

WAC 173-407-150 Calculating greenhouse gas emissions and determining compliance for a baseload electric cogeneration facility or unit under Part II.

(1) This section applies to a facility or unit certified to the Federal Energy Regulatory Commission under the provisions of 18 C.F.R. Part 292, Subpart B as a qualifying cogeneration facility (in effect on the date in WAC 173-407-006).

(2) The owner or operator of a baseload electric cogeneration facility or unit that must demonstrate compliance with the GHG EPS in WAC 173-407-130 must collect the following data:

(a) The usage and heat content of fuels and fuel feed stocks that provide energy input to the baseload electric cogeneration facility or unit. The facility or unit owner or operator must monitor and report these data as directed by WAC 173-407-160.

(b) Electrical output in MWh as measured and recorded per WAC 173-407-160.

(c) All useful thermal energy and useful energy used for nonelectrical generation uses in MMBtu must be converted to units of MWh_{eq} by using the conversion factor of 3.413 million British thermal units per megawatt hour (MMBtu/MWh).

(d) Regulated GHG emissions in pounds/MMBtu from a baseload electric cogeneration facility or unit as monitored, reported and calculated in WAC 173-407-160.

(e) Adjustments for use of renewable resources. If the owner or operator of a baseload electric cogeneration facility or unit adjusts its GHG emissions to account for the use of renewable resources, the GHG emissions are reduced based on the ratio of the annual heat input from renewable resources and the annual heat input from use of all fuels and fuel feed stocks. The owner or operator must base this adjustment on records of fuel usage and representative heat contents approved by ecology.

(f) Adjustment for sequestered GHG emissions. An owner or operator can subtract the quantity of GHG emissions that are permanently sequestered through an approved sequestration method(s) during the calendar year from the total pounds of GHG emitted during that year.

(3) Bottoming-cycle cogeneration facilities. Ecology and the facility must jointly develop the formula to determine compliance of a bottoming-cycle cogeneration facility or unit with the GHG EPS. To the extent possible, ecology and the facility must base the facility-specific formula on the one for topping-cycle facilities identifying the amount of energy converted to electricity, thermal losses, and energy from the original fuel(s) used to provide useful thermal energy in the industrial process. Ecology and the facility must ensure that the formula is specific to the equipment installed, thermal energy uses, and specific operating conditions of the facility.

(4) Topping-cycle cogeneration facilities. To demonstrate compliance with the GHG EPS, a topping-cycle facility or unit must:

(a) Determine annual electricity produced in MWh.

(b) Determine the annual electrical energy equivalent of the useful thermal energy output in MWh_{eq} .

(c) Determine the annual regulated GHG emissions produced in pounds.

(5) By January 31st of each year, the owner or operator of a baseload electric cogeneration facility or unit subject to the compliance demonstration requirements of Part II and Part III of this rule must:

(a) Calculate the pounds of regulated GHG emissions emitted per MWh of electricity produced during the prior calendar year by dividing the total regulated GHG emissions in pounds by the sum of the electricity produced in MWh and thermal energy output in MWh_{eq} in that year; and

(b) Submit that calculation and all supporting information to ecology.

[Statutory Authority: Chapter 80.80 RCW. WSR 18-05-091 (Order 16-12), § 173-407-150, filed 2/21/18, effective 3/24/18; WSR 08-14-011 (Order 07-11), § 173-407-150, filed 6/19/08, effective 7/20/08.]