

WAC 463-85-110 Definitions. The following definitions apply when these terms are used in the provisions of this chapter.

"Average available greenhouse gases emissions output" means the level of greenhouse gases emissions as surveyed and determined by the energy policy division of the department of community, trade, and economic development under RCW 80.80.050.

"Baseload electric generation" means electric generation from a power plant that is designed and intended to provide electricity at an annualized plant capacity factor of at least sixty percent. For a cogeneration facility, the sixty percent annual capacity factor applies to only the electrical production intended to be supplied for sale. For purposes of this rule, designed means originally specified by the design engineers for the power plant or generating units (such as simple cycle combustion turbines) installed at a power plant; and intended means allowed for by the current permits for the power plant, recognizing the capability of the installed equipment or intent of the owner or operator of the power plant.

"Baseload electric cogeneration facility" means a cogeneration facility that provides baseload electric generation.

"Baseload electric generation facility" means a power plant that provides baseload electric generation.

"Benchmark" means a planned quantity of the greenhouse gases to be sequestered each calendar year at a sequestration facility as identified in the sequestration plan or sequestration program.

"Bottoming-cycle cogeneration facility" means a cogeneration facility in which the energy input to the system is first applied to a useful thermal energy application or process, and at least some of the reject heat emerging from the application or process is then used for electrical power production.

"Change in ownership" as related to cogeneration plants means a new ownership interest in the electric generation portion of the cogeneration facility or unit.

"Cogeneration facility" means a power plant in which the heat or steam is also used for industrial or commercial heating or cooling purposes and that meets Federal Energy Regulatory Commission standards for qualifying facilities under the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. Sec. 824a-3), as amended. In general, a cogeneration facility is comprised of equipment and processes which through the sequential use of energy is used to produce electric energy and useful thermal energy (such as heat or steam) that is used for industrial, commercial, heating, or cooling purposes.

"Combined-cycle natural gas thermal electric generation facility" means a power plant that employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.

"Commence commercial operation" means, in regard to a unit serving an electric generator, to have begun to produce steam or other heated medium, or a combustible gas used to generate electricity for sale or use, including test generation.

"Consumer-owned utility" means a municipal utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, a mutual corporation or association formed under chapter 24.06 RCW, or port district within which an industrial district has been established as authorized by Title 53 RCW,

that is engaged in the business of distributing electricity to more than one retail electric customer in the state.

"Department" or "ecology" means the department of ecology.

"Electric generating unit (EGU)" is the equipment required to convert the thermal energy in a fuel into electricity. In the case of a steam electric generation unit, the EGU consists of all equipment involved in fuel delivery to the plant site, as well as individual boilers, any installed emission control equipment, and any steam turbine/generators dedicated to generating electricity. Where a steam turbine/generator is supplied by two or more boiler units, all boilers contributing to that steam turbine/generator comprise a single electric generating unit. All combustion units/boilers/combined-cycle turbines that produce steam for use in a single steam turbine/generator unit are part of the same electric generating unit.

Examples:

(a) For an integrated gasification combined-cycle combustion turbine plant, the EGU consists of all equipment involved in fuel delivery to the unit, as well as all equipment used in the fuel conversion and combustion processes, any installed emission control equipment, and all equipment used for the generation of electricity.

(b) For a combined-cycle natural gas fired combustion turbine, the EGU begins at the point where natural gas is delivered to the plant site and ends with the generation of electricity from the combustion turbine and from steam produced and used on a steam turbine.

(c) An EGU also concludes fuel cells fueled by hydrogen produced:

(i) In a reformer utilizing nonrenewable fuels; or

(ii) By a gasifier producing hydrogen from nonrenewable fuels.

"EFSEC" or "council" means the energy facility site evaluation council.

"Electric utility" means an electrical company or a consumer-owned utility.

"Electrical company" means a company owned by investors that meets the definition of RCW 80.04.010.

"Fossil fuel" means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material to produce heat for the generation of electricity.

"Greenhouse gases" includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"Long-term financial commitment" means:

(a) Either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or

(b) A new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

"MWh" = megawatt-hour electricity.

"MWh_{eq}" = megawatt-hour equivalent electrical energy of useful thermal energy output. 1 MWh_{eq} = 3.413 million Btu of thermal energy.

"New ownership interest" means a change in the ownership structure of a baseload power plant or a cogeneration facility or the electrical generation portion of a cogeneration facility affecting at least:

(a) Five percent of the market value of the power plant or cogeneration facility; or

(b) Five percent of the electrical output of the power plant or cogeneration facility.

The above thresholds apply to each unit within a multi-unit generation facility.

"Permanent sequestration" means the retention of greenhouse gases in a containment system using a method that is in accordance with standards approved by the department of ecology and that creates a high degree of confidence that substantially ninety-nine percent of the greenhouse gases will remain contained for at least one thousand years.

"Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatt-hours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatt-hours.

"Power plant" means a facility for the generation of electricity that is permitted as a single plant by the energy facility site evaluation council. A power plant may be comprised of one or more individual electrical generating units, each unit of which can be operated or owned separately from the other units.

"Regulated greenhouse gases emissions" is the mass of carbon dioxide emitted plus the mass of nitrous oxide emitted plus the mass of methane emitted. Regulated greenhouse gases emissions include carbon dioxide produced by a sulfur dioxide control system such as a wet limestone scrubber system.

"Renewable fuel" means:

- (a) Landfill gas;
- (b) Biomass energy utilizing animal waste, solid organic fuels from wood, forest, or field residues or dedicated energy crops that do not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenic;
- (c) By-products of pulping or wood manufacturing processes, including but not limited to bark, wood chips, sawdust, and lignin in spent pulping liquors; or
- (d) Gas from sewage treatment facilities.

"Renewable resources" means electricity generation facilities fueled by renewable fuels plus electricity generation facilities fueled by:

- (a) Water;
- (b) Wind;
- (c) Solar energy;
- (d) Geothermal energy; or
- (e) Ocean thermal, wave, or tidal power.

"Sequential use of energy" means:

- (a) For a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard; or
- (b) For a bottoming-cycle cogeneration facility, the use of reject heat from a thermal application or process, at least some of which is then used for power production.

"Sequestration plan" means a comprehensive plan describing how a plant owner or operator will comply with the emissions performance standard by means of sequestering greenhouse gases, where the sequestration will start after electricity is first produced, but within five years of the start of commercial operation.

"Sequestration program" means a comprehensive plan describing how a baseload electric generation plant's owner or operator will demonstrate compliance with the emissions performance standard at start of commercial operation and continuing unchanged into the future. The

program is a description of how the facility meets the emissions performance standard based on the characteristics of the baseload electric generation facility or unit or by sequestering greenhouse gases emissions to meet the emissions performance standard with the sequestration starting on or before the start of commercial operation.

"Supplementary firing" means an energy input to:

(a) A cogeneration facility used only in the thermal process of a topping-cycle cogeneration facility;

(b) The electric generating process of a bottoming-cycle cogeneration facility; or

(c) Any baseload electric generation unit to temporarily increase the thermal energy that can be converted to electrical energy.

"Topping-cycle cogeneration facility" means a cogeneration facility in which the energy input to the facility is first used to produce useful electrical power output, and at least some of the reject heat from the power production process is then used to provide useful thermal energy.

"Total energy input" means the total energy supplied by all fuels used to produce electricity in a baseload electric generation facility or unit.

"Total energy output" of a topping-cycle cogeneration facility or unit is the sum of the useful electrical power output and useful thermal energy output.

"Upgrade" means any modification made for the primary purpose of increasing the electric generation capacity of a baseload electric generation facility or unit. Upgrade does not include:

(a) Routine or necessary maintenance;

(b) Installation of emission control equipment;

(c) Installation, replacement, or modification of equipment that improves the heat rate of the facility; or

(d) Installation, replacement, or modification of equipment for the primary purpose of maintaining reliable generation output capability that does not increase the heat input or fuel usage as specified in existing generation air quality permits as of July 22, 2007, but may result in incidental increases in generation capacity.

"Useful energy output" of a cogeneration facility means the electric or mechanical energy made available for use, exclusive of any such energy used in the power production process.

"Useful thermal energy output" of a cogeneration facility means the thermal energy:

(a) That is made available to and used in an industrial or commercial process (minus any heat contained in condensate return and/or makeup water);

(b) That is used in a heating application (e.g., space heating, domestic hot water heating); or

(c) That is used in a space cooling application (i.e., thermal energy used by an absorption chiller).

"Waste gas" is refinery gas and other fossil fuel derived gases with a heat content of more than 300 Btu/standard cubic foot. Waste gas does not include gaseous renewable energy sources.

[Statutory Authority: Chapters 80.70 and 80.80 RCW and RCW 80.50.040. WSR 08-14-064, § 463-85-110, filed 6/25/08, effective 7/26/08.]