



WAC 173-441 & 173-446

Electricity Markets: Draft Rule Language Input Meeting

October 16, 2023

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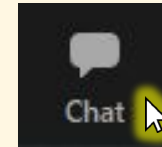
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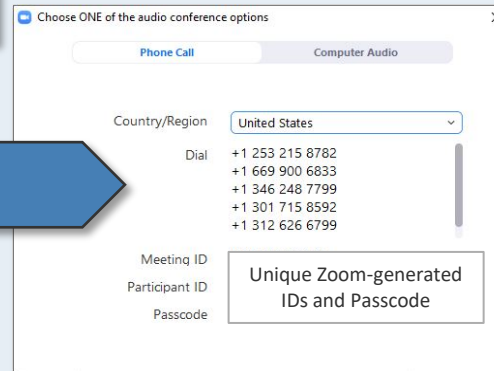
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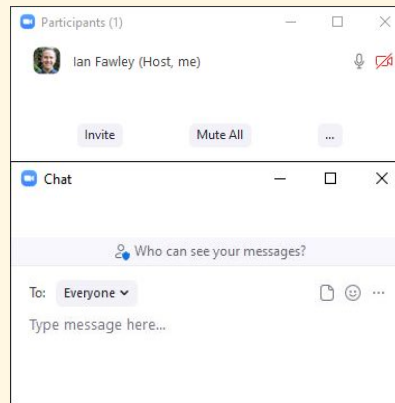
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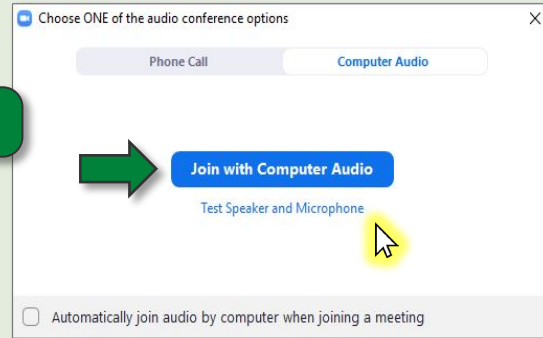
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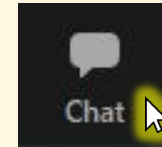
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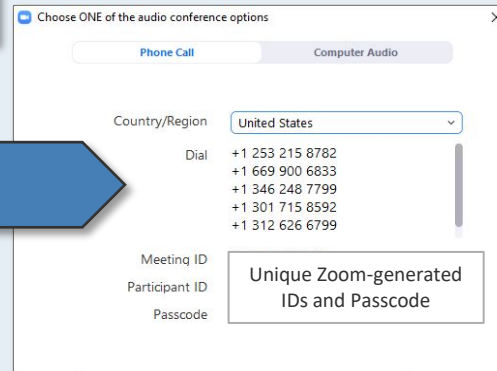
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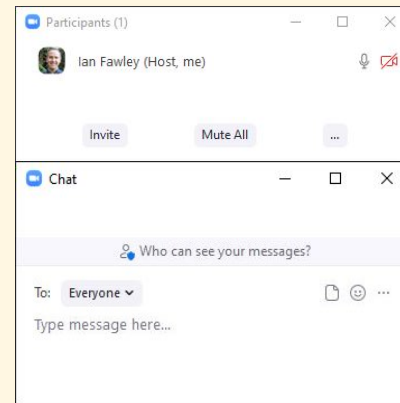
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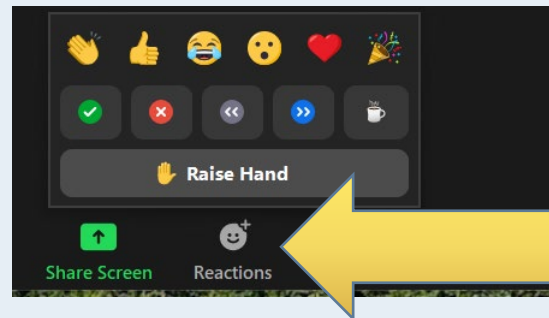


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How To Participate

During today's question-and-answer period:

- Participants using computer app: To raise your hand, press the “Reactions” icon and then press the “Raise Hand” button. This button is located in the lower right corner of the participant list window. You can also use the “Chat” icon to access the chat box.



- Participants calling in on the phone: Press *9 on your phone. The system will show you raised your hand. The host will call on you when it is your turn to speak.

Introductions: Ecology Staff

- **Nick Bourgault** – Host
- **Gopika Patwa**- Rule Lead
- **Bill Drumheller**- Lead Subject Matter Expert
- **Jack Millard**- Subject Matter Expert
- **Joshua Grice**- Policy and Planning Section Manager

Overview



Rulemaking Overview



Scope of this Rulemaking



Addressing Leakage



Informal Draft Rule Language



Questions & Input

Rulemaking Context and Statute

- This rulemaking will adopt amendments to Chapters **173-441** and **173-446** WAC.
- This rulemaking is required by the Climate Commitment Act.
 - *RCW 70A.65.080(1)(c)*
- *Interagency Communication*
 - Department of Commerce and the Utilities and Transportation Commission

Rulemaking Objectives

- Identify and establish compliance obligations for entities importing electricity to Washington through centralized electricity markets.
- This rulemaking will:
 - Eliminate gaps (we currently have no way to put compliance obligation on importing entity).
 - Allow necessary data infrastructure to be put in place by markets to track importing entities.
- Electricity markets addressed in this rulemaking:
 - Western Energy Imbalance Market
 - Extended Day Ahead Market
 - Markets Plus initiative underway by the Southwest Power Pool
 - Potential additional new markets

Rulemaking Timeline

Rule Announcement

- Introduce rulemaking
- **Stakeholder meetings**
- Rule development
- **Informal public comment periods**

June 2023 – January 2024

Rule Proposal

- Announce public hearings
- Provide proposed rule language
- **Formal comment period**
 - Hold public hearings
 - Submit comments

January 2024 - July 2024

Rule Adoption

- Adopt final rule language (CR-103)
- Concise Explanatory Statement (CES)
- Economic analysis
- Rule effective after 31 Days

Anticipated July 2024



Scope of this Rulemaking

Mandate to Address Centralized Electricity Markets

RCW 70A.65.080 Program coverage

(c) Where the person is a first jurisdictional deliverer importing electricity into the state and the cumulative annual total of emissions associated with the imported electricity, whether from specified or unspecified sources, exceeds 25,000 metric tons of carbon dioxide equivalent. **In consultation with any linked jurisdiction to the program created by this chapter, by October 1, 2026, the department, in consultation with the department of commerce and the utilities and transportation commission, shall adopt by rule a methodology for addressing imported electricity associated with a centralized electricity market;**

Climate Commitment Act: Two Key Concepts

• Imported Electricity

- RCW 70A.65.010 (42) "Imported electricity" means electricity generated outside the state of Washington with a final point of delivery within the state.
 - (a) "Imported electricity" includes electricity from an organized market, such as the energy imbalance market.

• Electricity Importer

- RCW 70A.65.010 (27) "Electricity importer" means:
 - (c) For electricity imported through a centralized market, the electricity importer will be defined by rule consistent with the rules required under RCW 70A.65.080(1)(c).

Proposed Scope: What is in Draft Language?

- Holistic, unified approach to existing and new centralized markets.
- Robust process for identifying electricity importer (i.e., the FJD) that is not wholly dependent on the actions of external entities.
- Equitable treatment across bilateral and centralized markets.
- Consistency with Western Climate Initiative (WCI) electricity design.
- Reporting sufficient to support informational and compliance needs.
- Clear methods to support market infrastructure and reporting tools.
- Emissions methods for centralized markets (and unspecified energy).
- Non-substantive administrative, rule clarity, and process changes.

Not in Draft Scope of Rulemaking

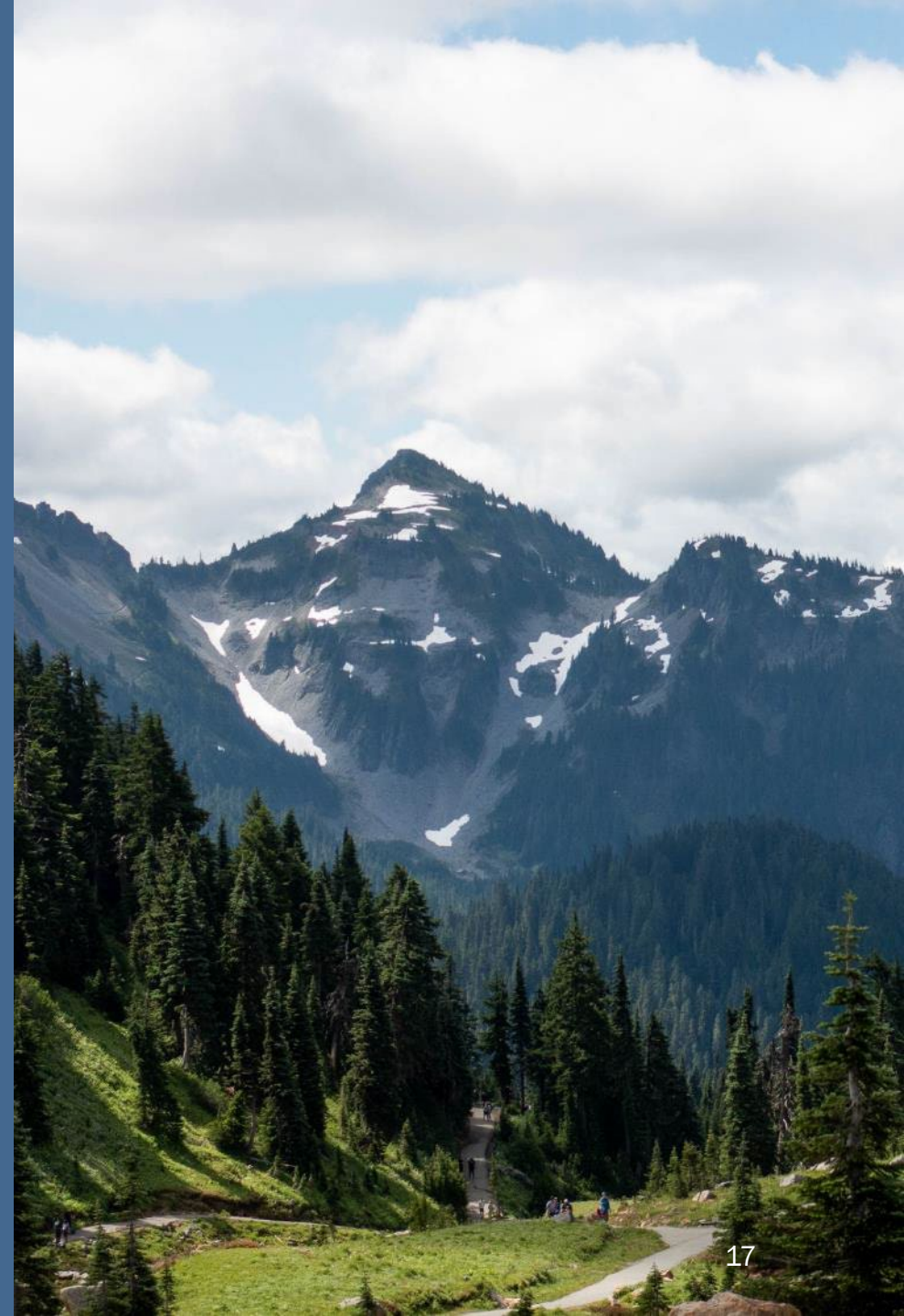
- Commenters request that Ecology take on the role of being the primary regulator of centralized electricity markets for Washington.
 - Financial regulation, collection, or direction on tolls or other liabilities.
 - Energy regulation of market design, operation, and resource supply.
- Some commenters request that rulemaking modify or pause legal requirements established through the CCA statute.
- Many electricity import issues identified by “white paper” process.
- Default unspecified electricity emissions factor (decoupled but same).
- Electricity issues not related to centralized electricity markets.

Addressing Leakage

- Some stakeholders have requested a “policy statement” on leakage.
- The Washington Legislature already provided such a statement:
 - *The legislature further finds that climate policies must be appropriately designed, in order to avoid leakage that results in net increases in global greenhouse gas emissions and increased negative impacts to those communities most impacted by environmental harms from climate change. [RCW 70A.65.005, underlining added]*
- Leakage is a likely linkage issue; Ecology rules need to be “linkage ready.”
- Substantial uncertainty in magnitude and methods to address linkage.
- No proposed language at this stage, but welcome further comment.



Informal Draft Rule Language



Informal Draft Rule Language – Key Clause

- Most fundamental question in this rule making process.
- Who is the electricity importer for imported electricity from centralized electricity markets?
- WAC 173-446 (3)(i) in the cap and invest program rule is clarified to state that:
 - The electricity importer is identified through the procedures in chapter WAC 173-441. [the greenhouse gas reporting rule]
- The definition of “electricity importer” is amended in WAC 173-441:
 - For electricity imported through a centralized electricity market, the electricity importer is the **designated market importer**.

Designated Market Importer (1)

- What is the designated market importer? Defined in reporting regulation.
 - “Designated Market Importer” means the market participant that is assigned by the market operator and meets the requirements of this section to take on the responsibility of meeting reporting and compliance obligations for an electricity transaction from a centralized electricity market.
- Additional supporting definitions added to reporting regulation:
 - “Market Operator” means the legal entity that operates and maintains a centralized electricity market.
 - “Market Participant” means an electric power entity that has an agreement with a centralized electricity market operator and participates in that centralized electricity market in accordance with rules and procedures of the relevant market, as well as with an approved tariff that governs the operations of the centralized electricity market.

Designated Market Importer (2)

- Market operators attribute market electricity transactions to EPEs.
 - An electric power entity is a designated market importer for an electricity transaction if a market operator designates, deems, attributes, or otherwise assigns to that electric power entity the responsibility for an electricity transaction that represents a transfer of electricity for delivery to Washington on behalf of the market operator and in accordance with the protocols, procedures, and methodologies put in place by the relevant centralized electricity market.
- Designated market importer must be a market participant.
 - An electric power entity may be assigned the role of designated market importer by the market operator if the electric power entity is a market participant in the centralized electricity market from which the relevant electricity transaction is derived.

New Definitions in GHG Reporting Rule

- Centralized Electricity Market (-441 and -446 rules)
- Designated Market Importer (-441 and -446 rules)
- Extended Day Ahead Market
- Imported Electricity (revised to broaden and update)
- Market Operator
- Market Participant
- Markets Plus or +
- Unspecified Pathway Market Electricity

Centralized Market Reporting Mandate

- Imported electricity from a centralized electricity market.
 - The reporting entity must separately report electricity transacted or delivered through or on behalf of centralized electricity markets, itemized by transaction and by originating market.
- Electric power entities that are designated market importers must report greenhouse gas emissions associated with their transactions.
 - Each electric power entity serving as a designated market importer must calculate, report, and cause to be verified on an annual basis the greenhouse gas emissions associated with the electricity for each electricity transaction in which the electric power entity has been assigned the role of designated market importer.

Compliance Backstop

- If market operator fails or chooses not to assign designated market importers, then they become the designated market importer.
 - For any electricity derived from a centralized electricity market that is delivered to Washington on behalf of the centralized electricity market and for which no designated market importer has been assigned, the market operator is then the designated market importer for those electricity transactions for the purposes of this chapter.
- Welcome comment on appropriate role of market operators if they choose not to put in place mechanisms for identifying parties responsible for providing electricity into their markets.
- Welcome comment on concept of alternative “third party” compliance.

Resource Specific Reporting Pathway

- Greenhouse gas reporting for centralized electricity markets proposed to rely on resource-specific pathway to extent possible.
- Stakeholder requests for clarity on specification of sources.
 - Electricity transactions for which designated market importers have been assigned are considered to be derived from a specified source if the designated market importer is also a generation providing entity or if it can be demonstrated that the transaction would otherwise have met the requirements of 3(a)(iv) of this subsection if the electricity was not derived from a centralized electricity market.
- Unclear how best to accomplish this goal for a centralized market transaction – comment welcome on better language or approaches.

Unspecified Electricity Reporting Pathway

- Proposed to allow for an unspecified pathway for electricity transactions if resource-specific pathway isn't possible.
 - “Unspecified pathway market electricity” means electricity derived from a centralized electricity market where, as part of the market’s design, some portion of the generation resources serving that market have been aggregated into a common electricity pool and are then assigned or offered to market participants as an unspecified source of electricity.
 - Electricity from an electricity transaction for which a designated market importer has been assigned may be treated as unspecified pathway market electricity only if the electricity is not eligible to be treated as specified electricity or if it is not possible to identify the resource assigned to supply the electricity through the methodologies and procedures put in place by the market operator.

Interim Approach for EIM Transactions

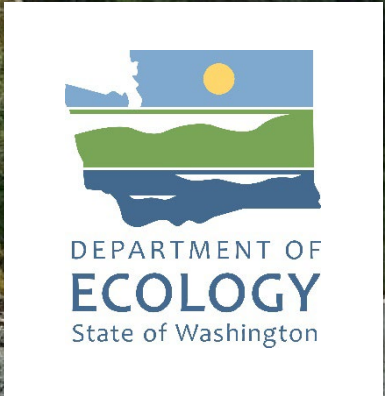
- Consistent with existing rule, Energy Imbalance Market (EIM) transactions are assigned to retail provider in Washington until 2025 (ending interim approach one year earlier), allowing time for new data infrastructure to be developed on market operator end.
 - For the energy imbalance market only, and for emissions reporting years 2023 through 2025 only, the retail provider located or operating in Washington that receives a delivery of electricity facilitated through the energy imbalance market is the designated market importer for that electricity for the purposes of this section. For these years only, any conflicting assignment of the designated market importer by the EIM market operator will instead default to the retail provider as put forth in this subsection.
- Welcome comment on whether interim approach can end earlier.

Addressing Double Counting Concerns

- What about potential double counting of in-state resources?
- Update existing language in cap and invest program rule.
 - For electricity generated by an electric generating facility in Washington serving as both the first jurisdictional deliverer with a compliance obligation under this chapter and as a designated market importer, there is no compliance obligation associated with the covered emissions for that same electricity for the entity assigned as the designated market importer.
- Allows market operator to assign or deem in-state resources as “imports” without concern about carbon price being applied twice.

Remove Definition of First Jurisdictional Deliverer from GHG Reporting Rule Language

- The definition of first jurisdictional deliverer (FJD) is proposed to be removed from GHG reporting rule definitions (WAC 173-441).
- Definition is already in cap and invest program rule definitions (-446).
- Term is not used anywhere else in GHG reporting rule language.
- FJD is a compliance term, not a reporting program term. The entity of concern in the GHG reporting program is electric power entity (EPE).
- Inclusion of FJD is causing confusion among GHG reporters.



10-minute Break

Calculating GHG Emissions Of Electricity From Centralized Electricity Markets (1)

- For electricity from centralized electricity markets, the reporting electric power entity must calculate emissions using these methods.
- To support these methods ecology will allow market operators to submit information pursuant to WAC 173-441-124 (3)(g) and (h), and calculate and publish on the ecology website an unspecified pathway emission factors for each centralized electricity market that offers unspecified pathway market electricity.

Calculating GHG Emissions Of Electricity From Centralized Electricity Markets (2)

- The reporting entity must calculate emissions for electricity supplied from each centralized electricity market, with each centralized electricity market total reported separately, using the following equation.
- Note that formula needs to be cleaned up and rebuilt with proper summation terminology.

$$\sum \text{CO}_2\text{e} = \frac{\sum(\text{PE}_{\text{sp}} * \text{EF}_{\text{sp}}) + \sum(\text{PE}_{\text{unsp}} * \text{EF}_{\text{CMUP}})}{\text{EF}_{\text{CMUP}}} \quad (\text{Eq. 124-?})$$

Where:

- CO_2 = Annual CO_2 equivalent mass emissions from electricity deliveries from each centralized electricity market (MT of CO_2e).
- PE_{sp} = Electricity purchased from resources assigned by the market operator that are also identified as specified sources pursuant to WAC Amount of electricity purchased from resources identified as specified sources for the data year as reported to ecology under this chapter (MWh).
- PE_{unsp} = Electricity purchased from sources listed by the market operator but not requested as specified sources under this chapter. Amount of electricity purchased to serve the unspecified electricity pathway for the data year as reported to ecology under this chapter (MWh).
- EF_{unsp} = CO_2e emission factor as defined for each specified facility or unit calculated consistent with (b)(ii) of this subsection (MT $\text{CO}_2\text{e}/\text{MWh}$).
- EF_{CMUP} = Centralized market unspecified pathway emission factor published on the ecology website (MT $\text{CO}_2\text{e}/\text{MWh}$) for the applicable centralized electricity market for the applicable emissions year.

Calculating GHG Emissions Of Electricity From Centralized Electricity Markets (3)

- Additional information for market participants of centralized electricity markets for claims of specified sources of electricity.
- To receive a positive verification statement upon verification of an electricity transaction derived from a centralized electricity market that attributes a specific resource to that transaction the electric power entity must be able to demonstrate proof to ecology's satisfaction that the market operator designated, assigned, deemed, or otherwise assigned that resource to that electric power entity as a designated market importer.

Calculating GHG Emissions Of Electricity From Centralized Electricity Markets (4)

- Proof of such attribution may be demonstrated through the provision of records and other information from the market operator listing all market participants that were assigned the role of designated market importer by the market operator. [Consolidated reporting option.]
- This provision of records and other information must be submitted to ecology in a manner designated by ecology by February 1 for electricity transactions involving centralized electricity markets in the previous calendar year. [Same timeline as specified source reporting.]
- These requirements may be combined with the report in (3)(h) by a market operator. [Combining specified and unspecified reporting.]

Emissions Factor for Unspecified Pathway (1)

- Requirements for designation of a centralized electricity market unspecified pathway emission rate.
- A market operator may request that ecology calculate a centralized electricity market unspecified pathway emissions rate for that market by submitting to ecology such a request and the necessary information to establish this rate in accordance with these requirements:
- (i) Provide records and other information to ecology listing all market participants that were assigned to serve electrical load in Washington through the market's attribution algorithms, either directly as designated market importers or indirectly through an unspecified pathway or other pooling technique in which no specific resource is or can be assigned to an electricity transaction.
- (ii) Provide this information to ecology in a manner designated by ecology by February 1 for electricity transactions involving centralized electricity markets in the previous year.

Emissions Factor for Unspecified Pathway (2)

- If a market operator for a centralized electricity market submits an annual report pursuant to WAC 173-441-124(3)(h) ecology will calculate the unspecified pathway emission factor for that centralized electricity market using the following equation. →
- If a market operator chooses not to or fails to submit an annual report pursuant to WAC 173-441-124(3)(h) then ecology will assign the unspecified pathway electricity emission factor (EFCMUP) to be equal to one metric ton of carbon dioxide equivalent per megawatt-hour (1.0 MT CO₂e/MWh).

$$E_{FCMUP} = \frac{\text{Sum of Resources Serving Unspecified Pathway Emissions MT of CO}_2\text{e}}{\text{Sum of Unspecified Pathway MWh}} \quad (\text{Eq. 124-?})$$

$$\frac{\text{Sum of Resources Serving Unspecified Pathway Emissions, MT of CO}_2\text{e}}{\text{MWh}} = \Sigma(\text{PEsp} * \text{EFsp}) + \Sigma(\text{PE} * \text{EFother}) - \Sigma\text{Erre} \quad (\text{Eq. 124-?})$$

$$\text{Sum of Unspecified Pathway MWh} = \Sigma\text{PEsp} + \Sigma\text{PEother} - \Sigma\text{Erre} \quad (\text{Eq. 124-?})$$

Where:

ΣErre = Emissions from owned facilities reported to ecology. Sum of CO₂e emissions from each facility/unit in the supplier's fleet that reports to ecology as a facility (MT of CO₂e).

ΣEGrre = Net generation from the facilities reporting to ecology in E_{net}. Sum of net generation for each specified facility/unit reporting to ecology for the data year as reported to ecology under this chapter (MWh).

PEsp = Electricity purchased from resources listed by the market operator that are also identified as specified sources pursuant to WAC 173-441-124(3)(h). Amount of electricity purchased from resources identified as specified sources for the data year as reported to ecology under this chapter (MWh).

PEunsp = Electricity purchased from sources listed by the market operator but not requested as specified sources under this chapter. Amount of electricity purchased to serve the unspecified electricity pathway for the data year as reported to ecology under this chapter (MWh).

EFsp = CO₂e emission factor as defined for each specified facility or unit calculated consistent with (b)(ii) of this subsection (MT CO₂e/MWh).

EFother = CO₂e emission factor as calculated for each facility or unit needing emissions data calculated in a manner consistent with (b)(ii) of this subsection (MT CO₂e/MWh).

Continued Reporting of Purchases from Centralized Electricity Markets

- Retail providers in Washington
 - (iv) Retail providers must report purchases from centralized electricity markets, based on annual totals of electricity purchased in MWh from each separate centralized electricity market.
- Multi-jurisdictional retail providers serving Washington
 - (e) Additional requirements for multijurisdictional retail providers. Multijurisdictional retail providers that provide electricity into Washington state at the distribution level must include the following information in the GHG emissions data report for each report year, in addition to the information identified elsewhere in this section.
 - (v) Retail sales derived from each centralized electricity market.

Update Language for Resource Specification

- Delivered electricity.
 - Each reporting entity claiming specified facilities or units for imported or exported electricity, including designated market importers, must register its anticipated specified sources with ecology as part of their greenhouse gas report to obtain associated emission factors calculated by ecology for use in the emissions data report required to be submitted by the report submission due date in WAC 173-441-050 (2)(a).
- Makes it clear that those who were assigned to be designated market importers in prior year must register information with Ecology so that recipients of centralized market electricity can report information.

Default Unspecified Electricity Factor

- Substantial organizational change.
- No change in policy or resulting emissions factor in practice.
- “Decoupling” CETA rule language.
- Splitting unspecified emissions factor and transmission loss.
- Combined result is that default unspecified emissions factor remains the same (0.437 t/MWh).

For electricity from unspecified sources, the electric power entity must calculate the annual CO₂ equivalent mass emissions using the following equation:

$$CO_2e = MWh \times TL \times EF_{unsp}$$

Where:

CO₂e = Annual CO₂ equivalent mass emissions from the unspecified electricity deliveries at each point of receipt identified (MT of CO₂e).

MWh = Megawatt-hours of unspecified electricity deliveries at each point of receipt identified.

EF_{unsp} = Default emission factor for unspecified electricity imports.

EF_{unsp} = 0.428 MT of CO₂e/MWh

TL = Transmission loss correction factor.

TL = 1.02 to account for transmission losses between the busbar and measurement at the first point of receipt in Washington.

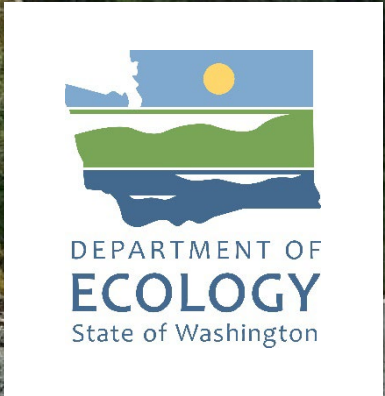
Update Rule to Reflect New Reporting Deadline

- Statutory change in 2022 updated reporting rule deadline to match similar California deadline for electric power entities.
- Deadline moved from March 31 to June 1.
- Electric power entities reporting under WAC 173-441-124 must submit a report by June 1st of each calendar year for GHG emissions in the previous calendar year.

Administrative Change to February 1 for Specified Source Registration Process

- If an operator fails to register a specified source by source by February 1 for sources used the previous year, the operator must use the emission factor provided by ecology for a specified facility or unit in the emissions data report required to be submitted by the report submission due date in WAC 173-441-050 (2)(a).

(2) (a) . If an operator fails to register a specified source by source by February 1 for sources used the previous year~~the registration due date in WAC 173-441-060(4)~~, the operator must use the emission factor provided by ecology for a specified



Questions & Input

Next steps

Draft Rule Language Input Meetings

- October 16, 2023: 3PM - 5PM

Second Informal Comment Period

- Collecting input on draft rule language
- Open 10/9/2023- 10/30/2023
- [Comment Period Webpage](#)

Rule Language Proposal

- January 2024

Ecology Contacts

Rule Lead:

Gopika Patwa

gopika.patwa@ecy.wa.gov

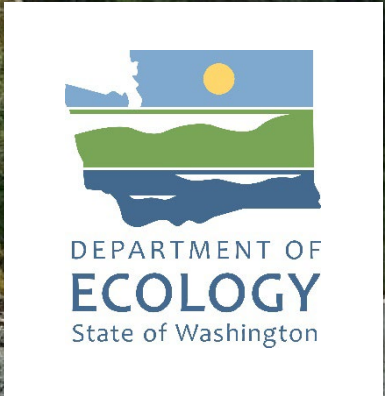
(360) 338-2419

Rulemaking webpage:

<https://ecology.wa.gov/regulations-permits/laws-rules-rulemaking/rulemaking/wac-173-441-446>

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