

1 **WAC 463-XX-XXX Carbon Dioxide Emissions Standard**

2  
3 (1) Introduction.

4 This rule establishes a carbon dioxide (“CO2”) emissions standard for natural gas power plants under  
5 council jurisdiction. The rule is divided into a standard for emissions, and three pathways to meet that  
6 standard.

7 (2) Policy.

8 Mitigation and offset of CO2 emissions, which contribute significantly to global warming, is consistent  
9 with the council’s overriding policy as described in WAC 463-47-110. To issue a site certificate, the  
10 council must find that the energy facility complies with any applicable CO2 emissions standard adopted  
11 by the council or enacted by statute.

12 (3) Standard for natural gas power plants.

13 A natural gas power plant shall not emit more than 0.458 pounds CO2 per kilowatt-hour (kWh), taking  
14 into account actual emissions from the plant and applicable offsets. New power plants must meet the  
15 standard in place at the time the council deems the application complete.

16 (4) Emissions.

17 Emissions will be analyzed and calculated based on a 30-year time frame. Based on these projections,  
18 offsetting and mitigation requirements will be set.

19 (5) Offset and mitigation requirements.

20 Three paths shall be allowed to meet the offset and mitigation requirement. An applicant can use one or  
21 more of these paths.

22 (i) Combined heat and power.

23 Combined heat and power systems utilize both the electrical and thermal energy generated by a  
24 power system using a single fuel source such as natural gas. Qualifying systems would need to  
25 produce at least 20% of their useful energy as electrical or mechanical power and at least 20% as  
26 thermal energy. Eligible systems must have an overall efficiency of at least 60%. Qualifying  
27 combined heat and power will reduce CO2 emissions and shall be credited against emission  
28 standards. These reductions shall be part of the initial analysis, and shall be trued up in the five-year  
29 reporting process.

30 (ii) Cofiring.

31 Cofiring with biomass shall be credited against emission standards. Biomass is defined in  
32 accordance with RCW 19.29A.090, which is incorporated here by reference, and shall include the  
33 gaseous and liquid forms. To encourage creation of facilities to produce biomass fuels, for the first  
34 five years after adoption of this rule, the full amount of biomass use shall be credited against CO2  
35 emission standards, with the percent CO2 emissions reduction equal to the percent biomass cofired.  
36 After that five-year time period, if the applicant elects to follow the direct investment path described  
37 in subsection (c)(i) of this section, the cofiring credit shall be based on actual CO2 emissions  
38 reductions and quantified by lifecycle analyses conducted by the U.S. Department of Energy or  
39 other approved, credible sources. Alternatively, if the applicant elects to follow the monetary path  
40 described in subsection (c)(ii) of this section, the cofiring credit shall be based on projected CO2  
41 emissions reductions and quantified by lifecycle analyses conducted by the U.S. Department of  
42 Energy or other approved, credible sources.

43 (c) Offset Projects.

1 The applicant and/or a qualified organization will conduct offset projects.

2 (i) If undertaken by the applicant (“direct investment”), the applicant’s CO2 emissions  
3 mitigation proposal must be submitted to and approved by the council. At least one public  
4 hearing must be held prior to the council’s determination of the adequacy of the proposal.  
5 To be considered adequate, the applicant’s proposal at a minimum must include a portfolio  
6 of different types of offset projects with geographic diversity. Appropriate CO2 emissions  
7 offset projects fall into the following categories: energy efficiency measures, clean and  
8 efficient transportation measures, renewable energy resources, and sequestration programs.  
9 Investment in sequestration is limited to no more than 20 percent of the total funds invested  
10 by the applicant to offset CO2 emissions. The applicant can aggregate its investments with  
11 other entities pursuing offsets. The applicant must demonstrate that the portfolio of  
12 proposed offset projects meets at least the following criteria:

- 13 (a) provides reasonable certainty that carbon reduction goals will be met,
- 14 (b) minimizes the extent to which external events can reduce the amount of CO2  
15 sequestered or offset,
- 16 (c) sequesters or offsets carbon for a period of time not less than 60 years,
- 17 (d) accomplishes carbon dioxide emissions reductions that would otherwise not have taken  
18 place,
- 19 (e) enables the applicant to legally claim the CO2 emissions offsets, and
- 20 (f) includes monitoring and verification to determine that reductions are actually made  
21 compared to a predetermined baseline.

22 The applicant will file biennial reports with the council on actual offsets achieved. Before  
23 beginning construction, a bond or comparable security must be provided in an amount equal  
24 to the amount the applicant would have paid by following the monetary path described in (ii)  
25 of this subsection.

26 (ii) If conducted by an independent qualified organization (“monetary path”), the council must  
27 approve the designated organization. The council shall consult with others and develop and  
28 maintain a list of qualified organizations with proven experience in emissions mitigation  
29 activities. The applicant will purchase offsets at a rate of \$2/short ton, including an  
30 administrative fee of up to 5%. A qualified organization may spend up to 20% of the total  
31 funds from the applicant for contracting and selection, monitoring, evaluation, and  
32 enforcement of contracts to implement offsets. The applicant shall pay the full amount to the  
33 selected qualified organization in equal installments over a five-year period, with the first  
34 payment due at the time commercial operation begins. Before beginning construction, the  
35 applicant will provide the council with a bond or comparable security equal to the total  
36 amount of the CO2 emissions mitigation monetary path requirement.

37 (iii) Within six months of adoption of this rule, the council shall establish a stakeholder advisory  
38 committee to develop and recommend to the council criteria regarding the process for  
39 selecting CO2 emissions mitigation projects and protocols for project monitoring and  
40 verification.

41 (1) Five-year review.

42 Five years after commencement of plant operation, and every five years thereafter, certificate holders  
43 that conduct their own offset projects as described in section (5)(c)(i) must provide the council with

1 reports on actual hours of operation and actual CO2 emissions. At these five-year intervals, the  
2 applicant will project future emissions and the council will set offsetting obligations accordingly.

3 (a) If actual emissions exceed projections for a five-year time period, certificate holders will be  
4 required to offset the excess through the monetary path, at the offset rate for the year in  
5 which the facility was permitted.

6 (b) If actual emissions are less than projections for a five-year time period, facility owners will  
7 be credited against future offsetting obligations on a ton for ton basis.

8 (7) Process for updating the standard.

9 The council shall conduct an evaluation of current state-of-the-art natural gas turbine technology every  
10 two years, beginning two years after adoption of this standard, and set new standards based on this  
11 evaluation no more than nine months later. The council shall conduct an evaluation of the current cost of  
12 mitigation per ton of CO2 every two years, beginning two years after adoption of this standard, and set  
13 new costs no more than nine months later.

14 (8) Modification of a permitted natural gas power plant.

15 If a permitted natural gas power plant is proposed to be modified in any way that increases CO2  
16 emissions, these increased emissions must be mitigated according to the current rule in place at the time  
17 of the proposed modification.

18 (9) Other.

19 The council may adopt CO2 emissions mitigation standards for other energy facilities under its  
20 jurisdiction that emit CO2.