- WAC 173-424-540 Calculating credits and deficits. (1) General credit or deficit calculation method. Except as provided in subsections (2) and (3) of this section, credit and deficit generation must be calculated for all fuels included in WAC 173-424-520:
- (a) Using credit and deficit basics as directed in WAC 173-424-510;
- (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;
- (c) Calculating the adjusted energy in mega joules by multiplying the energy in mega joules from (b) of this subsection by the energy economy ratio of the fuel listed in Table 4 under WAC 173-424-900 or as approved by ecology under WAC 173-424-620, as applicable;
- (d) Calculating the carbon intensity difference by subtracting the value in (d)(i) from (ii) of this subsection:
- (i) The fuel's carbon intensity as approved under WAC 173-424-600 through 173-424-630, adjusted for the fuel application's energy economy ratio as listed in Table 4 under WAC 173-424-900 or as approved under WAC 173-424-620 as applicable;
- (ii) The clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under WAC 173-424-900 or diesel fuel and diesel substitutes listed in Table 2 under WAC 173-424-900, as applicable;
- (e) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in mega joules in (c) of this subsection by the carbon intensity difference in (d) of this subsection;
- (f) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in (e) of this subsection by 1,000,000; and
- (g) Determining under WAC 173-424-510(5) whether credits or deficits are generated.
- (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 2022 and earlier, credit and deficit generation must be calculated by:
- (a) Using credit and deficit basics as directed in WAC 173-424-510;
- (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;
- (c) Calculating the carbon intensity difference by subtracting
 (c)(i) from (ii) of this subsection:
- (i) The fuel's carbon intensity as approved under WAC 173-424-600 through 173-424-630, adjusted for the fuel application's energy economy ratio listed in Table 4 under WAC 173-424-900 as applicable;
- (ii) The clean fuel standard for gasoline or gasoline substitutes listed in Table 1 under WAC 173-424-900 or diesel fuel and diesel substitutes listed in Table 2 under WAC 173-424-900, as applicable;
- (d) Calculating the grams of carbon dioxide equivalent by multiplying the adjusted energy in mega joules in (b) of this subsection by the carbon intensity difference in (c) of this subsection;
- (e) Calculating the metric tons of carbon dioxide equivalent by dividing the grams of carbon dioxide equivalent calculated in (d) of this subsection by 1,000,000; and
- (f) Determining under WAC 173-424-600(5) whether credits or deficits are generated.
- (3) Residential electric vehicle charging. For electricity used in residential charging of electric vehicles, credit calculations must

be based on the total electricity dispensed (in kilowatt hours) to vehicles, measured by:

- (a) The use of direct metering (either submetering or separate metering) to measure the electricity directly dispensed to all vehicles at each residence; or
- (b) For residences where direct metering has not been installed, ecology will calculate the total electricity dispensed as a transportation fuel based on analysis of the total number of BEVs and PHEVs in a utility's service territory based on Washington state department of licensing records. Ecology will perform this analysis at least twice a year and issue credits based on it. Ecology will select one of the following methods for estimating the amount of electricity charged based on its analysis of which is more accurate and feasible at the time it is performing the analysis:
- (i) An average amount of electricity consumed by BEVs and PHEVs at residential chargers, based on regional or national data; or
- (ii) An analysis of the average electric vehicles miles traveled by vehicle type or make and model, which compares the total amount of estimated charging for those electric vehicle miles traveled with the total reported charging in those territories in order to determine the amount of unreported charging that can be attributed to residential charging. The analysis may be done on a utility territory specific basis.
- (iii) Using government published information on average miles per gallon equivalent data by vehicle type or make and model, average annual vehicle miles traveled, and electric energy consumed by BEVs and PHEVs.
- (c) If ecology determines after the issuance of residential electric vehicle credits that the estimate under (b) of this subsection contained a significant error that led to one or more credits being incorrectly generated, the error will be corrected by withholding an equal number of credits to the erroneous amount from the next generation of residential electric vehicle credits.
- (d) A credit generator or aggregator may propose an alternative method, subject to the approval of ecology upon its determination that the alternative method is more accurate than either of the methods described in (b) of this subsection.
- (e) Credits generated under this subsection will be calculated by ecology under subsection (1) of this section using the estimated amount of electricity under (b) of this subsection and issues at least twice per year into the WFRS account of the utility, its designated aggregator, or the backstop aggregator within three months of the close of that year.
- (4) Incremental credits. In calculating incremental credits for actions that lower the carbon intensity of electricity, the credit calculations must be performed based on subsection (1) of this section, except that the carbon intensity difference is calculated based on the carbon intensity of the renewable electricity and the carbon intensity used to calculate the base credits for that electric vehicle or charging equipment, and consistent with the following requirements, as applicable:
- (a) Incremental credits for **nonresidential charging** are generated upon the retirement of RECs that qualify under WAC 173-424-630(5) by the credit generator, or its aggregator, or by another entity on their behalf. For credit generators and their aggregators, RECs must be retired prior to or at the same time as the submittal as the quarterly report where the charging is being reported and REC retirement records

must be submitted with the quarterly report as supplemental documentation. RECs may be retired by another entity on behalf of the credit generator or aggregator for their electric vehicle charging so long as it is clearly documented and that documentation is submitted with the quarterly report.

- (b) For incremental credits generated using a utility renewable electricity product or power purchase agreement, evidence that the chargers were covered by such a product must be submitted at least annually along with a quarterly report. Upon request by ecology, any entity using a power purchase agreement or a utility renewable electricity product must produce evidence that the charging equipment was covered by that agreement or product for all time periods when the entity was claiming incremental credits.
- (c) Incremental credits are generated when the registered entity retires RECs on behalf of nonresidential electric vehicle charging.
- (d) Incremental credits for residential charging are generated by a utility or its aggregator when RECs are retired on behalf of that charging, or when a utility demonstrates to ecology that EVs are being charged by customers enrolled in its utility renewable electricity products.

[Statutory Authority: Chapter 70A.535 RCW. WSR 22-24-004 (Order 21-04), § 173-424-540, filed 11/28/22, effective 12/29/22.]