

# NW Energy Coalition

Attached are comments and redlines for Rulemaking - Chapter 173-444 WAC



## **RE: Comments on proposed rule language for Chapter 173-444 WAC regarding the Clean Energy Transformation Act rules**

October 6, 2020

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NW Energy Coalition (NWECC) submits the following comments on the proposed rules dated September 2, 2020 filed by the Department of Ecology (Ecology). NWECC submitted comments in late January on the first draft rules and again in May on the next round of drafts. Some of those previous comments are still pertinent and are cited again; a few comments are new to this proposal. Our comments will follow the sections by order in the proposed rule; only those sections that raise questions or for which we suggest edits are addressed. For this CR-102 version, we also submit a redlined copy of the rules.

NWECC appreciates staff's efforts to further refine the rules; clearly some changes are in response to suggestions that were made by stakeholders regarding the previous version. Generally, the rules seem consistent with the statute, but we continue to have concerns with the complexity of the calculations section.

As we have commented before, the rules still do not account for the totality of emission impacts from the use of fossil fuels, which is contrary to the intent of the Clean Energy and Transformation Act (CETA). As we transition Washington's electricity system to 100% clean energy, as stated at RCW 19.405.010(2), we need to account for all the emissions, not just the emissions created when fuel is combusted.

To achieve an emissions-free, renewable electrical system, *all* GHG emissions resulting from providing electric service must be accounted for. GHG content calculations should incorporate all combustion *and non-combustion emissions*, including upstream emissions in the fuel supply chain, emissions from the generation of fossil fueled electricity, including station service, spinning reserves, and the effect of transmission and distribution losses.

This more comprehensive approach to ghg emissions calculations is described by Commerce in the 2<sup>nd</sup> draft rules at 194-40-110(1)(b) which applies the Social cost of Greenhouse Gas emissions *"to all emission resulting from the generation of electricity using fossil fuels including*

*extraction, production, transmission and combustion.”* This acknowledges that all phases of the use of fossil fuels creates emissions, which should be the standard in Ecology’s approach as well.

For example, accounting for all emissions could make the cogeneration adjustment used in Equation 2 unnecessary, as well as change section (5) regarding the proposed calculation of transmission losses. Currently, section (5) addresses only one component of non-combustion emissions, transmission and it is not clear if that term includes distribution losses. The equation needs to account for other non-combustion emissions. Additionally, the 5% factor at (5)(b)(iii)(A) would need to be adjusted to reflect that change. In any case, the source of the base data for the factor, whatever its final value, needs to be cited in a footnote. While we suggest some language in the redline to reflect our concerns, (5) should be redrafted from (b) on to make clear that all emissions need to be included in the calculations.

We commented in January that, rather than simply continuing with the outdated 2007 APCC AR4 report’s Global Warming Potential value for emission rates, it would make sense for Ecology to update WAC 173-441-040 by adopting at least the newer AR5 emission values for CO<sub>2</sub>e from the IPCC’s Fifth Assessment Report, published in 2014. Since the IPCC’s Sixth Assessment is due in April of 2021, we suggest Ecology consider adopting the most recent standard when it acts; the lag time on adoption of the emission values is troubling.

### **WAC 173-444-020 - Definitions**

There are a few definitions we strongly urge be added to the definitions section:

“Asset Controlling Supplier”: California is the only state that has created such a designation and this term needs to be clearly defined, rather than simply referenced in the definition of “aggregate source”. For example, *“Asset Controlling Supplier” means a utility that is so designated by the California Air Resources Board because the utility sells energy from more than one source into California and for which electricity resource mix the CARB establishes a single emissions rate.*”

“Approved Alternative Data Source”: This term is found in all the equations. It is not clear if an alternative data source is limited to CARB and its emission determinations for Asset Controlling Suppliers or if the term is broader and is intended to allow other “data sources” of emissions to be used in the equations as well.

“Greenhouse gas emission content”: means a calculation expressed in carbon dioxide equivalents made by the department of ecology for the purposes of determining the complete greenhouse gas lifecycle emissions in electricity attributable to a fuel, including emissions resulting from the extraction, production, transport and complete combustion or oxidation of fossil fuels.

“Plant net output basis”: This term is used only once in the rules at WAC 173-444-040(5)(b)(ii)(A). It needs to be distinguished from both “sales basis”, which is used once the same section, and from “plant net electric generation” (as used on pages 6, 7 and 9).

“Utility Claims”: It is not clear how this term differs from “plant net electric generation” or from “total claims” in (5)(b)(i) (total claims is only used once in the rules and it is not clear to what amount of electricity it refers). Is this term meant to include partial output of a known generator (for example, a utility purchases just half of the output of a specified natural gas generator)? If “utility claims” it is meant to capture MWhs of specified purchases from generators that are not owned by the utility, that should be part of the definition.

### **WAC 173-444-060 – Eligible categories of energy transformation projects**

We appreciate Ecology’s edits and restructuring of this section which have, overall, improved the section, more closely aligned the rule with statute and made process and expectations clearer. We suggest an edit to (7)(d) to also include energy efficiency projects in excess of any other state obligations as described at RCW 19.405.020(18)(b)(i).

### **WAC 173-444-080 - Procedures for energy transformation projects.**

It is not clear why the 30-day comment period for provisional “validated” projects was dropped since the last draft. Instead of eliminating the opportunity for the public to comment on proposed energy transformation projects when Ecology provides an advisory validation opinion for a project, it would be better to require public comment for *any* proposed project, including those validated by third parties.

We strongly urge that the processes and procedures that will be established in the Ecology guidance document for third party verification at (9)(c) include a public review opportunity and that the 30-day public comment that was previously required at (10)(g) be reinstated. We have so indicated in our redlined rules.

The proposed rules rightly require the projects be validated prior to implementation, monitored while functioning; and performance and outcomes verified to assure the actual benefits of the project over time. This is crucial, as the statute allows for no more than 20% of the 2030 standard to be met with ETPs, which should in actual practice move the state towards a cleaner grid.

We appreciate your consideration of our comments and of the suggested redlines.

Cordially,

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**Chapter 173-444 WAC**  
**CLEAN ENERGY TRANSFORMATION RULE**

NEW SECTION

**WAC 173-444-010 Purpose and scope.** The purpose of this chapter is to establish rules that electric utilities shall use to comply with parts of the Washington Clean Energy Transformation Act (CETA), chapter 19.405 RCW.

(1) The purpose of the provisions in Part I of this chapter is to establish methods for calculation of the greenhouse gas emissions content in electricity an electric utility supplies to its retail electric customers in Washington state. The calculation methods in Part I of this chapter are developed under the requirements of RCW 19.405.070 and 19.405.020(22).

(2) Part II of this chapter implements the requirements under RCW 19.405.020(18), 19.405.040, and 19.405.100(7). The purpose of the provisions in Part II of this chapter is to establish:

(a) The processes for identifying project categories that are eligible for compliance with CETA as energy transformation projects.

(b) The process and requirements for developing the standards, methodologies, and procedures for evaluating energy transformation projects.

NEW SECTION

**WAC 173-444-020 Definitions.** The definitions in this section apply throughout this chapter unless the context clearly requires otherwise. If this section provides no definition, the definition found in chapter 173-441 WAC applies.

(1) **"Additionality"** means a condition where a project would not or did not come into being but for the investment action taken by the electric utility (or utilities) for the purposes of complying with chapter 19.405 RCW, in accordance with RCW 19.405.040 (2)(e) and (f) and this section.

(2) **"Aggregate source"** means:

(a) Electric power originating from the same source type from one or more power plants that cannot be traced back to a specific power plant with data published in Form EIA-923; or

(b) Electric power obtained from a single asset-controlling supplier, as designated by the California Air Resources Board, with an emissions rate approved by the regulatory agency. This can include multiple source types.

(X) "Approved alternative Data Source" should establish standard for other allowed data sources.

(3) **"Approving body"** means the governmental agency, board, commission, or other entity that is granted the authority to ensure compliance with RCW 19.405.060 or 19.405.090 and therefore provide approval to a project intended to serve as an energy transformation project.

(X) "Asset Controlling Supplier" means a utility that is so designated by the California Air Resources Board because the utility sells energy from more than one source into California

and for which electricity resource mix the CARB establishes a single emissions rate."

(4) "**Baseline**" means a reference case, projection, or estimation of project performance against which actual project performance can be measured. The baseline condition for a project is a reasonable representation of conditions that would likely have occurred during the energy transformation project implementation period if the project had not been implemented.

(5) "**Biogenic CO<sub>2</sub>**" is defined in 40 C.F.R. Part 98 as adopted in chapter 173-441 WAC.

(6) "**Biomass energy**":

(a) Includes:

(i) Organic by-products of pulping and the wood manufacturing process;

(ii) Animal manure;

(iii) Solid organic fuels from wood;

(iv) Forest or field residues;

(v) Untreated wooden demolition or construction debris;

(vi) Food waste and food processing residuals;

(vii) Liquors derived from algae;

(viii) Dedicated energy crops; and

(ix) Yard waste.

(b) Does not include:

(i) Wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic;

(ii) Wood from old growth forests; or

(iii) Municipal solid waste.

(7) "**Carbon dioxide equivalent**" or "**CO<sub>2</sub>e**" means a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential as established in Table A-1 in WAC 173-441-040.

(8) "**Commission**" means the Washington utilities and transportation commission.

(9) "**Energy Information Administration**" or "**EIA**" means the U.S. Department of Energy's Energy Information Administration.

(10) "**Energy transformation project**" has the same meaning as RCW 19.405.020(18).

(11) "**Environmental Protection Agency**" or "**EPA**" means the U.S. Environmental Protection Agency.

(12) "**Form EIA-923**" means the survey data published by the U.S. Energy Information Administration that describes detailed electric power data, monthly and annually, on electricity generation, fuel consumption, fossil fuel stocks, and receipts at the power plant and prime mover level. *Generation and Fuel Data*, page 1, is typically used for compliance with this chapter.

(13) "**Fossil fuel**" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such a material.

(14) "**Greenhouse gas**," "**greenhouse gases**," "**GHG**," and "**GHGs**" includes carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). "Greenhouse gas" also includes any other gas or gases designated by ecology by rule in Table A-1 in WAC 173-441-040.

(x) "**Greenhouse gas emission content**": means a calculation expressed in carbon dioxide equivalents made by the department of ecology for the purposes of determining the complete greenhouse gas lifecycle emissions in electricity attributable to a fuel, including

emissions resulting from the extraction, production, transport and complete combustion or oxidation of fossil fuels.

(15) **"Megawatt-hour"** or **"MWh"** means one thousand kilowatt-hours or one million watt-hours.

(16) **"Net output basis"**: This term is used only once in the rules at WAC 173-444-040(5)(b)(ii)(A). It needs to be distinguished from both "sales basis", which is used once the same section, and from "plant net electric generation" (as used on pages 6, 7 and 9).

(17) **"Non-emitting electric generation"** means:

(a) Electricity from a generating facility or a resource that provides electric energy, capacity, or ancillary services to an electric utility and that does not emit greenhouse gases as a by-product of energy generation; and

(b) Does not include renewable resources.

(17) **"Permanent"** means an emission reduction that can be assured and demonstrated by application of basic scientific principles to:

(a) Be nonreversible; or

(b) Exist for a period of not less than one hundred years except in the case of any project subject to WAC 463-85-200 and related requirements; or

(c) Exist for the time period incorporated into the definition for permanent sequestration in case of any projects subject to WAC 463-85-200 and related requirements.

(18) **"Project"** means a scheme or plan for utilizing goods or services to accomplish a goal, including by implementing a program or by facilitating the placement or utilization of machinery or infrastructure.

(19) **"Protocol"** means a compendium of principles, procedures, criteria, processes, methodologies, rules, or other requirements that ensure uniform or consistent application of those elements across electric utilities in the implementation of energy transformation projects.

(20) **"Regulatory agency"** means the Washington utilities and transportation commission for investor-owned utilities or the department of commerce for consumer-owned utilities.

(21) **"Renewable hydrogen"** means hydrogen produced using renewable resources both as the source for the hydrogen and the source for the energy input into the production process.

(22) **"Renewable natural gas"** means a gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters.

(23) **"Renewable resource"** means:

(a) Water;

(b) Wind;

(c) Solar energy;

(d) Geothermal energy;

(e) Renewable natural gas;

(f) Renewable hydrogen;

(g) Wave, ocean, or tidal power;

(h) Biodiesel fuel that is not derived from crops raised on land cleared from old growth or first growth forests; or

(i) Biomass energy.

(24) **"Source type"** or **"fuel type"** means the technology or fuel used to generate electricity. This typically follows the classification of fuel type codes from Form EIA-923.

(25) **"Unspecified electricity"** means an electricity source for which the fuel attribute is unknown or has been separated from the energy delivered to retail electric customers.



(26) **"Utility Claims"**: It is not clear how this term differs from "plant net electric generation" or from "total claims"; if it is meant to capture MWhs of market purchases, that should be explicitly stated in a definition.

NEW SECTION

**WAC 173-444-030 Applicability.** The provisions of this chapter apply to:

- (1) Consumer-owned utilities as defined in RCW 19.405.020(10).
- (2) Investor-owned utilities as defined in RCW 19.405.020(24).

**PART I - CALCULATION OF GREENHOUSE GAS EMISSIONS CONTENT IN ELECTRICITY**

NEW SECTION

**WAC 173-444-040 Greenhouse gas content calculation.** Use the following methods to calculate the greenhouse gas emissions content in electricity.

(1) **Utility emissions.**

(a) Total annual utility greenhouse gas emissions are calculated using Equation 1 of this subsection.

**Equation 1**

Utility Emissions = EPA + EIA + unspecified

Where:

- Utility emissions = Total of all GHG emissions for the facility for the calendar year, metric tons CO<sub>2</sub>e/year.
- EPA = Total of all GHG emissions calculated using the EPA methodology in subsection (2) of this section, metric tons CO<sub>2</sub>e/year.
- EIA = Total of all GHG emissions calculated using the EIA methodology in subsection (3) of this section, metric tons CO<sub>2</sub>e/year.
- Unspecified = Total of all GHG emissions calculated using the unspecified electricity methodology in subsection (4) of this section, metric tons CO<sub>2</sub>e/year.

(b) Do not include non-emitting electric generation and renewable resources when calculating utility emissions using Equation 1 of this subsection.

(c) Methodology selection:

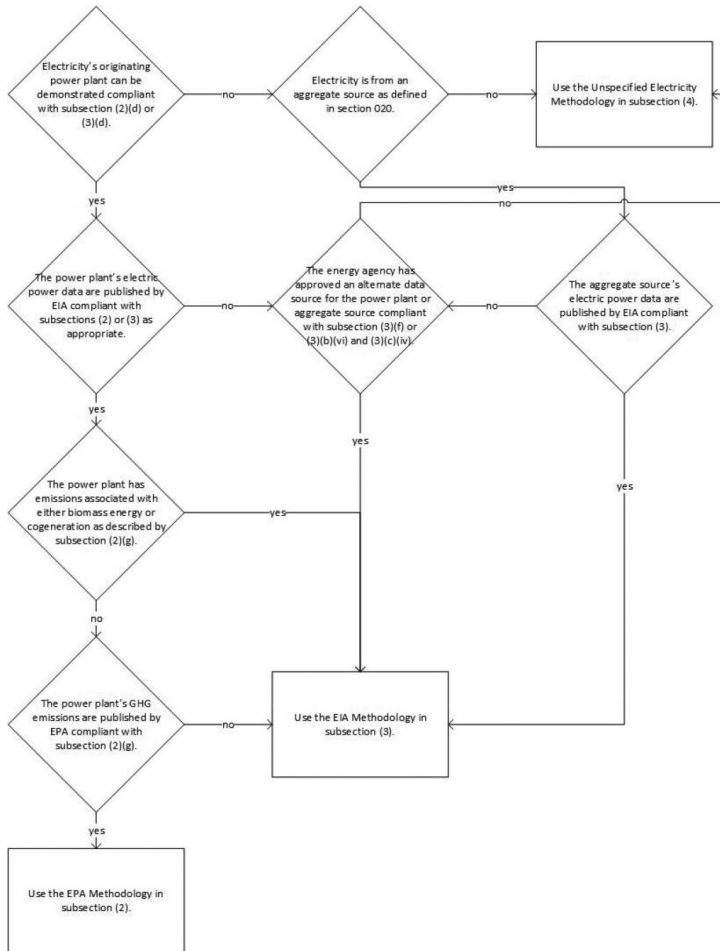
(i) Use the conditions in subsections (2)(g), (3)(f), and (4) of this section to determine the appropriate method for a given quantity of electricity. Figure 1 of this subsection provides a simplified representation of the method selection process, but subsections (2)(g), (3)(f), and (4) of this section take precedence.

(ii) The methodologies in subsections (2) through (4) of this section are ordered from most to least preferred, with subsection (2) of this section being the most preferred.

[4 ] OTS-2372.2

(iii) The regulatory agency may instruct a utility to use a specific method from this section on a case-by-case basis if the regulatory agency determines another method is not appropriate in that case.

Figure 1: Simplified representation of the method selection process



(2) **EPA methodology.** This methodology calculates greenhouse gas emissions content in electricity using public data from the Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program established under 40 C.F.R. Part 98 as adopted by WAC 173-441-120 and public data from the Energy Information Administration's (EIA) Form EIA-923 program.

(a) GHG emissions from each power plant are calculated individually then summed to create a utility specific total for this method using Equation 2 of this subsection.

**Equation 2**

$$\text{EPA} = \frac{\sum_{i=1}^n \text{EPA plant GHG emissions} \times \text{cogeneration correction factor} \times (\text{utility claims} + \text{transmission non-Combustion losses})}{\text{plant net electric generation}}$$

Where:

- EPA = Total of all GHG emissions calculated using the EPA methodology, metric tons CO<sub>2</sub>e/year.
- EPA plant GHG emissions = sum of all GHG emissions from the individual power plant as calculated by subsection (2)(b) of this section, metric tons CO<sub>2</sub>e/year.
- Cogeneration correction factor = ratio of electric energy to total energy for the individual power plant as calculated by subsection (2)(f) of this section, unitless.
- Plant net electric generation = sum of all net generation from the individual power plant as calculated by subsection (2)(c) of this section, MWh/ year.
- Utility claims = sum of all utility claims for the individual power plant as calculated by subsection (2)(d) of this section, MWh/year.
- Transmission losses = estimate of transmission losses between the individual power plant and utility customers as calculated by subsection (2)(e) of this section, MWh/year.
- n = number of power plants with utility claims using this method in the given calendar year.

(b) EPA plant GHG emissions. GHG emissions for this method are defined as the sum of all Subpart C and Subpart D emissions from the individual power plant as published by EPA based on 40 C.F.R. Part 98 reporting consistent with the methods adopted in WAC 173-441-120. Emissions are on a calendar year basis and in units of metric tons CO<sub>2</sub>e. Use emissions values specific to the calendar year in the calculation. If EPA has not yet published emissions values for the calendar year in the calculation, use the most recent five year rolling average published emissions values. The total must include all reported GHGs, including biogenic CO<sub>2</sub>, listed in Table A-1 of WAC 173-441-040 converted into CO<sub>2</sub>e as specified in that section.

(c) Plant net electric generation. Sum of all annual net generation (megawatt-hours) from Form EIA-923 for the power plant for the calendar year for all reported fuel type codes.

(d) Utility claims. Claims of the reporting utility for the power plant measured at the busbar for the calendar year as established by:

(i) Information submitted to the department of commerce under RCW 19.29A.140 and rules implementing that section; or

(ii) Information reported to the utilities and transportation commission under WAC 480-109-300 or its successor, should that provision be amended or recodified.

(e) Transmission losses. Calculate transmission losses using subsection (5) of this section.

(f) Cogeneration correction factor. Account for nonelectric heat use at the power plant by dividing the sum of all annual Elec Fuel Consumption MMBtu by the sum of all annual Total Fuel Consumption MMBtu from Form EIA-923.

(g) Use this methodology only when all of the following conditions are met for the individual power plant and calendar year:

[ 6 ]The utility can demonstrate the originating power plant for the electricity with a claim that meets the standards of subsection

(2) (d) of this section.

(i) EPA has published GHG emissions totals for the power plant consistent with subsection (2) (b) of this section. The published report must not be flagged by EPA as having not met EPA's verification requirements.

(ii) Published EPA GHG emissions for the power plant must not include any biomass energy.

(iii) EIA has published electric power data for the power plant consistent with subsections (2) (c) and (f) of this section.

(iv) The power plant is not classified as a combined heat and power plant in that year's Form EIA-923 report.

(v) The cogeneration correction factor calculated in subsection (2) (f) of this section must be 0.9 or greater.

(3) **EIA methodology.** This methodology calculates greenhouse gas emissions content in electricity using public data from the EIA's Form EIA-923 program or an approved alternate data source.

(a) GHG emissions from each power plant or aggregate source are calculated individually then summed to create a utility specific total for this method using Equation 3 of this subsection.

**Equation 3**

$$EIA = \sum_{i=1}^n \frac{\text{EIA GHG emissions}}{\text{net electric generation}} \times (\text{utility claims} + \text{transmission GHG losses})$$

Where:

- EIA = Total of all GHG emissions calculated using the EIA methodology, metric tons CO<sub>2</sub>e/year.
- EIA GHG emissions = sum of all GHG emissions from the individual power plant or aggregate source as calculated by subsection (3)(b) of this section, metric tons CO<sub>2</sub>e/year.
- Net electric generation = sum of all net generation from the individual power plant or aggregate source as calculated by subsection (3)(c) of this section, MWh/ year.
- Utility claims = sum of all utility claims for the individual power plant or aggregate source as calculated by subsection (3)(d) of this section, MWh/ year.
- Transmission losses = estimate of transmission losses between the individual power plant or aggregate source and utility customers as calculated by subsection (3)(e) of this section, MWh/year.
- n = number of power plants and aggregate sources with utility claims using this method in the given calendar year.

(b) EIA GHG emissions. GHG emissions for this method are defined as the sum of all GHG emissions from the individual power plant or aggregate source based on fuel quantities published by EIA or from an

approved alternate source. Emissions are on a calendar year basis and in units of metric tons CO<sub>2</sub>e.

(i) GHG emissions are calculated separately for either:

(A) Whenever possible: Each power plant, calendar year, and reported fuel type; or

(B) When power plant information is not available: Each aggregate source, calendar year, and source type.

(ii) GHG emissions for non-emitting electric generation and renewable resources must be calculated, but kept separate from other types of GHG emissions.

(iii) GHG emissions, including CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, from combustion are calculated using the Tier 1 Calculation Methodology in Subpart C of 40 C.F.R. Part 98 as adopted by WAC 173-441-120.

(A) For fuel quantity use one of the following:

(I) For plant level emissions use annual electric fuel consumption quantity; or

(II) For aggregate source level emissions use the total fuel consumption quantity for the aggregate source.

(III) The regulatory agency may approve an alternate fuel quantity data source for the plant or aggregate source.

(B) Use WAC 174-441-080 to convert units as needed.

(C) The high heat value, CO<sub>2</sub> emissions factor, CH<sub>4</sub> emissions factor, and N<sub>2</sub>O emissions factor for the following source types are assumed to be zero:

(I) Geothermal;

(II) Nuclear;

(III) Solar;

(IV) Water;

(V) Wind.

(D) Calculate emissions for carbon dioxide, methane, and nitrous oxide. Calculate total GHG emissions for each fuel type using Equation A-1 of WAC 173-441-030.

(iv) Fugitive CO<sub>2</sub> emissions from steam geothermal sources must be calculated by multiplying plant net electric generation from steam geothermal sources as described in subsection (3)(c) of this section by 0.04028 metric tons/MWh. Add this value to the combustion emissions calculated in subsection (3)(b)(iii) of this section.

(v) Sum total GHG emissions for all fuel types to get the total power plant or aggregate source GHG emissions for the year, including non-emitting electric generation and renewable resources. Provide a second total that excludes non-emitting electric generation and renewable resources.

(vi) GHG emissions from an asset-controlling supplier aggregate source may be a single value, including multiple source types, specific to that asset-controlling supplier provided that the value was originally calculated in accordance with this chapter and approved by the regulatory agency.

(c) Net electric generation. Calculate the net electric generation, using one of the following:

(i) For plant net electric generation sum all net generation (megawatt-hours) for the power plant for the calendar year for all reported fuel type codes;

(ii) For aggregate source net electric generation sum all net generation (megawatt-hours) for the aggregate source for the calendar year;

(iii) The regulatory agency may approve an alternate net electric generation data source for the plant or aggregate source; or

(iv) Net electric generation from an asset-controlling supplier aggregate source may be a single value, including multiple source types, specific to that asset-controlling supplier provided that the value was originally calculated in accordance with this chapter and approved by the regulatory agency.

(d) Utility claims. Claims of the reporting utility for the power plant or aggregate source measured at the busbar for the calendar year as established by:

(i) Information submitted to the department of commerce under RCW 19.29A.140 and rules implementing that section; or

(ii) Information reported to the utilities and transportation commission under WAC 480-109-300 or its successor, should that provision be amended or recodified.

(e) Transmission losses. Calculate transmission losses using subsection (5) of this section.

(f) Use this methodology only when the following conditions are met for the individual power plant or aggregate source and calendar year:

(i) The utility can demonstrate the originating power plant or aggregate source for the electricity with a claim that meets the standards of subsection (3)(d) of this section.

(ii) One of the following conditions is met:

(A) EIA has published electric power data for the power plant or aggregate source consistent with subsection (2)(b) and (c) of this section; or

(B) The regulatory agency has approved an alternate data source for the plant or aggregate source.

(4) **Unspecified electricity.** Use Equation 4 of this subsection when calculating greenhouse gas emissions content in electricity for unspecified electricity.

#### Equation 4

$$\text{unspecified} = \text{UE} \times \text{UCO}_{2e}$$

Where:

- Unspecified = Total of all GHG emissions calculated using the unspecified electricity methodology, metric tons CO<sub>2e</sub>/year.
- UE = Total electricity subject to this method, MWh/ calendar year.
- UCO<sub>2e</sub> = 0.437 metric tons CO<sub>2e</sub>/MWh of electricity.

(5) **Transmission GHG losses** Calculate **transmission GHG losses** using the following method as directed by the regulatory agency.

(a) Calculate transmission losses at the following levels from most to least preferred depending on data availability:

(i) Specific to the individual power plant;

(ii) Specific to the aggregate source;

(iii) Generalized for the utility.

(b) Use one of the following to calculate **transmission GHG losses**:

(i) If utility claims are reported on a sales basis, then multiply total sales in MWh by  $1 - (\text{retail sales MWh} / \text{total claims MWh})$ .

Commented [JB1]: The intent of this section should be to estimate all the emissions not already captured in other calculations, not just the emissions related to transmissions.  
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- (ii) Transmission losses in this equation are zero MWh if:  
(A) ~~Utility claims are reported on a plant net output basis; or~~  
(B) The emissions rate already includes all greenhouse gas emissions transmission losses; or  
(C) The emissions rate is from an asset-controlling supplier and includes all non-combustion emissions, where that emissions rate was approved by the regulatory agency.
- (iii) If unable to calculate transmission losses using subsection (5) (b) (i) or (ii) of this section, then multiply utility claims in MWh by:
- (A) 5%;
- (B) A value specified by the regulatory agency that includes combustion and non-combustion emissions.

Commented [JB2]: The source of the value should be cited. It should also reflect all non-combustion emissions.

## PART II - ENERGY TRANSFORMATION PROJECTS

### NEW SECTION

#### **WAC 173-444-050 Requirements for energy transformation projects.**

(1) Electric utilities that invest in energy transformation projects as a means to assist in meeting the greenhouse gas neutral standard in RCW 19.405.040 must fulfill the requirements of this chapter.

(2) A project intended to serve as an energy transformation project must conform to a project category included in the list of eligible categories of energy transformation projects established through the process in WAC 173-444-060.

(3) Electric utilities that invest in energy transformation projects must use the criteria established through the requirements and processes in WAC 173-444-070.

(4) Electric utilities that invest in energy transformation projects must use the verification methods, reporting standards, and other procedures established in WAC 173-444-080.

(5) The commission, the governing boards of consumer-owned utilities, or the department of commerce may have rules or requirements related to energy transformation projects in addition to the requirements of this chapter. Fulfilling the requirements of this chapter is a necessary, but not final, step toward receiving approval for a candidate project intended as an energy transformation project under chapter 19.405 RCW. Fulfilling the requirements of this chapter does not provide a basis for guaranteeing a positive decision by an approving body for a candidate project intended as an energy transformation project.

(6) Approval or rejection of a particular energy transformation project occurs through the governing boards of consumer-owned utilities, the commission, or other applicable approving bodies with the necessary jurisdiction over the financial decisions of the electric utility or utilities proposing the candidate energy transformation project.



NEW SECTION

**WAC 173-444-060 Eligible categories of energy transformation projects.** (1) Ecology will identify eligible categories of energy transformation projects. A list of these eligible categories of energy transformation projects will be established, expanded, and maintained through the processes in this section.

(2) This list will identify categories of projects that have been subject to a preliminary but not definitive evaluation and screening relative to the conditions, requirements, and criteria established in RCW 19.405.040 and 19.405.020(18) for energy transformation projects.

(3) Inclusion on this list of a project category does not grant or imply preapproval or preauthorization for any particular project that may conform to a listed category relevant to that project.

(4) Inclusion of a category on this list does not indicate a final determination as to whether a particular project has or will meet the criteria established in WAC 173-444-070.

(5) In order for a project category to be included in this list, hypothetical projects that may fall under that category must have the potential of meeting all of the following conditions:

- (a) Providing energy-related goods or services;
- (b) Reducing fossil fuel consumption and GHG emissions attributable to that consumption;
- (c) Providing benefits to the customers of an electric utility or electric utilities in a manner that can satisfy the equity considerations required for this chapter;
- (d) Associated with the consumption of energy in Washington;
- (e) Being enforceable by the state of Washington;
- (f) Providing quantifiable benefits in units of energy or units of GHG emissions;
- (g) Resulting in permanent reductions of greenhouse gas emissions; and
- (h) Satisfying the additionality tests required by RCW 19.405.040 (2) (e) and (f).

(6) In addition to the conditions in subsection (4) of this section in order for a project category to be included in this list, potential projects that may fall under that category must not:

- (a) Be intended to generate electricity for delivery, sale, or other provision of electricity to retail customers as a good or service as the primary purpose of the project. Indirect provision of stored electricity to retail customers as a secondary benefit (e.g., certain grid-connected vehicle energy storage technologies) is not in and of itself a disqualifying factor. Generation of electricity for another energy-related purpose (e.g., vehicle propulsion) is not disqualifying;
- (b) Have the capacity to create a new use of fossil fuels resulting in a net increase of fossil fuel usage;
- (c) Have the capacity to be credited as a resource that could meet the standard established in RCW 19.405.040 (1)(a) in addition to use as an alternative compliance mechanism consistent with this chapter.

(7) Ecology will begin preparation of an initial list of eligible program categories within thirty days after the effective date of this chapter.

(a) Ecology will include in its evaluation of project categories that should be considered eligible all of the project type descriptions and groupings listed for consideration in RCW 19.405.020 (18)(b).

(b) Ecology will provide a thirty-day public comment period for interested parties to submit to ecology project categories, concepts, or groupings not described in RCW 19.405.020 (18)(b), and any justification or background materials for the submission, which they wish to have subject to the evaluation process for adding to this list.

(c) In the preparation of the initial list ecology will take into account comments received in the rulemaking process for this section, including recommendations for the evaluation of project categories, concepts, or groupings not described in RCW 19.405.020 (18)(b) and comments regarding the appropriateness of including those described in RCW 19.405.020 (18)(b).

(d) At a minimum, ecology will include project categories in the initial list that have the potential to:

(i) facilitate electrification of the transportation sector, including at least one project category pertaining to the establishment of electric vehicle charging infra-structure and at least one category pertaining to either the use or supply of renewable hydrogen.

(ii) facilitate home weatherization or other energy efficiency measures in excess of the target established under RCW 19.285.040(1), other state obligations or other obligations in effect on May 7, 2019.

(8) After completing its evaluation, ecology will post on its website a draft list of eligible categories of energy transformation projects along with an evaluation report summarizing its analysis process for public comment. Ecology will send out notice to invite the public comment on the draft list. The public comment period for this stage will be not less than sixty days.

(9) Not less than ninety days after the close of the comment period ecology will post on its website a revised initial list of eligible categories of energy transformation projects. This will be the initial list of eligible project categories.

(10) Ecology can modify or add to this initial list of project categories after posting it on its website. Additions or modifications to this list must:

(a) Be capable of meeting the conditions established in subsections (5) and (6) of this section; and

(b) Go through a public review and comment process for at least forty-five days.

(11) Ecology will allow interested parties to submit requests for consideration of additional or modified categories of projects after posting this initial list, through a method approved by ecology. Prior to making a decision on the request, ecology will:

(a) Evaluate whether the requested additional or modified categories meet the conditions established in subsections (4) and (5) of this section; and

(b) Send notice and post on its website for public comment any proposed additions or modifications to the list of project categories for a period of not less than forty-five days before any final determination.

NEW SECTION

**WAC 173-444-070 Criteria for energy transformation projects.**

(1) Criteria for use by electric utilities and the manner in which to use them for projects intended to serve as energy transformation projects will exist in a comprehensive protocol authored and maintained by ecology, as well as in supporting documents derived from a variety of sources.

(2) The goal of the comprehensive protocol is to ensure that the criteria, standards, elements, and requirements established in RCW 19.405.020(18), 19.405.040, and 19.405.100(7) are clearly defined, relevant to, and actionable for projects that conform to eligible categories of energy transformation projects. The comprehensive protocol will be applicable to project proponents, electric utilities, verification entities, oversight authorities, and interested parties.

(3) At a minimum the comprehensive protocol will include context, instructions, quantitative factors, methodologies, procedures, data, and external references to address the following:

(a) Applicability (pursuant to RCW 19.405.020 (18)(a)): Description of the range of projects to which the protocol applies in a manner consistent with the list of eligible categories of energy transformation projects developed and maintained through WAC 173-444-060.

(b) Assessment parameters (pursuant to RCW 19.405.020 (18)(a) and 19-405-040(3)):

(i) Identification of the primary effects of the project, including fossil fuel reductions and energy impacts; which will be necessary for analysis and included in the project plan; and

(ii) Key secondary effects, such as benefits to utility customers, and the geographic regions in which these effects occur which are, at a minimum, important inputs into other elements of the project plan.

(c) Temporal scope (pursuant to RCW 19.405.040 (2)(a), (b), and

(d)):

(i) Identification of the time scale over which the project is expected to persist; and

(ii) The capability of the project to provide the projected or expected level of benefits over time, in addition to any procedures for ensuring those benefits over time.

(d) Quantification methods (pursuant to RCW 19.405.040 (2)(a), (b), and (4)):

(i) Methodologies to be employed to measure or estimate energy benefits, emission reductions and other effects from the project categories address in the comprehensive protocol, potentially varying from project category to project category; and

(ii) Proration methods, as applicable to a particular project category, to distinguish and separate electricity use from fossil fuel effects; and

(iii) Conversion factors for greenhouse gas emissions from projects, to be used as directed in the relevant methodologies to ensure the project benefits can be expressed in units of energy for compliance purposes if the use of direct energy benefits are not appropriate.

(e) Baseline procedures (pursuant to RCW 19.405.040 (2)(a), (b), and (4)): Conditions and procedures by which to establish a baseline or benchmark against which to measure project performance over time.

(f) Equity effects (pursuant to RCW 19.405.020 (18)(a) and 19.405.040(8)):

(i) Narrative or analysis sufficient to contribute to the overall demonstration, consistent with the requirements of an approving body or regulatory agency to implement RCW 19.405.040(8), that the benefits to utility customers identified in (b) of this subsection are occurring through:

(A) An equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; and

(B) Long-term and short-term public health and environmental benefits and reduction of costs and risks; and

(C) Energy security and resiliency.

(ii) Any other information to ensure that the project plan provides the necessary information and inputs for any determinations, processes, or other steps required by the approving bodies or regulatory agencies for their assessment of the equity requirements in chapter 19.405 RCW.

(g) Fossil fuel effects (pursuant to RCW 19.405.040(3)): Analysis sufficient to demonstrate that the project does not create a new use of fossil fuels resulting in a net increase of fossil fuel usage.

(h) Additionality tests (pursuant to RCW 19.405.040 (2) (e) and

(f)):

(i) Procedures or demonstrations that the project is not required by another statute, rule, or other legal requirement; and

(ii) Not reasonably assumed to occur absent the investment in the project, or, if an investment has already been made, not reasonably assumed to occur absent additional funding in the near future.

(i) Monitoring and reporting procedures (pursuant to RCW 19.405.100(7)): A description of the planned approaches or procedures that ensure that project outcomes are measurable, and reported over time through regulatory requirements or voluntary action, including any such procedures that an approving body may put in place.

(j) Verification procedures (pursuant to RCW 19.405.040 (2) (d) and 19.405.100(7)):

(i) Demonstration or attestation of commitment to third-party verification of the project, for the period of time for which the benefits of the project are proposed to be applied toward the requirements of chapter 19.405 RCW, in a manner consistent with the requirements of WAC 173-444-080; and

(ii) Meeting or ensuring compliance with any additional project verification requirements for the project category which may intersect with any of the criteria identified in this section, such as fuel inspections or infrastructure inspections.

(k) Enforcement regimes (pursuant to RCW 19.405.040 (2)(c)): Identification of relevant regulatory or compliance authorities that have jurisdiction over aspects of the project to establish which jurisdiction or jurisdictions have the authority to enforce, and whether the project is enforceable by the state of Washington.

(4) The comprehensive protocol may adopt or adapt other protocols, methodologies, guidance, or similar documents in whole or in part from other project-based programs or policy bodies, and apply those elements to some or all of the included elements of the comprehensive protocol.

(5) Additional information or analysis may be required for a given program category or categories by the comprehensive protocol.

(6) Ecology will post the initial comprehensive protocol for public comment for a period of not less than sixty days before finalizing the initial version of the protocol.

(7) Ecology will modify or expand the comprehensive protocol to reflect new information, improve the applicability of the embodied in-

formation to existing projects, and to ensure the ability of the comprehensive protocol to incorporate and account for new projects.

(a) Ecology will establish a web-based mechanism, as well as alternative comment pathways, for soliciting comment on the comprehensive protocol to ensure timely updates are possible.

(b) Ecology will evaluate the comprehensive protocol every six months and update it as necessary.

(8) Ecology will post any such modifications to the existing comprehensive protocol for public comment for a period of not less than thirty days before making any changes to the protocol.

(9) The publication process for the comprehensive protocol will use a versioning system, so that the version of the protocol in place at the time that it is used for the purposes outlined in this chapter will be easily discernible and memorialized for use in other processes.

(10) Ecology will post the most recent version of the comprehensive protocol and supporting documents on the agency website and will make them available in alternative forms upon request.

#### NEW SECTION

##### **WAC 173-444-080 Procedures for energy transformation projects.**

(1) Electric utilities must follow the processes and procedures in this section in order for energy transformation projects to be eligible for use.

(2) To facilitate the processes in this section an electric utility must prepare a project plan describing the project intended to qualify as an energy transformation project, how the project should work, and how the project conforms to the criteria and requirements in the comprehensive protocol.

(3) Electric utilities must submit the project plan to the validating or verifying entities and to approving bodies consistent with the applicable requirements of the comprehensive protocol.

(4) The comprehensive protocol that ecology develops will provide the required criteria and address the manner in which electric utilities or their designated representatives should apply the criteria to prepare and submit the project plan.

(5) The comprehensive protocol will include reporting, formatting, and organizational requirements for the creation of the project plan to promote consistency in explanation and ease of interpretation for use in the project approval process for energy transformation projects.

(6) The approving body may require additional information or plan elements to be included in this project plan beyond those that are required by the comprehensive protocol.

(7) The project plan must be validated to verify that the proposed project conforms to the comprehensive protocol and any supporting documents referenced in that protocol. This verification step validates whether the project, as proposed in the project plan, meets the following conditions:

(a) The project plan is complete in that every issue required to be addressed by the comprehensive protocol has a sufficient response in the project plan.

(b) The narrative responses in the project plan provides a sufficient justification or evidentiary basis that, as proposed, the

project is capable of meeting the requirements of the protocol and any supporting documents referenced in the protocol.

(8) The validation step in subsection (7) of this section can be accomplished in one of the following two ways, unless the approving body mandates the use of only one approach:

(a) Through third-party verifier or verifying team according to subsection (9) of this section; or

(c) Through a voluntary request by the electric utility to ecology according to subsection (10) of this section.

(d) If a third party is used for the validation process in subsection (7) of this section, that entity must meet the following requirements:

(a) The third-party verifier, or the firm employing the verifier or verifying team, must be accredited or approved by at least one of the following:

(i) The American National Standards Institute National Accreditation Board accreditation program for Greenhouse Gas Validation/Verification Bodies.

(ii) The California Air Resources Board under California's Regulation for the Mandatory Reporting of GHG emissions.

(iii) Through another accreditation program by prior approval of ecology if it is deemed by ecology that the accreditation program is of equal stringency to (a)(i) or (ii) of this subsection.

(e) The firm employing the verifier or verifying team, or an independent verifier if there is no team or firm involved, must be able to demonstrate that there is no conflict of interest in their evaluation. All verifiers must sign the conflict of interest declaration through a form and process designated by ecology.

(f) Once the firm employing the verifier or verifying team or independent verifier judges that the project plan for a project is complete, the utility will post the relevant documents for public comment for a period of forty-five days.

(e) The processes and procedures for using a third-party verification service will be established by ecology through a guidance document. After completion by ecology this guidance document will be posted for public comment for a minimum of thirty days.

(9) The validation step in subsection (7) of this section can also be accomplished through a voluntary request by the electric utility to ecology for a validation opinion for the project. This validation opinion will be conducted as follows:

(a) Ecology will first conduct a completeness evaluation to ensure that all aspects of the project plan and supporting application are included, and that the documentation provides a level of detail and clarity sufficient for further evaluation.

(b) If ecology determines the project plan is insufficient or incomplete, ecology will notify the applicant. A period of time for remedying the problem will be provided by ecology. Extensions for good cause may be approved by ecology at its discretion.

(c) If the applicant is able to address all issues with the project plan or supporting materials within the time period provided by ecology, the evaluation process will continue to the next phase. If the applicant is unable to remedy the identified issues, the evaluation process may be put on hold by ecology.

(d) Once ecology judges that the project plan for a project is complete, ecology will post the relevant documents for public comment for a period of forty-five days.

(e) Ecology will conduct a review of the project plan to validate the project plan in relation to the requirements of the comprehensive

protocol. Ecology will, to the best of its abilities, follow comparable procedures and analytical methods as those used by verifiers and verifying firms that have been certified through the processes identified in subsection (9)(a) of this section.

(f) Upon completion of its review of a project plan, ecology will provide one of the following appraisals:

(i) Projects plans that appear to meet all requirements set forth in the protocol will be given a provisional status of being "validated."

(ii) Projects plans that do not appear to meet the necessary requirements of the protocol are not provided with a status, and will not be validated. Ecology will provide an explanation of the factors that led to that determination.

(g) Ecology will review the public comments for project plans that are in the provisionally valid status and make a final appraisal decision.

(h) Those project plans that have met the necessary standards will receive a final determination of being "validated" by ecology.

(11) Applicants may submit for ecology reconsideration a revised project plan and supporting documents for a project plan proposal failing to achieve "validated" status upon initial evaluation.

(12) A project report failing to achieve "validated" status through ecology may also be reevaluated under the third-party validation procedures in subsection (9) of this section.

(13) The electric utility requesting the project validation through either means identified in subsection (8) of this section must be provided with a validation report summarizing the process and the rationale for the decisions made by the validating entity. This validation report will also serve as the proof of validation for the approving body responsible for approving or rejecting the project that is intended as an energy transformation project.

(14) After a project is approved by the applicable approving body, and after the project comes into existence and is functioning, the electric utility must ensure that:

(a) Proper monitoring of the benefits of the project occur over time. The manner and means by which this monitoring occurs may vary between project types, and will be detailed in the comprehensive protocol.

(b) The benefits of the project are being reported over time to one or more bodies. The manner and means by which this reporting occurs will be detailed in the comprehensive protocol.

(15) After a project is approved by the applicable approving body, and after the project comes into existence, the electric utility must conduct or facilitate a performance verification process to verify the actual benefits of the project over time. The manner, timing, and means by which this performance verification occurs may vary from project type, and will be detailed in the comprehensive protocol but will, at a minimum, require that:

(a) The third-party verifier, or the firm employing the verifier or verifying team, must be accredited or approved by at least one of the following:

(i) The American National Standards Institute National Accreditation Board accreditation program for Greenhouse Gas Validation/Verification Bodies.

(ii) The California Air Resources Board under California's Regulation for the Mandatory Reporting of GHG emissions.

(iii) Through another accreditation program by prior approval of ecology if it is deemed by ecology that the accreditation program is of equal stringency to (a)(i) or (ii) of this subsection.

(b) The firm employing the verifier or verifying team, or an independent verifier if there is no team or firm involved, must be able to demonstrate that there is no conflict of interest in their evaluation. All verifiers must sign the conflict of interest declaration through a form and process designated by ecology.

NEW SECTION

**WAC 173-444-090 Severability.** If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.



[ 18 ]

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