Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

May 26, 2020

In reply refer to: DI-7

The Bonneville Power Administration (BPA) appreciates the opportunity to provide comments on the Washington Department of Ecology's (Ecology) draft rule language regarding the GHG emissions content in electricity. BPA has voluntarily reported its fuel mix to the Washington Department of Commerce (Commerce) for years and understands this rulemaking may have implications for that fuel mix disclosure and CETA compliance for BPA's Washington preference customers or investor-owned utilities purchasing from BPA.

In BPA's January 2020 comments on this rulemaking, BPA asked Ecology to provide additional clarification around the application of transmission losses in the GHG content calculations. BPA appreciates and acknowledges Ecology's efforts to provide this clarification. Ecology's draft rules are a significant improvement as compared to the original concept shared in January. BPA is providing these further comments on two areas: (1) the inclusion of transmission line losses in the GHG emissions content calculation, and (2) the calculation of the GHG emissions content for an aggregate source. Redline edits to the proposed rules are attached for your consideration.

First, BPA reiterates that it reads CETA to regulate the volume of power that is equal to utility retail sales to customers. BPA asks that Ecology consider removing transmission line losses in its GHG emissions content calculation. Use of the word "transmission" line losses refers to wholesale transmission of power, but the statute refers to retail sales. Thus, including transmission losses as they exist in a wholesale context appears inconsistent with the statute, which states: "It is the policy of the state that all *retail sales* of electricity to Washington *retail customers* be greenhouse gas neutral by January 1, 2030." RCW §19.405.040 (emphasis added). The statute does not contain language stating it applies to transmission line losses.

In the event that Ecology does decide to include transmission losses in the calculation, Ecology's proposed methodology appears to provide adequate flexibility for utilities to accurately apply transmission losses in the calculation. However, BPA believes the five percent default emissions loss factor may be significantly higher than transmission losses in the region. BPA's high-voltage transmission system, accounting for nearly 75 percent of the high-voltage transmission in the region, has a transmission loss factor of 1.9 percent (BPA Open Access Transmission Tariff[1], Schedule 11, page 143). BPA requests that Ecology change its default transmission loss factor to 1.9 percent, consistent with BPA's transmission

[1] Available at https://www.bpa.gov/transmission/Doing%20Business/Tariff/Documents/bpa-oatt-TC-20-settlement-tariff-100119.pdf

loss factor. This is also similar to the two percent transmission loss factor that the California Air Resource Board applies to electricity imports for its Mandatory Reporting Requirements (MRR) and cap-and-trade program (MRR §95111(b)).

Second, BPA appreciates Ecology's addition of an "aggregate source" in the GHG emissions content calculation. This concept recognizes that BPA sells power from a single system of resources, to both preference customers and investor-owned utilities in the state. BPA believes, however, that the draft rules could be improved by providing some additional clarification around the calculation of the GHG emissions content for an aggregate source and utilization of that calculation in the subsequent calculation of a retail utility's GHG emissions content. Attached to these comments is a document with redline edits to Ecology's proposed WAC 173-444-020 and WAC 173-444-040 with some specific suggested areas of clarification.

Finally, related to the concept of an aggregate source, BPA notes that RCW 19.405.070 (3) states "For the purposes of chapter 288, Laws of 2019, the fuel mix calculated for the BPA may exclude any purchases of electric generation that are not associated with load in the state of Washington." It is not clear to BPA whether Ecology should address this provision in Ecology's rulemaking, or whether it should be addressed in subsequent rulemakings by the Washington Department of Commerce or Washington Utilities and Transportation Commission. But insofar as it is relevant to the GHG emissions content calculation, BPA requests Ecology incorporate this provision.

Again, BPA appreciates Ecology's efforts to improve and clarify the GHG content calculations as compared to the January 2020 concept. Please feel free to contact myself at 503.230.4358 or Liz Klumpp at 360.943.0157 if you have any questions on these general comments or suggested edits to the proposed rule.

Thank you,

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Attachment: BPA Redlines to Proposed DRAFT Language for Stakeholder Review Chapter 173-444 WAC - CLEAN ENERGY TRANSFORMATION RULE

Proposed DRAFT Language for Stakeholder Review
Chapter 173-444 WAC - CLEAN ENERGY TRANSFORMATION RULE

WAC 173-444-010

Purpose and scope.

(1) The purpose of this Chapter is to establish rules that electric utilities shall use to comply with parts of the Clean Energy Transformation Act, Chapter 19.405 RCW.

(a) 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 RCW 19.405.020(22).

(b) The purpose of the provisions in Part II of this chapter is to establish the process and requirements for developing the standards, methodologies, and procedures for evaluating energy transformation projects. These processes and requirements of energy transformation projects in Part II of this chapter are developed under the requirements of RCW 19.405.020(18), 19.405.040, and 19.405.100(7).

WAC 173-444-020

Definitions.

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

(1) "**Additionality**" means a condition where a project would not happen otherwise due to regulatory or legal requirements, and but for the investment being made into the project by the electric utility (or utilities) for the purposes of compliance with RCW 19.405.

(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 an ~~single~~ asset-controlling supplier, as ~~designated by~~ approved by and registered with the California Air Resources Board. The system emissions factor, calculated pursuant to WAC 173-444-040, for an asset-controlling supplier will be ~~, with an emissions rate~~ approved by the regulatory agency. ~~This can include multiple source types.~~

(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 RCW 19.405.090 and therefore provide ultimate approval to a project that is intended to serve as an energy transformation project.

(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) "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.

(6) **"Carbon dioxide equivalent" or "CO_2e"** 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.

(7) **"Commission"** means the Washington Utilities and Transportation Commission.

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

(9) "**Energy Transformation Project**" has the same meaning as RCW 19.405.020 (18).

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

(11) **"Form EIA-923"** means the survey data published by the 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. Page 1 Generation and Fuel Data is typically used for compliance with this chapter.

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

(13) **"Greenhouse gas," "greenhouse gases," "GHG," and "GHGs"** includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. "Greenhouse gas" also includes any other gas or gases designated by ecology by rule in Table A-1 in WAC 173-441-040.

(14) "Nonemitting electric generation"

a. means 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.
b. "Nonemitting electric generation" does not include renewable resources.

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

a. be non-reversible; or,
b. exist for a period of not less than 100 years except in the case of any project subject to WAC 463-85-200 and related requirements; or,

c. for any projects subject to WAC 463-85-200 and related requirements the emission reduction must exist for the time period incorporated into the definition for permanent sequestration in that rule.

(16) "**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.

(17) "**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.

(18) "**Regulatory agency**" means the Washington Utilities and Transportation Commission for investor-owned utilities or the Department of Commerce for consumer-owned utilities.

(19) **"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.

(20) **"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.

(21) **"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.

(22) "**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.

(23) **"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.

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

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 + aggregate source

Where:

- Utility emissions = Total of all GHG emissions for the facility for the calendar year, metric tons CO_2e/year.
- EPA = Total of all GHG emissions calculated using the EPA methodology in subsection (2) of this section, metric tons CO_2e/year.
- EIA = Total of all GHG emissions calculated using the EIA methodology in subsection (3) of this section, metric tons CO_2e/year.
- Unspecified = Total of all GHG emissions calculated using the unspecified electricity methodology in subsection (4) of this section, metric tons CO_2e/year.
- Aggregate Source = total of all GHG emissions calculated using the aggregate source methodology in subsection (6) of this section, metric tons CO_2e/year

b. Do not include nonemitting electric generation and renewable resources when calculating utility emissions using Equation 1 of this subsection.

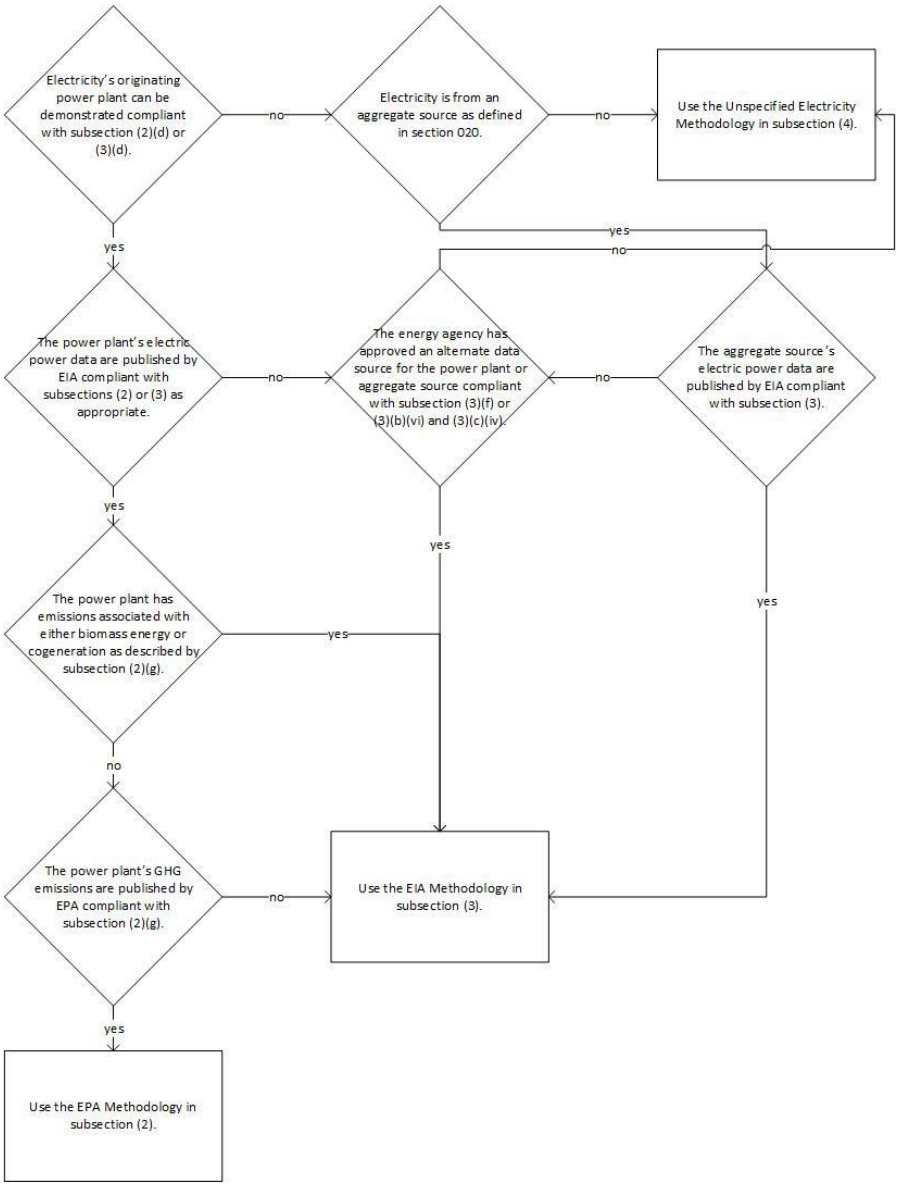
c. Methodology selection.

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) being the most preferred.

iii. The Department of Ecology or regulatory agency may instruct a utility to use a specific method from this section on a case by case basis if the Department of Ecology or 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 (EPA)'s Greenhouse Gas Reporting Program (GHGRP) established under 40 CFR Part 98 as adopted by WAC 173-441-120 and public data from the Energy Information Administration (EIA)'s 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:

$$EPA = \sum_{ii=1}^{nn} \frac{Plant\ GHG\ emissions_{ii} \times Cogeneration\ correction\ factor_{ii}}{Plant\ net\ electric\ generation_{ii} + Utility\ claims_{ii} + Transmission\ losses_{ii}}$$

Where:

- EPA = Total of all GHG emissions calculated using the EPA methodology, metric tons CO_2e/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_2e/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 CFR 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_2e. 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_2, listed in Table A-1 of WAC 173-441-040 converted into CO_2e as specified in that section.

c. Plant net electric generation. Sum all annual Net Generation (Megawatthours) 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 reported to the Department of Commerce under WAC 194-04-060 or its successor, should that provision be amended or recodified, 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 non-electric 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:

i. 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.

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

iii. Published EPA GHG emissions for the power plant must not include any biomass energy.

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

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

vi. 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:

$$EIA = \sum_{ii=1}^{nn} \frac{EIA\ GHG\ emissions}{Net\ electric\ generation - Utility\ claims + Transmission\ losses} \times (Net\ electric\ generation - Utility\ claims)$$

Where:

- EIA = Total of all GHG emissions calculated using the EIA methodology, metric tons CO_2e/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_2e/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_2e.
   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 nonemitting electric generation and renewable resources must be calculated, but kept separate from other types of GHG emissions.
   iii. GHG emissions, including CO_2, CH_4, and N_2O, from combustion are calculated using the Tier 1 Calculation Methodology in Subpart C of 40 CFR Part 98 as adopted by WAC 173-441-120.
      A. For fuel quantity use one of the following:
         a. For plant level emissions use Annual Electric Fuel Consumption Quantity, or
         b. For aggregate source level emissions use the total fuel consumption quantity for the aggregate source.
         c. 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_2 emissions factor, CH_4 emissions factor, and N_2O emissions factor for the following source types are assumed to be zero.
         a. Geothermal
         b. Nuclear
         c. Solar
         d. Water
         e. 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_2 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 MT/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 nonemitting electric generation and renewable resources. Provide a second total that excludes nonemitting electric generation and renewable resources.

Commented [KD(-D1]: BPA suggests this more explicitly say there is no need to calculate emissions for the list in (iii)(C).

~~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 use 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.
   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 reported to the Department of Commerce under WAC 194-04-060 or its successor, should that provision be amended or recodified, 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 subsections (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:

$$uuEEEEuuuuuuTruuTuuuu = UUEE \ xx \ UUCCCC_2uu$$

Where:

- Unspecified = Total of all GHG emissions calculated using the unspecified electricity methodology, metric tons CO_2e/year.
- UE = Total electricity subject to this method, MWh/calendar year
- UCO_2e = 0.437 metric tons CO_2e/MWh of electricity.

The emissions factor for unspecified electricity includes a transmission loss factor of two percent. Do not calculate additional transmission losses for unspecified electricity.

(5) Transmission losses. Calculate transmission losses for electric generation calculated pursuant to (2) and (3) 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 losses:
   i. If utility claims are reported on a sales basis, then multiply total sales in MWh by 1-(retail sales MWh/total claims MWh).
   ii. If utility claims are reported on a plant net output basis or already include transmission losses, then transmission losses in this equation are zero MWh.
   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. 1.95% or
      B. A value specified by the regulatory agency.

(6) Aggregate Sources.

a. An aggregate source that is an asset-controlling supplier shall calculate GHG content for its system consistent with (2)-(6) above…

b. In calculating utility emissions under (1) above, a utility shall use the GHG content for an aggregate source calculated pursuant to this section and approved by the regulating agency.

Commented [KD(-D2]: BPA recommends Ecology adds this section to provide additional clarity on (1) how an aggregate source calculates emissions for its system and (2) how a utility then incorporates that into the utility emissions calculated under (1) above

PART II – ENERGY TRANSFORMATION PROJECTS

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 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 and published 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, the department of commerce, or the state auditor may have additional 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 ultimate approval for a candidate project intended as an energy transformation project under RCW 19.405. 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.

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 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 RCW 19.405.020 (18) for energy transformation projects.

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

(4) In order for a project category to be included in this list projects that may fit 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 greenhouse gases 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) Quantifiable in units of energy or units of greenhouse gas emissions.
(g) Resulting in permanent reductions of greenhouse gas emissions.
(h) Satisfying the additonality tests required by RCW 19.405.040 (3).

(5) In addition to the conditions in subsection (4) of this section in order for a project category to be included in this list, projects that may fit that category must not have the capacity to:
(a) Generate electricity for delivery, sale, or other provision of electricity as a good or service.
(b) Create a new use of fossil fuels resulting in a net increase of fossil fuel usage.
(c) 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.

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

(7) The list of eligible categories of energy transformation projects will be derived in component parts through separate processes, each to take part in sequence based on the schedule in this section.

(8) The first component of the list of eligible categories of energy transformation projects will be composed of the following project categories, upon the effective date of this chapter:
(a) Electric vehicle charging infrastructure
(b) Renewable hydrogen fueling infrastructure
(c) Renewable hydrogen distribution infrastructure
(d) Renewable hydrogen production infrastructure
(e) Natural gas energy efficiency and conservation measures.

(9) The second component of the list of eligible categories of energy transformation projects will be developed after the effective date of this chapter.

(10) Ecology will include in its evaluation of the project categories that comprise this second component all of the project groupings listed for Ecology consideration in RCW 19.405.020 (18) (b).

(11) Before initiating the evaluation process Ecology will provide a 30 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 for the submission, which they wish to have subject to the evaluation process for adding to this list.

(12) After completing its evaluation, Ecology will post for comment a draft list of eligible categories of energy transformation projects along with an evaluation report summarizing its analysis process. The comment period for this stage will be not less than 60 days.

(13) Not less than 90 days after the close of the comment period Ecology will post a revised list of eligible categories of energy transformation projects reflecting those project categories established in subsection (8) of this section and those project categories derived through this component of the process.

(14) Ecology can modify or add to this list after posting the initial list. Additions or modifications to this list must meet the same evaluation standards established in subsections (4) and (5) of this section.

(15) 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.

(16) Ecology will send notice and post for comment any proposed additions or modifications to the list for a period of not less than 60 days before Ecology makes any final determination.

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), RCW 19.405.040 (2), and RCW 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))

(i) 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) &.040 (3))

(i) Identification of the primary effects of the project, such as fossil fuel reductions or 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,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 same level of benefits over time, in addition to any procedures for ensuring consistent benefit outputs over time.

(d) Quantification methods (Pursuant to RCW 19.405.040 (2) (a,b),(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 any beneficial 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),(4))
  (i) 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), as modified by RCW 19.405.040 (8))
  (i) Analysis sufficient to demonstrate that any benefits to utility customers identified in (b)(i) in this subsection are occurring through:
    (A) an equitable distribution of energy and non-energy 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.
(g) Fossil fuel effects (Pursuant to RCW 19.405.040 (3))
  (i) 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 (3))
  (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 procedures (Pursuant to RCW 19.405.040 (3))
  (i) Establishing procedures that ensure that project outcomes are measureable and observable, and that that the impacts and benefits of the project are recorded over time.
(j) Reporting strategies (Pursuant to RCW 19.405.040 (3))
  (i) Meeting any ongoing, planned, or anticipated regulatory or voluntary reporting requirements for the project.
(k) Verification procedures (Pursuant to RCW 19.405.040 (3))
  (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 RCW 19.405, 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.
(l) Enforcement regimes (Pursuant to RCW 19.405.040 (3))
  (i) Identification of relevant regulatory or compliance authorities that have jurisdiction over an aspect or aspects of the project.

(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 by the comprehensive protocol.

(6) Ecology will modify or expand the comprehensive protocol to reflect new information, improve the applicability of the embodied information 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 update the comprehensive protocol (if changes are deemed necessary) no less than twice each calendar year.
(7) Ecology will post any such modifications to the existing comprehensive protocol for public comment for a period of not less than 30 days before making any changes to the protocol.
(8) A versioning system will be embedded into the publication process for the comprehensive protocol, 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 discernable and can be memorialized for use in other processes.
(9) Ecology will post the most recent version of the comprehensive protocol and supporting documents on the agency web site and will be available in alternative forms upon request.

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 is expected to work, and how the project that is being proposed is consistent with the criteria and requirements in the comprehensive protocol.
(3) Electric utilities must submit the project plan to the validating or verifying entities identified in this section and to approving bodies consistent with the applicable requirements of the comprehensive or protocol.
(4) The comprehensive protocol developed by Ecology will provide the required criteria and address the manner in which electric utilities or their designated representatives should apply the required criteria to create 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 later stages of the 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) To verify that that the project that is being proposed conforms to the comprehensive protocol and any supporting documents referenced in that protocol each project plan must be validated. 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) Unless an approving body requires that a single validation approach of the two options provided in this section be used, the validation step in subsection (7) of this section can be accomplished in two ways:

(a) through third party verifier, or the firm employing the verifier or verifying team according to subsection (9) of this section, or,

(b) through a voluntary request by the electric utility to Ecology for an advisory validation opinion for the project according to subsection (10) of this section.

(9) One option is for the validation step in subsection (7) of this section to be accomplished through a third party verification service to perform the necessary validation step.

(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 (i) or (ii).

(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.

(c) 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 30 days.

(10) The validation step in subsection (7) of this section can also be accomplished through a voluntary request by the electric utility to Ecology for an advisory validation opinion for the project. This advisory 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 30 days.

(e) Ecology will conduct a review of the project plan to validate the project plan in relation to the requirement 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) Project plans that receive a provisional "validated" status will be posted for public comment for 30 days along with the application documents and other relevant information.

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

(i) 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 ultimately 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 proper monitoring of the benefits of the project occur over time. The manner and means by which this monitoring occurs may vary from project type, and 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 and is functioning, the electric utility must ensure that 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.

(16) 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 (i) or (ii).

(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.

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.