

**MN DG Rate Group, Docket No. E999/CI-01-1023
Must-Buy Scenario**

October 9, 2002 Proposed Agreement

When the utility is in a "Must-Buy" situation, the utility agrees to pay for the capacity and energy at a rate based on its Avoided Cost under on/off peak and seasonal scenarios.

"Must-Buy" Definition

A "Must-Buy" situation exists when the customer meets the requirements of a Qualifying Facility" as defined by PURPA. PURPA's definition of a Qualifying Facility reads as follows:

***Qualifying Facility** means a cogeneration facility or a small power production facility that is a qualifying facility under Subpart B of part 292.*

The criteria outlined in Subpart B of part 292 for becoming a qualifying small power production or cogeneration facility has been included at the end of this document as Appendix 1.

Avoided Cost Definition

To remain consistent with the definition of the Must-Buy situation, the definition provided by PURPA for Avoided Cost should be used as a starting point for rate development. The PURPA definition reads as follows:

***Avoided Cost** means the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source.*

Using this definition as a guideline, Avoided Cost for Must-Buy situations are used to develop rate structures as described below:

1. **Cogenerator or small producer, under 40KW**
As currently offered today through utility tariffs, small producers under 40KW have the option to net meter. Through net-metering, the customer receives credit for energy sold to the utility at the utility's applicable retail rate. Therefore the rate paid by the utility is higher than the utility's avoided cost.
2. **Cogenerator or small producer, 40-100KW**
As currently offered today through utility tariffs, small producers from 40 to 100KW can sell power to the utility at the rate specified in each utility's tariff. This rate is developed using a proxy for avoided cost and is updated on an annual basis.

3. **Cogenerator or large producer, over 100KW, Utility DOES NOT need capacity¹**
Because the utility does not need capacity, the rate paid to a Distributed Generation facility should be based on the energy cost of the utility's energy resource that is avoided². Thus, the rate paid could be lower than when the utility needs capacity. The tariffed service offering should include a methodology for rate development on an individual contract basis rather than a specific rate.

4. **Cogenerator or large producer, over 100KW, Utility DOES NEED capacity.**
Because the utility does need capacity currently or in the near future, the rate paid to a Distributed Generation facility should be based on the utility's avoided capacity and energy cost. Thus, the total rate paid should³ be higher than when the utility does NOT need capacity. Again, the tariffed service offering should include a methodology for rate development on an individual contract basis rather than a specific rate.

¹ If a utility has no avoided capacity cost, the avoided capacity payment is zero. See <http://www.revisor.leg.state.mn.us/arule/7835/3700.html> "7835.3700 **Amount of Capacity Payments; Considerations** for further details.

² The avoided energy resource could be generation or a purchase.

³ The total rate paid should be higher because the utility would be including a capacity payment with the energy payment.

Appendix 1

§ 292.204 Criteria for qualifying small power production facilities.

(a) Size of the facility. –

(1) Maximum size. There is no size limitation for an eligible solar, wind, waste or facility, as defined by section 3(17)(E) of the Federal Power Act. For a non-eligible facility, the power production capacity for which qualification is sought, together with the power production capacity of any other non-eligible small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts.

(2) Method of calculation.

(i) For purposes of this paragraph, facilities are considered to be located at the same site as the facility for which qualification is sought if they are located within one mile of the facility for which qualification is sought and, for hydroelectric facilities, if they use water from the same impoundment for power generation.

(ii) For purposes of making the determination in clause (i), the distance between facilities shall be measured from the electrical generating equipment of a facility.

(3) Waiver. The Commission may modify the application of paragraph (a)(2) of this section, for good cause.

(b) Fuel use.

(1)

(i) The primary energy source of the facility must be biomass, waste, renewable resources, geothermal resources, or any combination thereof, and 75 percent or more of the total energy input must be from these sources.

(ii) Any primary energy source which, on the basis of its energy content, is 50 percent or more biomass shall be considered biomass.

(2) Use of oil, natural gas and coal by a facility, under section 3(17)(B) of the Federal Power Act, is limited to the minimum amounts of fuel required for ignition, startup, testing, flame stabilization, and control uses, and the minimum amounts of fuel required to alleviate or prevent unanticipated equipment outages, and emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. Such fuel use may not, in the aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy and any calendar year subsequent to the year in which the facility first produces electric energy.

Appendix 1

§ 292.205 Criteria for qualifying cogeneration facilities.

(a) Operating and efficiency standards for topping-cycle facilities.

(1) Operating standard. For any topping-cycle cogeneration facility, the useful thermal energy output of the facility must be no less than 5 percent of the total energy output during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first produces electric energy.

(2) Efficiency standard.

(i) For any topping-cycle cogeneration facility for which any of the energy input is natural gas or oil, and the installation of which began on or after March 13, 1980, the useful power output of the facility plus one-half the useful thermal energy output, during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first produces electric energy, must:

(A) Subject to paragraph (a)(2)(i)(B) of this section be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; or

(B) If the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility.

(ii) For any topping-cycle cogeneration facility not subject to paragraph (a)(2)(i) of this section there is no efficiency standard.

(b) Efficiency standards for bottoming-cycle facilities.

(1) For any bottoming-cycle cogeneration facility for which any of the energy input as supplementary firing is natural gas or oil, and the installation of which began on or after March 13, 1980, the useful power output of the facility during the 12-month period beginning with the date the facility first produces electric energy, and any calendar year subsequent to the year in which the facility first produces electric energy must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing.

(2) For any bottoming-cycle cogeneration facility not covered by paragraph (b)(1) of this section, there is no efficiency standard.

(c) Waiver. The Commission may waive any of the requirements of paragraphs (a) and (b) of this section upon a showing that the facility will produce significant energy savings.