WAC 173-441-124 Calculation methods for electric power entities. This section establishes the scope of reportable energy and GHG emissions under this chapter and GHG emissions calculation methods for electric power entities. Owners and operators of electric power entities must follow the requirements of this section to determine if they are required to report under WAC 173-441-030(3). Owners and operators of electric power entities that are subject to this chapter must follow the requirements of this section when calculating emissions. If a conflict exists between a provision in WAC 173-441-010 through 173-441-110 and 173-441-140 through 173-441-170 and any applicable provision of this section, the requirements of those sections must take precedence.

(1) **General requirements.** An owner or operator of an electric power entity subject to the requirements of this chapter must report GHG emissions, including GHG emissions from biomass, from all applicable categories listed in (a) of this subsection using the methods and procedures in this section.

(a) Electric power entity categories:

(i) Electricity importers and exporters, as defined in this section;

(ii) Retail providers, including multijurisdictional retail providers, as defined in this section;

(iii) Asset controlling suppliers;

(iv) Electric generating facilities in Washington state must report using the methods specified in WAC 173-441-120.

(b) The calculation methods for voluntary reporting in WAC 173-441-120(3) apply, except calculation methods in WAC 173-441-120 (3)(b) take precedence over the methods from WAC 173-441-120 (3)(a).

(c) Alternative calculation methods approved by petition. An owner or operator may petition ecology to use calculation methods other than those specified in this section to calculate its electric power entities GHG emissions. Such alternative calculation methods must be approved by ecology prior to reporting and must meet the requirements of WAC 173-441-140.

(2) **Definitions specific to electric power entities.** The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.

(a) "Direct delivery of electricity" means electricity that meets any of the following criteria: The facility has a first point of interconnection at a Washington scheduling point or within a power system; The electricity is scheduled for delivery from the specified source to a Washington scheduling point or a power system via a continuous physical transmission path from interconnection of the facility in the balancing authority in which the facility is located to the Washington scheduling point or power system; or there is an agreement to dynamically transfer electricity from the facility to a Washington scheduling point or power system.

(b) "Electricity generating facility" means a facility that generates electricity and includes one or more generating units at the same location.

(c) "Electricity importer" means:

(i) For electricity that is scheduled with an e-tag to a final point of delivery into a balancing authority area located entirely within Washington state, the electricity importer is identified on the e-tag as the purchasing-selling entity on the last segment of the tag's physical path with the point of receipt located outside Washington state and the point of delivery located inside Washington state;

(ii) For facilities physically located outside Washington state with the first point of interconnection to a balancing authority area located entirely within Washington state when the electricity is not scheduled on an e-tag, the electricity importer is the facility operator or owner;

(iii) For electricity imported through a centralized market, the electricity importer is the retail provider, marketer, or asset controlling supplier that conducts an electricity transaction through the EIM that results in EIM power being delivered to final point of delivery in Washington state;

(iv) For electricity from facilities allocated to serve retail electricity customers of a multijurisdictional electric company, the electricity importer is the multijurisdictional electric company;

(v) If the importer identified under (c)(i) of this subsection is a federal power marketing administration over which Washington state does not have jurisdiction, and the federal power marketing administration has not voluntarily elected to comply with this chapter, then the electricity importer is the next purchasing-selling entity in the physical path on the e-tag, or if no additional purchasing-selling entity over which Washington state has jurisdiction, then the electricity importer is the electric utility that operates the Washington state transmission or distribution system, or the generation balancing authority;

(vi) For electricity that is imported into the state by a federal power marketing administration and sold to a public body or cooperative customer or direct service industrial customer located in Washington state pursuant to section 5 (b) or (d) of the Pacific Northwest Electric Power Planning and Conservation Act of 1980, P.L. 96-501, the electricity importer is the federal marketing administration;

(vii) If the importer identified under (c)(vi) of this subsection has not voluntarily elected to comply with this chapter, then the electricity importer is the public body or cooperative customer or direct service industrial customer;

(viii) For electricity that is imported into the state to a designated scheduling point inside the balancing authority area of a federal power marketing administration, the importer is the purchasing-selling entity on the e-tag at the last point on the physical path that is not the sink;

(ix) If the importer identified under (c)(vii) of this subsection is a federal power marketing administration that has not elected to voluntarily comply with this chapter, then the importer is the retail provider with which the scheduling point is associated; or

(x) For electricity from facilities allocated to a consumer-owned utility inside Washington state from a multijurisdictional consumer-owned utility, the electricity importer is the consumer-owned utility inside Washington state.

(d) "First jurisdictional deliverer" means the owner or operator of an electric generating facility in Washington state or an electricity importer.

(e) "Generation providing entity" or "GPE" means a facility or generating unit operator, full or partial owner, party to a contract for a fixed percentage of net generation from the facility or generating unit, party to a tolling agreement with the owner, or exclusive marketer for the facility or generating unit recognized by ecology.

(f) "Retail provider" means any of the following:

(i) An electric utility as defined in RCW 19.405.020(14);

(ii) Multijurisdictional retail providers;

(iii) Multijurisdictional consumer-owned utilities.

(g) "Imported electricity" means electricity generated outside Washington state with a final point of delivery within the state.

(i) "Imported electricity" includes electricity from an organized market, such as the energy imbalance market.

(ii) "Imported electricity" includes imports from linked jurisdictions, but such imports shall be construed as having no emissions.

(iii) Electricity from a system that is marketed by a federal power marketing administration shall be construed as "imported electricity," not electricity generated in Washington state.

(iv) "Imported electricity" does not include electricity imports of unspecified electricity that are netted by exports of unspecified electricity to any jurisdiction not covered by a linked program by the same entity within the same hour.

(v) For a multijurisdictional electric company, "imported electricity" means electricity, other than from in-state facilities, that contributes to a common system power pool. Where a multijurisdictional electric company has a cost allocation methodology approved by the Washington state utilities and transportation commission, the allocation of specific facilities to Washington state's retail load will be in accordance with that methodology.

(vi) For a multijurisdictional consumer-owned utility, "imported electricity" includes electricity from facilities that contribute to a common system power pool that are allocated to a consumer-owned utility inside Washington state pursuant to a methodology approved by the governing board of the consumer-owned utility.

(h) "Multijurisdictional consumer-owned utility" means an electric generation and transmission cooperative owned by a collection of consumer-owned utilities in multiple states or a consumer-owned utility that provides electricity to member owners in Washington state and in one or more other states in a contiguous service territory or from a common power system.

(i) "Multijurisdictional electric company" means an investor-owned utility that provides electricity to customers in Washington state and in one or more other states in a contiguous service territory or from a common power system.

(j) "Multijurisdictional retail provider" means a:

(i) Multijurisdictional electric company; or

(ii) Multijurisdictional consumer-owned utility.

(k) "E-tag" means an energy tag representing transactions on the North American bulk electricity market scheduled to flow between or across balancing authority areas and to and from locations listed in an affiliated registry, as represented in a manner and form created by the North American Electric Reliability Corporation and as maintained by the North American Energy Standards Board or a successor organization.

(l) "Point of delivery" means a point on the electricity transmission or distribution system where a deliverer makes electricity available to a receiver, or available to serve load. This point may be an interconnection with another system or a substation where the transmission provider's transmission and distribution systems are connected to another system, or a distribution substation where electricity is imported into the state over a multijurisdictional retail provider's distribution system.

(m) "Specified source of electricity" or "specified source" means a facility, unit, or asset controlling supplier that is permitted to be claimed as the source of electricity delivered. The reporting enti-

ty must have either full or partial ownership in the facility or a written power contract to procure electricity generated by that facility or unit or from an asset controlling supplier at the time of entry into the transaction to procure electricity.

(n) "Unspecified source of electricity" or "unspecified source" means a source of electricity that is not a specified source at the time of entry into the transaction to procure electricity.

(o) "Electricity exporter" means electric power entities that deliver exported electricity. The entity that exports electricity is identified on the e-tag as the purchasing-selling entity (PSE) on the last segment of the tag's physical path, with the point of receipt located inside Washington state and the point of delivery located outside Washington state. For electricity that is exported from a designated scheduling point in the balancing authority area of a federal power marketing administration, the exporter is the purchasing-selling entity at the first point of the physical path of the e-tag that is not the generation source.

(p) "Electricity transaction" means the purchase, sale, import, export or exchange of electric power.

(q) "Energy imbalance market" or "EIM" means the western energy imbalance market operated by the California independent system operator.

(r) "Exported electricity" means electricity generated inside Washington state and delivered to serve load located outside Washington state. This includes electricity delivered from a first point of receipt inside Washington state, to the first point of delivery outside Washington state, with a final point of delivery outside Washington state. Exported electricity delivered across balancing authority areas is documented on e-tags with the first point of receipt located inside Washington state and the final point of delivery located outside Washington state. Exported electricity does not include electricity generated inside Washington state then transmitted outside of Washington state, but with a final point of delivery inside Washington state. Exported electricity does not include electricity generated inside Washington state that is allocated to serve Washington state retail customers of a multijurisdictional retail provider, consistent with a cost allocation methodology approved by the Washington state utilities and transportation commission and the utility regulatory commission of at least one additional state in which the multijurisdictional retail provider provides retail electric service.

(s) "Final point of delivery" means the sink specified on the e-tag, where defined points have been established through the affiliated registry. When e-tags are not used to document electricity deliveries, as may be the case within a balancing authority, the final point of delivery is the location of the load. Exported electricity is disaggregated by the final point of delivery on the e-tag.

(t) "First point of delivery in Washington" means the first defined point on the transmission system located inside Washington state at which imported electricity may be measured, consistent with defined points that have been established through the affiliated registry.

(u) "First point of receipt" means the generation source specified on the e-tag, where defined points have been established through the affiliated registry. When e-tags are not used to document electricity deliveries, as may be the case within a balancing authority, the first point of receipt is the location of the individual generating facility or unit, or group of generating facilities or units.

(v) "Grid" or "electric power grid" means a system of synchronized power providers and consumers connected by transmission and distribution lines and operated by one or more control centers.

(w) "Last point of delivery in Washington" means the last defined point on the transmission system located inside Washington state at which exported electricity may be measured, consistent with defined points that have been established through the North American Energy Standards Board Electric Industry Registry.

(x) "Marketer" means a purchasing-selling entity that delivers electricity and is not a retail provider.

(y) "Point of receipt" or "POR" means the point on an electricity transmission or distribution system where an electricity receiver receives electricity from a deliverer. This point can be an interconnection with another system or a substation where the transmission provider's transmission and distribution systems are connected to another system.

(z) "Power" means electricity, except where the context makes clear that another meaning is intended.

(aa) "Power contract" or "written power contract," as used for the purposes of documenting specified versus unspecified sources of imported and exported electricity, means a written document, including associated verbal or electronic records if included as part of the written power contract, arranging for the procurement of electricity. Power contracts may be, but are not limited to, power purchase agreements, enabling agreements, electricity transactions, and tariff provisions, without regard to duration, or written agreements to import or export on behalf of another entity, as long as that other entity also reports to ecology the same imported or exported electricity. A power contract for a specified source is a contract that is contingent upon delivery of power from a particular facility, unit, or asset-controlling supplier's system that is designated at the time the transaction is executed.

(bb) "Purchasing-selling entity" or "PSE" means the entity that is identified on an e-tag for each physical path segment.

(cc) "Retail end use customer" or "retail end user" means a residential, commercial, agricultural, or industrial electric customer who buys electricity to be consumed as a final product and not for resale.

(dd) "Retail sales" means electricity sold to retail end users.

(ee) "Sink" or "sink to load" or "load sink" means the sink identified on the physical path of e-tags, where defined points have been established through the affiliated registry. Exported electricity is disaggregated by the sink on the e-tag, also referred to as the final point of delivery on the e-tag.

(ff) "Source of generation" or "generation source" means the generation source identified on the physical path of e-tags, where defined points have been established through the affiliated registry. Imported electricity and wheels are disaggregated by the source on the e-tag, also referred to as the first point of receipt.

(gg) "Tolling agreement" means an agreement whereby a party rents a power plant from the owner. The rent is generally in the form of a fixed monthly payment plus a charge for every megawatt generated, generally referred to as a variable payment.

(3) **Data requirements and calculation methods.** The electric power entity who is required to report under WAC 173-441-030(3) of this chapter must comply with the following requirements.

(a) General requirements and content for GHG emissions data reports for electricity importers and exporters.

(i) Greenhouse gas emissions. The electric power entity must report GHG emissions separately for each category of delivered electricity required, in metric tons of CO_2 equivalent (MT of CO_2e), with biogenic CO_2 reported separately, according to the calculation methods in this section.

(ii) Delivered electricity. The electric power entity must report imported and exported electricity in MWh disaggregated by first point of receipt (POR) or final point of delivery, as applicable, and must also separately report imported and exported electricity from unspecified sources and the energy imbalance market, and from each specified source. First points of receipt and final points of delivery (POD) must be reported using the standardized code used in e-tags, as well as the full name of the POR/POD.

(iii) Imported electricity from unspecified sources. When reporting imported electricity delivered from unspecified sources, the electric power entity must report for each first point of receipt the following information:

(A) Whether the first point of receipt is located in a linked jurisdiction published on the ecology website;

(B) The amount of electricity from unspecified sources as measured at the first point of delivery in Washington state;

(C) The amount of electricity imports of unspecified electricity that are netted by exports of unspecified electricity to any jurisdiction not covered by a linked program by the same entity within the same hour.

(D) The net amount of imported unspecified electricity after taking into account the requirements in (a)(iii)(C) of this subsection.

(E) GHG emissions, including those associated with transmission losses, as required in this section.

(F) When the unspecified power was obtained from the energy imbalance market.

(iv) Delivered electricity from specified facilities or units. The electric power entity must report all direct delivery of electricity as from a specified source for facilities or units in which they are a generation providing entity (GPE) or have a written power contract to procure electricity. An electric power entity must report imported electricity as from a specified source when the electricity power entity is a GPE of that facility. When reporting imported electricity from specified facilities or units, the electric power entity must disaggregate electricity deliveries and associated GHG emissions by facility or unit and by first point of receipt, as applicable. The reporting entity must also report total GHG emissions and MWh from specified sources and the sum of emissions from specified sources explicitly listed as not covered in chapter 70A.65 RCW, as described in chapter 173-446 WAC. Seller Warranty: The sale or resale of specified source electricity is permitted among entities on the e-tag market path insofar as each sale or resale is for specified source electricity in which sellers have purchased and sold specified source electricity, such that each seller warrants the sale of specified source electricity from the source through the market path. Claims of specified sources of imported electricity, must include the following information:

(A) Measured at busbar. The amount of imported electricity from specified facilities or units as measured at the busbar; and

(B) Not measured at busbar. If the amount of imported electricity deliveries from specified facilities or units as measured at the bus-

bar is not provided, report the amount of imported electricity as measured at the first point of delivery in Washington state, including estimated transmission losses as required in this section and the reason why measurement at the busbar is not known.

(v) Imported electricity from the energy imbalance market. The reporting entity must separately report power obtained from the energy imbalance market.

(vi) Imported electricity supplied by asset-controlling suppliers. The reporting entity must separately report imported electricity supplied by asset-controlling suppliers recognized by ecology. The reporting entity must:

(A) Report the asset-controlling supplier standardized purchasing-selling entity (PSE) acronym or code, full name, and the ecology identification number;

(B) Report asset-controlling supplier power that was not acquired as specified power, as unspecified power;

(C) Report delivered electricity from asset-controlling suppliers as measured at the first point of delivery in Washington state; and

(D) Report GHG emissions calculated pursuant to this section, including transmission losses.

(E) To claim power from an asset-controlling supplier, the asset-controlling supplier must be identified in one of the following means:

(I) On the physical path of the e-tag as the PSE at the first point of receipt, or in the case of asset-controlling suppliers that are exclusive marketers, as the PSE immediately following the associated generation owner; or

(II) If there is no e-tag associated with the imported electricity, on a long-term contract that identifies the ACS as the relevant provider of that electricity.

(vii) Exported electricity. The electric power entity must report exported electricity in MWh and associated GHG emissions in MT of CO_2e for unspecified sources disaggregated by each final point of delivery outside Washington state, and for each specified source disaggregated by each final point of delivery outside Washington state, as well as the following information:

(A) Exported electricity as measured at the last point of delivery located in Washington state, if known. If unknown, report as measured at the final point of delivery outside Washington state.

(B) Do not report estimated transmission losses.

(C) Report whether the final point of delivery is located in a linked jurisdiction published on the ecology website.

(D) Report GHG emissions calculated pursuant to this section.

(viii) Exchange agreements. The electric power entity must report delivered electricity under power exchange agreements consistent with imported and exported electricity requirements of this section. Electricity delivered into Washington state under exchange agreements must be reported as imported electricity and electricity delivered out of Washington state under exchange agreements must be reported as exported electricity.

(ix) Verification documentation. The electric power entity must retain for purposes of verification documentation of e-tags, written power contracts, settlements data, and all other information required to confirm reported electricity procurements and deliveries pursuant to the recordkeeping requirements of WAC 173-441-050.

(x) Electricity generating units and cogeneration units in Washington state. Electric power entities that also operate electricity

generating units or cogeneration units located inside Washington state that meet the applicability requirements of WAC 173-441-030(1) must report GHG emissions to ecology under WAC 173-441-120.

(xi) Electricity generating units and cogeneration units outside Washington state. Operators and owners of electricity generating units and cogeneration units located outside Washington state who elect to report to ecology under WAC 173-441-030(5) must fully comply with the reporting and verification requirements of this chapter.

(b) Calculating GHG emissions.

(i) Calculating GHG emissions from unspecified sources. For electricity from unspecified sources, the electric power entity must calculate the annual CO_2 equivalent mass emissions using the method established in WAC 173-444-040(4) and based on the amount of net imported electricity reported consistent with (a)(iii)(D) of this subsection.

(ii) Calculating GHG emissions from specified facilities or units. For electricity from specified facilities or units, the electric power entity must calculate emissions using the following equation:

$$CO_2e = MWh \times TL \times EF_{sp} \qquad \text{(Eq. 124-1)}$$

Where:

CO_2e	=	Annual CO_2 equivalent mass emissions from the specified electricity deliveries from each facility or unit claimed (MT of CO_2e).
MWh	=	Megawatt-hours of specified electricity deliveries from each facility or unit claimed.
EFsp	=	Facility-specific or unit-specific emission factor published on the ecology website and calculated using total emissions and transactions data as described below. The emission factor is based on data from the year prior to the reporting year.
TL	=	Transmission loss correction factor.
TL	=	1.02 to account for transmission losses associated with generation outside of a Washington state balancing authority.
TL	=	1.0 if the reporting entity provides documentation that demonstrates to the satisfaction of a verifier and ecology that transmission losses have been accounted for, or are compensated by using electricity sourced from within Washington state.

(A) Ecology shall calculate facility-specific or unit-specific emission factors and publish them on the ecology website using the following equation:

$$EFsp = Esp/EG \qquad \text{(Eq. 124-2)}$$

Where:

Esp	=	CO_2e emissions for a specified facility or unit for the report year (MT of CO_2e).

EG = Net generation from a specified facility or unit for the report year shall be based on data reported to the Energy Information Administration (EIA).

(B) To register a specified unit(s) source of power, the reporting entity must provide to ecology unit level GHG emissions consistent with the data source requirements of this section and net generation data as reported to the EIA, along with contracts for delivery of power from the specified unit(s) to the reporting entity, and proof of direct delivery of the power by the reporting entity as an import to Washington state.

(I) For specified facilities or units whose operators are subject to this chapter or whose owners or operators voluntarily report under this chapter, Esp shall be equal to the sum of CO_2e emissions reported pursuant to this section.

(II) For specified facilities or units whose operators are not subject to reporting under this chapter or whose owners or operators do not voluntarily report under this chapter, but are subject to the U.S. EPA GHG Mandatory Reporting Regulation, Esp shall be based on GHG emissions reported to U.S. EPA pursuant to 40 C.F.R. Part 98. For GHG emissions reported to U.S. EPA pursuant to 40 C.F.R. Part 98, if it is not possible to isolate the emissions that are directly related to electricity production, ecology may calculate Esp based on EIA data. Emissions from combustion of biomass-derived fuels will be based on EIA data until such time the emissions are reported to U.S. EPA.

(III) For specified facilities or units whose operators are not subject to reporting under this chapter or whose owners or operators do not voluntarily report under this chapter, nor are subject to the U.S. EPA GHG Mandatory Reporting Regulation, Esp is calculated using heat of combustion data reported to the Energy Information Administration (EIA) as shown below.

$$Esp = 0.001 \times \Sigma(Q \times EF) \qquad \text{(Eq. 124-3)}$$

Where:

0.001 = Conversion factor kg to MT

Q = Heat of combustion for each specified fuel type from the specified facility or unit for the report year (MMBtu). For cogeneration, Q is the quantity of fuel allocated to electricity generation consistent with EIA reporting. For geothermal electricity, Q is the steam data reported to EIA (MMBtu).

EF = CO_2e emission factor for the specified fuel type as required by this chapter (kg CO_2e/MMBtu). For geothermal electricity, EF is the estimated CO_2 emission factor published by EIA.

(IV) Facilities or units will be assigned an emission factor by the ecology based on the type of fuel combusted or the technology used when a U.S. EPA GHG Report or EIA fuel consumption report is not available, including new facilities and facilities located outside the U.S.

(V) Meter data requirement. For verification purposes, electric power entities shall retain meter generation data to document that the power claimed by the reporting entity was generated by the facility or unit at the time the power was directly delivered.

(VI) A lesser of analysis is applicable to imports from specified sources for which ecology has calculated an emission factor of zero, and for imports from Washington renewable portfolio standard (RPS) eligible resources, excluding the following: Dynamically tagged power deliveries; nuclear power; asset controlling supplier power; and imports from hydroelectric facilities for which an entity's share of metered output on an hourly basis is not established by power contract. A lesser of analysis is required pursuant to the following equation:

$$\text{Sum of Lesser of MWh} = \Sigma\text{HMsp min (MGsp*Ssp, TGsp)} \quad \text{(Eq. 124-4)}$$

Where:

- ΣHMsp = Sum of the Hourly Minimum of MGsp and TGsp (MWh).
- MGsp = Metered facility or unit net generation (MWh).
- Ssp = Entity's share of metered output, if applicable.
- TGsp = Tagged or transmitted energy at the transmission or subtransmission level imported to Washington (MWh).

(iii) Calculating GHG emissions of imported electricity supplied by asset-controlling suppliers. Based on annual reports submitted to ecology pursuant to WAC 173-441-070(3), ecology will calculate and publish on the ecology website the system emission factor for all asset-controlling suppliers recognized by the ecology. The reporting entity must calculate emissions for electricity supplied using the following equation:

$$CO_2e = MWh \times TL \times EF_{acs} \quad \text{(Eq. 124-5)}$$

Where:

- CO_2 = Annual CO_2 equivalent mass emissions from the specified electricity deliveries from ecology-recognized asset-controlling suppliers (MT of CO_2e).
- MWh = Megawatt-hours of specified electricity deliveries.
- EFACS = Asset-Controlling Supplier system emission factor published on the ecology website (MT CO_2e/MWh). Ecology will assign the system emission factors for all asset-controlling suppliers based on a previously verified GHG report submitted to ecology pursuant to WAC 173-441-070(3). The supplier-specific system emission factor is calculated annually by ecology. The calculation is derived from data contained in annual reports submitted that have received a positive or qualified positive verification statement. The emission factor is based on data from two years prior to the reporting year.
- TL = Transmission loss correction factor.
- TL = 1.02 when deliveries are not reported as measured at a first point of receipt located within the balancing authority area of the asset-controlling supplier.

TL = 1.0 when deliveries are reported as measured at a first point of receipt located within the balancing authority area of the asset-controlling supplier.

Ecology must calculate the system emission factor for asset-controlling suppliers using the following equations:

$$EFACS = \text{Sum of System Emissions MT of } CO_2e / \text{Sum of System MWh} \quad \text{(Eq. 124-6)}$$

$$\text{Sum of System Emissions, MT of } CO_2e = \Sigma Easp + \Sigma(PEsp * EFsp) + \Sigma(PEunsp * EFunsp) - \Sigma(SEsp * EFsp) \quad \text{(Eq. 124-7)}$$

$$\text{Sum of System MWh} = \Sigma EGasp + \Sigma PEsp + \Sigma PEunsp - \Sigma SEsp \quad \text{(Eq. 124-8)}$$

Where:

ΣEasp = Emissions from owned facilities. Sum of CO_2e emissions from each specified facility/unit in the asset-controlling supplier's fleet (MT of CO_2e).

ΣEGasp = Net generation from owned facilities. Sum of net generation for each specified facility/unit in the asset-controlling supplier's fleet for the data year as reported to ecology under this chapter (MWh).

PEsp = Electricity purchased from specified sources. Amount of electricity purchased wholesale and taken from specified sources by the asset-controlling supplier for the data year as reported to ecology under this chapter (MWh).

PEunsp = Electricity purchased from unspecified sources. Amount of electricity purchased wholesale from unspecified sources by the asset-controlling supplier for the data year as reported to ecology under this chapter (MWh).

SEsp = Electricity sold from specified sources. Amount of wholesale electricity sold from specified sources by the asset-controlling supplier for the data year as reported to ecology under this chapter (MWh).

EFsp = CO_2e emission factor as defined for each specified facility or unit calculated consistent with (b)(ii) of this subsection (MT CO_2e/MWh).

EFunsp = Default emission factor for unspecified sources calculated consistent with (b)(i) of this subsection (MT CO_2e/MWh).

(iv) Calculating GHG emissions of imported electricity for multijurisdictional retail providers. Multijurisdictional retail providers must include emissions and megawatt-hours in the terms below from facilities or units that contribute to a common system power pool. Multijurisdictional retail providers do not include emissions or mega-

watt-hours in the terms below from facilities or units allocated to serve retail loads in designated states pursuant to a cost allocation methodology approved by the Washington state utilities and transportation commission and the utility regulatory commission of at least one additional state in which the multijurisdictional retail provider provides retail electric service. For multijurisdictional consumer-owned utilities, the cost allocation methodology must be approved by its governing board. Multijurisdictional retail providers must calculate emissions that have a compliance obligation using the following equation:

$$CO_2e_{linked} = (MWhR \times TLR - MWhWSP\text{-}WA - EGWA) \times EFMJRP\text{-}notWA + MWhSP\text{-}notWA \times TLWSP \times EFunsp - CO_2e \quad \text{(Eq. 124-9)}$$

Where:

CO_2e	=	Annual CO_2e mass emissions of imported electricity (MT of CO_2e).
MWhR	=	Total electricity procured by multijurisdictional retail provider to serve its retail customers in Washington, reported as retail sales for Washington state service territory, MWh.
MWhWSP-WA	=	Wholesale electricity procured in Washington state by multijurisdictional retail provider to serve its retail customers in Washington state, as determined by the first point of receipt on a e-tag and pursuant to a cost allocation methodology approved by the Washington state utilities and transportation commission (UTC) and the utility regulatory commission of at least one additional state in which the multijurisdictional retail provider provides retail electric service, MWh. For multijurisdictional consumer-owned utilities, the cost allocation methodology must be approved by its governing board.
MWhWSP-not WA	=	Wholesale electricity imported into Washington state by multijurisdictional retail provider with a final point of delivery in Washington state and not used to serve its Washington state retail customers, MWh.
EFMJRP-not WA	=	Multijurisdictional retail provider system emission factor for out-of-state generation calculated by ecology and consistent with a cost allocation methodology approved by the Washington state utilities and transportation commission and the utility regulatory commission of at least one additional state in which the multijurisdictional retail provider provides retail electric service. For multijurisdictional consumer-owned utilities, the cost allocation methodology must be approved by its governing board.
EFunsp	=	Default emission factor for unspecified sources calculated consistent with this section (MT CO_2e/MWh).
EGWA	=	Net generation measured at the busbar of facilities and units located in Washington state that are allocated to serve its retail customers in Washington state pursuant to a cost allocation methodology approved by the Washington state utilities and transportation commission and the utility regulatory commission of at least one additional state in which the multijurisdictional retail provider provides retail electric service, MWh. For multijurisdictional consumer-owned utilities, the cost allocation methodology must be approved by its governing board.
TL	=	Transmission loss correction factor.
TL WSP	=	1.02 for transmission losses applied to wholesale power.

TL_R	=	Estimate of transmission losses from busbar to end user reported by multijurisdictional retail provider.
CO_2e_{linked}	=	Annual CO_2e mass emissions recognized by ecology pursuant to linkage under chapter 70A.65 RCW, as described in chapter 173-446 WAC (MT of CO_2e).

(c) Additional requirements for retail providers, excluding multijurisdictional retail providers. Retail providers must include the following information in the GHG emissions data report for each report year, in addition to the information identified in (a)(i), (ii), and (vii) of this subsection.

(i) Retail providers must report Washington state retail sales. A retail provider who is required only to report retail sales may choose not to apply the verification requirements specified in WAC 173-441-085, if the retail provider deems the emissions data report nonconfidential.

(ii) Retail providers may elect to report the subset of retail sales attributed to the electrification of shipping ports, truck stops, and motor vehicles if metering is available to separately track these sales from other retail sales.

(d) Retail providers that report as electricity importers or exporters also must separately report electricity imported from specified and unspecified sources by other electric power entities to serve their load, designating the electricity importer. In addition, all imported electricity transactions documented by e-tags where the retail provider is the PSE at the sink must be reported.

(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.

(i) A report of the electricity transactions and GHG emissions associated with the common power system or contiguous service territory that includes consumers in Washington state. This includes the requirements in this section as applicable for each generating facility or unit in the multijurisdictional retail provider's fleet;

(ii) The multijurisdictional retail provider must include in its emissions data report wholesale power purchased and taken (MWh) from specified and unspecified sources and wholesale power sold from specified sources according to the specifications in this section, and as required for ecology to calculate a supplier-specific emission factor;

(iii) Total retail sales (MWh) by the multijurisdictional retail provider in the contiguous service territory or power system that includes consumers in Washington state;

(iv) Retail sales (MWh) to Washington state customers served in Washington state's portion of the service territory;

(v) Retail sales derived from the energy imbalance market;

(vi) GHG emissions associated with the imported electricity, including both Washington state retail sales and wholesale power imported into Washington state from the retail provider's system, according to the specifications in this section;

(vii) Multijurisdictional retail providers that serve Washington state load must claim as specified power all power purchased or taken from facilities or units in which they have operational control or an ownership share or written power contract;

(viii) Multijurisdictional retail providers that serve Washington state load may elect to exclude information listed in this section when registering claims to specified power from facilities located outside Washington state and participating in the Federal Energy Regulatory Commission's PURPA Qualifying Facility program.

(f) Additional requirements for asset-controlling suppliers. Owners or operators of electricity generating facilities or exclusive marketers for certain generating facilities may apply for an asset-controlling supplier designation from ecology. Approved asset-controlling suppliers may request that ecology calculate or adopt a supplier-specific emission factor pursuant to this section. To apply for asset-controlling supplier designation, the applicant must:

(i) Meet the requirements in this chapter, including reporting pursuant as applicable for each generating facility or unit in the supplier's fleet;

(ii) Include in its emissions data report wholesale power purchased and taken (MWh) from specified and unspecified sources and wholesale power sold from specified sources according to the specifications in this section, and as required for ecology to calculate a supplier-specific emission factor;

(iii) Retain for verification purposes documentation that the power sold by the supplier originated from the supplier's fleet of facilities and either that the fleet is under the supplier's operational control or that the supplier serves as the fleet's exclusive marketer;

(iv) Provide the supplier-specific ecology identification number to electric power entities who purchase electricity from the supplier's system.

(v) To apply for and maintain asset-controlling supplier status, the entity shall submit as part of its emissions data report the following information, annually:

(A) General business information, including entity name and contact information;

(B) List of officer names and titles;

(C) Data requirements as prescribed by ecology;

(D) A list and description of electricity generating facilities for which the reporting entity is a first jurisdiction deliverer; and

(E) An attestation, in writing and signed by an authorized officer of the applicant, as follows:

(I) "I certify under penalty of perjury under the laws of the State of Washington that I am duly authorized by (name of entity) to sign this attestation on behalf of (name of entity), that (name of entity) meets the definition of an asset-controlling supplier as specified in this section and that the information submitted herein is true, accurate, and complete."

(II) Asset-controlling suppliers must annually adhere to all reporting and verification requirements of this chapter, or be removed from asset-controlling supplier designation. Asset-controlling suppliers will also lose their designation if they receive an adverse verification statement, but may reapply in the following year for redesignation.

(g) Requirements for claims of specified sources of electricity. Each reporting entity claiming specified facilities or units for imported or exported electricity 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). If an operator fails to register a

specified source by the registration due date in WAC 173-441-060(4), 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). Each reporting entity claiming specified facilities or units for imported or exported electricity must also meet requirements in the emissions data report.

(i) Registration information for specified sources. The following information is required:

(A) The facility names and, for specification to the unit level, the facility and unit names.

(B) For sources with a previously assigned ecology identification number, the ecology facility or unit identification number or supplier number published on ecology's website. For newly specified sources, ecology will assign a unique identification number.

(C) If applicable, the facility and unit identification numbers as used for reporting to the U.S. EPA Acid Rain Program, U.S. EPA pursuant to 40 C.F.R. Part 98, U.S. Energy Information Administration, Federal Energy Regulatory Commission's PURPA Qualifying Facility program, as applicable.

(D) The physical address of each facility, including jurisdiction.

(E) Provide names of facility owner and operator.

(F) The percent ownership share and whether the facility or unit is under the electricity importer's operational control.

(G) Total facility or unit gross and net nameplate capacity when the electricity importer is a GPE.

(H) Total facility or unit gross and net generation when the electricity importer is a GPE.

(I) Start date of commercial operation and, when applicable, date of repowering.

(J) GPEs claiming additional capacity at an existing facility must include the implementation date, the expected increase in net generation (MWh), and a description of the actions taken to increase capacity.

(K) Designate whether the facility or unit is a newly specified source, a continuing specified source, or was a specified source in the previous report year that will not be specified in the current report year.

(L) Provide the primary technology or fuel type as listed below:

(I) Variable renewable resources by type, defined for purposes of this chapter as pure solar, pure wind, and run-of-river hydroelectricity;

(II) Hybrid facilities such as solar thermal;

(III) Hydroelectric facilities ≤ 30 MW, not run-of-river;

(IV) Hydroelectric facilities ≥ 30 MW;

(V) Geothermal binary cycle plant or closed loop system;

(VI) Geothermal steam plant or open loop system;

(VII) Units combusting biomass-derived fuel, by primary fuel type;

(VIII) Nuclear facilities;

(IX) Cogeneration by primary fuel type;

(X) Fossil sources by primary fuel type;

(XI) Co-fired fuels;

(XII) Municipal solid waste combustion;

(XIII) Other.

(ii) Additional information for specified sources. For each claim to a specified source of electricity, the electricity importer must indicate whether one or more of the following descriptions applies:

(A) Deliveries from new facilities. Specified source of electricity is first registered pursuant to this section and delivered by an electricity importer within 12 months of the start date of commercial operation and the electricity importer making a claim in the current data year is either a GPE or purchaser of electricity under a written power contract;

(B) Deliveries from existing facilities with additional capacity. Specified source of electricity is first registered pursuant to this section and delivered by a GPE within 12 months of the start date of an increase in the facility's generating capacity due to increased efficiencies or other capacity increasing actions.

(4) **Recordkeeping.** GHG inventory program for electric power entities that import or export electricity. In lieu of a GHG monitoring plan, electric power entities that import or export electricity must prepare GHG inventory program documentation that is maintained and available for verifier review and ecology audit pursuant to the recordkeeping requirements of this section. The following information is required:

(a) Information to allow the verification team to develop a general understanding of entity boundaries, operations, and electricity transactions;

(b) Reference to management policies or practices applicable to reporting pursuant to this section;

(c) List of key personnel involved in compiling data and preparing the emissions data report;

(d) Training practices for personnel involved in reporting delivered electricity and responsible for data report certification, including documented training procedures;

(e) Query of e-tag source data to determine the quantity of electricity (MWh) imported, exported, and wheeled for transactions in which they are the purchasing-selling entity on the last physical path segment that crosses the border of Washington state, access to review the raw e-tag data, a tabulated summary, and query description;

(f) Reference to other independent or internal data management systems and records, including written power contracts and associated verbal or electronic records, full or partial ownership, invoices, and settlements data used to document whether reported transactions are specified or unspecified and whether the requirements for adjustments to covered emissions of chapter 70A.65 RCW, as described in chapter 173-446 WAC are met;

(g) Description of steps taken and calculations made to aggregate data into reporting categories required pursuant to this section;

(h) Records of preventive and corrective actions taken to address verifier and ecology findings of past nonconformances and material misstatements;

(i) Log of emissions data report modifications made after initial certification; and

(j) A written description of an internal audit program that includes emissions data report review and documents ongoing efforts to improve the GHG inventory program.

[Statutory Authority: RCW 70A.15.2200. WSR 22-05-050 (Order 21-07), § 173-441-124, filed 2/9/22, effective 3/12/22.]