition to this lower carbon option.

Adjustments to the CI of Electricity

4. **Update the methodology to calculate the CI of electricity:** The current CFP calculates the carbon intensity of electricity as a transportation fuel using data collected by DEQ's Greenhouse Gas Reporting Program using the most recently-available 5-year rolling average of electricity consumed in Oregon. It allows for both a statewide grid mix CI and an option for individual utilities to claim a utility-specific mix CI. This utility-specific option allows for utilities that are primarily BPA customers to have a much lower CI for the electricity they use and thus generate many more credits than if they used the statewide grid mix CI.

   DEQ is proposing to update this methodology in several ways. First, DEQ is proposing to switch to a single year value as opposed to a 5-year rolling average. Second, DEQ is proposing to remove the load that is allocated to a utility-specific CI. This will allow for more accurate accounting of what is left in the statewide grid mix. Third, DEQ is proposing to replace the emissions associated with the closed Boardman coal-fired power plant with the value used for an unspecified mix of 0.428 MT/MWh to calculate the 2021 and 2022 CIs until actual data can be incorporated. These three items will produce a more accurate and more current CI to calculate credit generation.

5. **Allow for the retirement of RECs to claim zero carbon electricity**: The current regulation only allows for zero carbon electricity claims if the source of the renewable electricity is located behind the same meter as the non-residential EV charger.

   DEQ is proposing to allow for the retirement of renewable electricity credits (RECs) to offset the electricity used as a transportation fuel. RECs must be Green-e certified, (or equivalent) be generated 2015 and newer, and be delivered to a balancing authority that includes Oregon (plus PacifiCorp-East). Bundled and unbundled RECs can be retired individually, from participation in a utility green power product (such as Blue Sky and Green Source programs), and through participation in a power purchase agreement. RECs can be retired for both residential and non-residential vehicle charging.

6. **Establish parties eligible to generate incremental credits:** The retirement of RECs creates incremental credits which represent the difference in the statewide grid mix or utility-specific CI and the zero carbon claim. This differs from the base credits which represents the difference between the gasoline or diesel standard and the carbon intensity of the statewide electric grid mix or utility-specific mix.

   DEQ is proposing to allow many of the same parties to generate the incremental credits as those who are eligible to generate the base credits. Specifically, DEQ is proposing to allow the EV charger owner to generate the incremental credits for non-residential (public, fleets, workplaces, multi-unit dwellings) charging; the transit agency to generate the incremental credits for light rail, street car, aerial tram, or electric buses; and the fleet owner or operator to generate the incremental credits for forklifts. For residential charging, DEQ is proposing to allow the utilities to generate the residential incremental credits on behalf of their EV-owning customers and the remaining residential incremental credits to flow to an Incremental Aggregator. Any unclaimed non-residential incremental credits may also flow to the Incremental Aggregator. The operation of the Incremental Aggregator will mimic that of the Backstop Aggregator for the base credits with the addition of an equity advisory committee that DEQ will convene to assist in developing criteria to ensure that the revenue from the incremental credits will be focused on projects that prioritize underserved communities and those that are most vulnerable to the impacts of climate change. The equity advisory committee will also assist DEQ in developing the annual work plan of projects and evaluating the utility annual reports.

Additional Credit Generation Opportunities

7. **Allow for advance crediting for certain fleets:** The current regulation allows for credit generation as quarterly reports on the amount of electricity dispensed are submitted to DEQ.

   DEQ is proposing to allow fleets to apply for "advance credits," what is effectively a loan of future credits, to be paid back over a specified period of time. These are not paper credits, but credits that will be generated in future quarters and drawn down from the up-front allocation until the entire amount is repaid. In order to mitigate risks, DEQ is proposing to limit this advance crediting provision to transit agencies, school districts, public fleets and fleets that are contracted by those entities. Fleets will have to submit an application to DEQ to request a number of credits to be advanced, supported by information that will estimate the number of miles driven, the duty cycle, the electricity consumed, etc. DEQ and the applicant will negotiate the terms of the advance including the number of years' worth of credits that will be advanced, the payback period, and what happens if the terms are violated. If the number of credits advanced are not paid back by the end of the payback period, the applicant will have to retire additional credits to repay the loan.

Miscellaneous Provisions

8. **Increase the frequency of residential EV crediting**: The current regulation allows DEQ to issue residential EV credits to utilities and the Backstop Aggregator once per year for the previous calendar year.

   DEQ is proposing to allow DEQ to issue residential EV credits at least twice per year. DEQ envisions that we would receive EV registration data from DMV in February for the second half of the previous calendar year and in August for the first half of the current calendar year and that DEQ could issue the residential credits in March and September. This would apply to both base and incremental residential credits.

9. **Direct the spending of revenue from the sale of residential credits to support transportation electrification**: The current regulation does not have any requirements on the spending of revenue from the sale of residential credits.

   DEQ is proposing to require utilities to report to DEQ annually. For base credits, the report should describe how the revenue was spent; for the investor-owned utilities, it should be consistent with the guiding principles contained in UM 1826, under the authority of the Oregon Public Utility Commission. For incremental credits, the report should provide additional detail about how the revenue was spent in alignment with guiding principles developed by DEQ and an equity advisory committee. Failure to submit the annual report would result in DEQ re-assigning the base credits for the next period to the Backstop Aggregator or re-assigning the incremental credits for the next period to the Incremental Aggregator. The utility could subsequently submit the annual report to restore its credit generator status.

Statement of fiscal and economic impact

Fiscal and Economic Impact

These proposed rules involve changes to numerous provisions of the CFP, and new several new provisions. These changes each will have their own impact, and they will have an overall, cumulative impact.

1. **Add new EERs**: This proposal will have a positive fiscal and economic impact to fleets that will be able to generate credits from the deployment of these EVs. There is no way for DEQ to anticipate the number of EVs that will take advantage of this proposal.

2. **Add a process to administratively adopt new EERs:** This proposal will have a positive fiscal and economic impact to fleets that will be able to generate credits quicker through the administrative approval of EERs. There is no way for DEQ to anticipate the number of EVs that will take advantage of this proposal.

3. **Allow new forklifts to generate displacement credits:** This proposal will have a positive fiscal and economic impact to forklift owners and operators as the number of credits they are eligible to generate will increase.

4. **Update the methodology to calculate the carbon intensity of electricity:** This proposal will result in a slight increase in the statewide CI which will slightly decrease the amount of base credits generated per unit of fuel used.

5. **Allow for the retirement of RECs to claim zero carbon electricity**: This proposal will have a significant positive fiscal and economic benefit to those who can retire RECs to generate incremental credits due to the large increase in credit generation. There is a cost to the acquisition and management of RECs in this proposal, but that cost is offset by the revenue from selling incremental credits resulting in a net benefit to the credit generator.

6. **Establish parties eligible to generate incremental credits:** This proposal will have a significant positive fiscal and economic benefit to the parties eligible to generate the incremental credits – EV charger owners, transit agencies, forklift owners and operators, utilities, and the Incremental Aggregator.

7. **Allow for advance crediting for certain fleets:** This proposal will have slight positive fiscal and economic benefit to the fleets that participate in this provision. The impact is slight since the advancing of credits effectively is a loan rather than granting extra credits; and that loan helps quicken the fuel cost and operations and maintenance benefits realized from switching from a petroleum fuel to electricity. As envisioned, the advancing of credits is intended to incentivize additional purchases of EVs and a quicker conversion of an entire fleet.

8. **Increase the frequency of residential EV crediting**: This proposal does not have a significant fiscal and economic impact. Approximately the same number of credits will be generated, but on a more frequent cycle; and the revenue from the sale of those credits will not significantly differ. This proposal may provide additional liquidity to the clean fuels market as the number of electricity credits that are generated in the future increases but this will not be significant in the near term.

Aggregate Fiscal Impact of the proposed rules

Overall, the proposals contained in this rulemaking will result in the generation of more credits and therefore may lower the program's overall cost of compliance to regulated parties, applying the basic economic principle of supply and demand.

Statement of Cost of Compliance

Oregon Department of Environmental Quality

For DEQ, implementing these proposals will require several new processes but they can all be accomplished with existing resources. DEQ believes that its existing reporting tool can accommodate many of the additional data requirements and that some minor manual adjustments might be needed for everything else. Most significantly, the establishment of the equity advisory committee and the Incremental Aggregator will require significant resources in the initial years but that cost difference should decrease in future years.

Other state agencies and local governments

Many other state agencies and local governments are generators of credits since they own EVs and chargers. Changes to the CI of electricity will affect the number of base credits generated. They will also have the option of generating the incremental credits for those chargers. Additionally, the advance crediting provision are available to these public entities which might be a strong incentive to advance fleet electrification goals. Many cities are also electric utilities and they will be subject to the additional reporting requirement.

Public

The fiscal and economic impact to the general public should be negligible in that no additional costs are anticipated. In fact, the public will benefit from lower air pollution and wherever EVs replace dirtier vehicles. The members of the public that are EV owners will likely see an increase in charging infrastructure and incentives that benefit the EV ecosystem broadly as credit generators reinvest their credit revenue.

Large businesses - businesses with more than 50 employees

Currently, approximately 200 entities are registered to participate in the Clean Fuels Program and approximately 50 of those entities are registered as credit generators and provide electricity as a transportation fuel. These credit generators are a combination of large and small businesses. The large businesses, approximately 45, are a mix of private EV charging companies, electric utilities, and local governments. As generators of electricity credits, large businesses will benefit from these proposed rules due to the potential to generate even more credits.

Small businesses – businesses with 50 or fewer employees

ORS 183.336 Cost of Compliance Effect on Small Businesses

1. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

Approximately 5 small businesses are affected by these proposed rules. The small businesses are primarily companies that are registered as an aggregator to assist larger companies in reporting data and managing credit transactions.

2. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

There is minimal additional reporting, recordkeeping and other administrative activities that are associated with these proposed changes that will affect the small businesses who will be impacted, and those costs are offset by the revenue those businesses are likely to receive from the additional credit generation that these proposed changes likely will facilitate.

3. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

There is minimal additional equipment, supplies, labor and increased administration for the small businesses that will be impacted by these proposed changes and those costs are offset by the revenue from the additional credit generation that these proposed changes likely will facilitate.

4. Describe how DEQ involved small businesses in developing this proposed rule.

Several of the registered small businesses participated in the rulemaking advisory committee (RAC) meetings and one was appointed to the RAC.

Documents relied on for fiscal and economic impact

Document title	Document location
List of CFP registered parties	DEQ 700 NE Multnomah Portland OR 97232
CFP Scenario Tool	https://www.oregon.gov/deq/Regulations/rulemaking/RuleDocuments/cfpe2021scenariotool.xlsx
Clean Fuels Program Electricity 2021 Rulemaking web page	https://www.oregon.gov/deq/Regulations/rulemaking/Pages/rcfpe2021.aspx

Advisory committee

DEQ appointed the Clean Fuels Program Electricity 2021 Rulemaking Advisory Committee to provide input on the proposed rules and for input on the fiscal and economic impact statement. As ORS 183.333 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses and complies with ORS 183.540.

The committee will review the draft fiscal and economic impact statement and will share its comments findings with DEQ staff, who will document those comments and findings.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because the proposed rules only affect transportation fuels used in Oregon.

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.