

# MINNESOTA RULES 1987

## 6981 COGENERATION AND SMALL POWER PRODUCTION 7835.0100

### CHAPTER 7835 PUBLIC UTILITIES COMMISSION COGENERATION AND SMALL POWER PRODUCTION

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#### 7835.0100 DEFINITIONS.

Subpart 1. **Applicability.** For purposes of this chapter, the following terms have the meanings given them in this part.

Subp. 2. **Average annual fuel savings.** "Average annual fuel savings" means the annualized difference between the system fuel costs that the utility would have incurred without the additional generation facility and the system fuel costs the utility is expected to incur with the additional generation facility.

Subp. 2a. **Average retail utility energy rate.** "Average retail utility energy rate" means, for any class of utility customer, the quotient of the total annual class revenue from sales of electricity minus the annual revenue resulting from fixed charges, divided by the annual class kilowatt-hour sales. Data from the most recent 12-month period available before each filing required by parts 7835.0300 to 7835.1200 must be used in the computation.

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Subp. 3. **Backup power.** "Backup power" means electric energy or capacity supplied by the utility to replace energy ordinarily generated by a qualifying facility's own generation equipment during an unscheduled outage of the facility.

Subp. 4. **Capacity.** "Capacity" means the capability to produce, transmit, or deliver electric energy.

Subp. 5. **Capacity costs.** "Capacity costs" means the costs associated with providing the capability to deliver energy. They consist of the capital costs of facilities used to generate, transmit, and distribute electricity and the fixed operating and maintenance costs of these facilities.

Subp. 6. **Commission.** "Commission" means the Minnesota Public Utilities Commission.

Subp. 7. **Energy.** "Energy" means electric energy, measured in kilowatt-hours.

Subp. 8. **Energy costs.** "Energy costs" means the variable costs associated with the production of electric energy. They consist of fuel costs and variable operating and maintenance expenses.

Subp. 9. **Firm power.** "Firm power" means energy delivered by the qualifying facility to the utility with at least a 65 percent on-peak capacity factor in the month. The capacity factor is based upon the qualifying facility's maximum on-peak metered capacity delivered to the utility during the month.

Subp. 10. **Generating utility.** "Generating utility" means a utility which regularly meets all or a portion of its electric load through the scheduled dispatch of its own generating facilities.

Subp. 11. **Incremental cost of capital.** "Incremental cost of capital" means the current weighted cost of the components of a utility's capital structure, each cost weighted by its proportion of the total capitalization.

Subp. 12. **Interconnection costs.** "Interconnection costs" means the reasonable costs of connection, switching, metering, transmission, distribution, safety provisions, and administrative costs incurred by the utility that are directly related to installing and maintaining the physical facilities necessary to permit interconnected operations with a qualifying facility. Costs are considered interconnection costs only to the extent that they exceed the corresponding costs which the utility would have incurred if it had not engaged in interconnected operations, but instead generated from its own facilities or purchased from other sources an equivalent amount of electric energy or capacity. Costs are considered interconnection costs only to the extent that they exceed the costs the utility would incur in selling electricity to the qualifying facility as a nongenerating customer.

Subp. 13. **Interruptible power.** "Interruptible power" means electric energy or capacity supplied by the utility to a qualifying facility subject to interruption under the provisions of the utility's tariff applicable to the retail class of customers to which the qualifying facility would belong irrespective of its ability to generate electricity.

Subp. 14. **Maintenance power.** "Maintenance power" means electric energy or capacity supplied by a utility during scheduled outages of the qualifying facility.

Subp. 15. **Marginal capital carrying charge rate in the first year of investment.** "Marginal capital carrying charge rate in the first year of investment" means the percentage factor by which the amount of a new capital investment in a generating unit would have to be multiplied to obtain an amount equal to the total additional first year amounts for the cost of equity and debt capital, income taxes, property and other taxes, tax credits (amortized over the useful life of the generating unit), depreciation, and insurance which would be associated with the new capital investment and would account for the likely inflationary or deflationary changes in the investment cost due to the one-year delay in building the unit.

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Subp. 16. **Nongenerating utility.** "Nongenerating utility" means a utility which has no electric generating facilities, or a utility whose electric generating facilities are used only during emergencies or readiness tests, or a utility whose electric generating facilities are ordinarily dispatched by another entity.

Subp. 17. **On-peak hours.** "On-peak hours" means, for utilities whose rates are regulated by the commission, those hours which are defined as on-peak for retail ratemaking. For any other utility, on-peak hours are either those hours formally designated by the utility as on-peak for ratemaking purposes or those hours for which its typical loads are at least 85 percent of its average maximum monthly loads.

Subp. 18. **Purchase.** "Purchase" means the purchase of electric energy or capacity or both from a qualifying facility by a utility.

Subp. 19. **Qualifying facility.** "Qualifying facility" means a cogeneration or small power production facility which satisfies the conditions established in Code of Federal Regulations, title 18, section 292.101 (b) (1), (1981), as applied when interpreted in accordance with the amendments to Code of Federal Regulations, title 18, sections 292.201 to 292.207 adopted through Federal Register, volume 46, pages 33025-33027, (1981). The initial operation date or initial installation date of a cogeneration or small power production facility must not prevent the facility from being considered a qualifying facility for the purposes of this chapter if it otherwise satisfies all stated conditions.

Subp. 20. **Sale.** "Sale" means the sale of electric energy or capacity or both by an electric utility to a qualifying facility.

Subp. 21. **Supplementary power.** "Supplementary power" means electric energy or capacity supplied by the utility which is regularly used by a qualifying facility in addition to that which the facility generates itself.

Subp. 22. **System emergency.** "System emergency" means a condition on a utility's system which is imminently likely to result in significant disruption of service to customers or to endanger life or property.

Subp. 23. **System incremental energy costs.** "System incremental energy costs" means amounts representing the hourly energy costs associated with the utility generating the next kilowatt-hour of load during each hour.

Subp. 24. **Utility.** "Utility" means:

A. for the purposes of parts 7835.1300 to 7835.1800 and 7835.4500 to 7835.4550, any public utility, including municipally owned electric utilities or cooperative electric associations, that sells electricity at retail in Minnesota; or

B. for the purposes of parts 7835.0200 to 7835.1200, 7835.1900 to 7835.4400, 7835.4600 to 7835.6100, and 7835.9910, any public utility, including municipally owned electric utilities and cooperative electric associations, that sells electricity at retail in Minnesota, except those municipally owned electric utilities that have adopted and have in effect rules consistent with this chapter.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.0200 SCOPE AND PURPOSE.

The purpose of this chapter is to implement certain provisions of Minnesota Statutes, section 216B.164; the Public Utility Regulatory Policies Act of 1978, United States Code, title 16, section 824a-3 (Supplement III, 1979); and the Federal Energy Regulatory Commission regulations, Code of Federal Regulations, title 18, sections 292.101 to 292.602 (1981). Nothing in this chapter excuses any utility from carrying out its responsibilities under these provisions of state and federal law. This chapter must at all times be applied in accordance with its intent to give the maximum possible encouragement to cogeneration and small power production consistent with protection of the ratepayers and the public.

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**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### FILING REQUIREMENTS

#### 7835.0300 FILING DATES.

Within 60 days after the effective date of this chapter, on January 1, 1985, and every 12 months thereafter, each utility must file with the commission, for its review and approval, a cogeneration and small power production tariff. The tariff for generating utilities must contain schedules A to G, except that generating utilities with less than 500,000,000 kilowatt-hour sales in the calendar year preceding the filing may substitute their retail rate schedules for schedules A and B. The tariff for nongenerating utilities must contain schedules C, D, E, F, and H, and may, at the option of the utility, contain schedules A and B, using data from the utility's wholesale supplier.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.0400 FILING OPTION.

If, after the initial filing, schedule C is the only change in the cogeneration and small power production tariff to be filed in a subsequent year, the utility may notify the commission in writing, by the date the tariff is due, that there is no other change in the tariff. This notification and new schedule C will serve as a substitute for the refiling of the complete tariff in that year.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.0500 SCHEDULE A.

Schedule A must contain the estimated system average incremental energy costs by seasonal peak and off-peak periods for each of the next five years. For each seasonal period, system incremental energy costs must be averaged during system daily peak hours, system daily off-peak hours, and all hours in the season. The energy costs must be increased by a factor equal to 50 percent of the line losses shown in schedule B. Schedule A must describe in detail the method used to determine the on-peak and off-peak hours and seasonal periods and must show the resulting on-peak and off-peak and seasonal hours selected.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.0600 SCHEDULE B.

**Subpart 1. Information required.** Schedule B must contain the information listed in subparts 2 to 6.

**Subp. 2. Planned utility generating facility additions.** Schedule B must contain a description of all planned utility generating facility additions anticipated during the next ten years, including:

- A. name of unit;
- B. nameplate rating;
- C. fuel type;
- D. in-service date;

E. completed cost in dollars per kilowatt in the year in which the plant is expected to be put in service, including allowance for funds used during construction;

F. anticipated average annual fixed operating and maintenance costs in dollars per kilowatt;

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G. energy costs associated with the unit, including fuel costs and variable operating and maintenance costs;

H. projected average number of kilowatt-hours per year the plant will generate during its useful life; and

I. average annual fuel savings resulting from the addition of this generating facility, stated in dollars per kilowatt.

**Subp. 3. Planned firm capacity purchases.** Schedule B must contain a description of all planned firm capacity purchases, other than from qualifying facilities, during the next ten years, including:

A. year of the purchase;

B. name of the seller;

C. number of kilowatts of capacity to be purchased;

D. capacity cost in dollars per kilowatt; and

E. associated energy cost in cents per kilowatt-hour.

**Subp. 4. Percentage of line losses.** Schedule B must contain the utility's overall average percentage of line losses due to the distribution, transmission, and transformation of electric energy.

**Subp. 5. Net annual avoided capacity cost.** Schedule B must contain the utility's net annual avoided capacity cost stated in dollars per kilowatt-hour averaged over the on-peak hours and the utility's net annual avoided capacity cost stated in dollars per kilowatt-hour averaged over all hours. These figures must be calculated as follows in items A to I:

A. The completed cost per kilowatt of the utility's next major generating facility addition, as reported in schedule B, must be multiplied by the utility's marginal capital carrying charge rate in the first year of investment. If the utility is unable to determine this carrying charge rate as specified, the rate of 15 percent must be used.

B. The dollar amount resulting from the calculation set forth in item A must be discounted to present value, as of the midpoint of the reporting year, from the in-service date of the generating unit. The discount rate used must be the incremental cost of capital.

C. The figure for average annual fuel savings per kilowatt described in subpart 2, item I must be discounted to present value using the procedure of item B.

D. The number resulting from the calculation in item C must be subtracted from the number resulting from the calculation in item B. This is the net annual avoided capacity cost stated in dollars per kilowatt at present value.

E. The net annual avoided capacity cost calculated in item D must be multiplied by 1.15 to recognize a reserve margin.

F. The figure determined from the calculation of item E must be increased by the present value of the anticipated average annual fixed operating and maintenance costs as reported in subpart 2, item F. The present value must be determined using the procedure of item B.

G. The figure determined from the calculation of item F must be increased by one-half of the percentage amount of the average system line losses as shown on schedule B.

H. The annual dollar per kilowatt figure, as calculated in accordance with item G, must be divided by the annual number of hours in the on-peak period as specified in schedule A. The resulting figure is the utility's net annual on-peak avoided capacity cost in dollars per kilowatt-hour.

I. The annual dollar per kilowatt figure resulting from the calculation specified in item G must be divided by the total number of hours in the year. The resulting figure is the utility's net annual avoided capacity cost in dollars per kilowatt-hour averaged over all hours.

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Subp. 6. **Net annual avoided capacity cost.** If the utility has no planned generating facility additions for the ensuing ten years, but has planned additional capacity purchases, other than from qualifying facilities, during the ensuing ten years, schedule B must contain its net annual avoided capacity cost stated in dollars per kilowatt-hour averaged over the on-peak hours and the utility's net annual avoided capacity costs stated in dollars per kilowatt-hour averaged over all hours. These must be calculated as follows in items A and B:

A. The annual capacity purchase amount, in dollars per kilowatt, for the utility's next planned capacity purchase, other than from a qualifying facility, must be discounted to present value as of the midpoint of the reporting year, from the year of the planned capacity purchase. The discount rate used must be the incremental cost of capital.

B. The net annual avoided capacity cost must be computed by applying the figure determined in item A to the steps enumerated in subpart 5, items D to I, excluding item F.

Subp. 7. **Avoidable capacity costs.** If the utility has neither planned generating facility additions nor planned additional capacity purchases, other than from qualifying facilities, during the ensuing ten years, the utility must be deemed to have no avoidable capacity costs.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.0650 SCHEDULE C.

Schedule C must contain the calculation of the average retail utility energy rates.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.0700 SCHEDULE D.

Schedule D must contain all standard contracts to be used with qualifying facilities, containing applicable terms and conditions.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.0800 SCHEDULE E.

Schedule E must contain the utility's safety standards, required operating procedures for interconnected operations, and the functions to be performed by any control and protective apparatus. These standards and procedures must not be more restrictive than the interconnection guidelines listed in parts 7835.4800 to 7835.5800. The utility may include in schedule E suggested types of equipment to perform the specified functions. No standard or procedure may be established to discourage cogeneration or small power production.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.0900 SCHEDULE F.

Schedule F must contain procedures for notifying affected qualifying facilities of any periods of time when the utility will not purchase electric energy or capacity because of extraordinary operational circumstances which would make the costs of purchases during those periods greater than the costs of internal generation.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

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### 7835.1000 SCHEDULE G.

Schedule G must contain and describe all computations made by the utility in determining schedules A and B.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### 7835.1100 SCHEDULE H; SPECIAL RULE FOR NONGENERATING UTILITIES.

Schedule H must list the rates at which a nongenerating utility purchases energy and capacity. If the nongenerating utility has more than one wholesale supplier, schedule H must list the rates of that supplier from which purchases may first be avoided. If the nongenerating utility with more than one wholesale supplier also chooses to file schedules A and B, the data on schedules A and B must be obtained from that supplier from which purchases may first be avoided.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### 7835.1200 AVAILABILITY OF FILINGS.

All filings required by parts 7835.0300 to 7835.1100 must be made with the commission and maintained at the utility's general office and any other offices of the utility where rate case filings are kept. These filings must be available for public inspection at the commission and at the utility offices during normal business hours.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## REPORTING REQUIREMENTS

### 7835.1300 GENERAL REPORTING REQUIREMENTS.

Each utility interconnected with a qualifying facility must provide the commission with the information in parts 7835.1400 to 7835.1800 on or before November 1, 1984, and annually thereafter, and in such form as the commission may require.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### 7835.1400 NET ENERGY BILLED QUALIFYING FACILITIES.

For qualifying facilities under net energy billing, the utility must provide the commission with the following information:

A. a summary of the total number of interconnected qualifying facilities, the type of interconnected qualifying facilities by energy source, and the name plate ratings of such units;

B. for each qualifying facility type, the total kilowatt-hours delivered per month to the utility by all net energy billed qualifying facilities;

C. for each qualifying facility type, the total kilowatt-hours delivered per month by the utility to all net energy billed qualifying facilities; and

D. for each qualifying facility type, the total net energy delivered per month to the utility by net energy billed qualifying facilities.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### 7835.1500 OTHER QUALIFYING FACILITIES.

For all qualifying facilities not under net energy billing, the utility must provide the commission with the following information:

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A. a summary of the total number of interconnected qualifying facilities, the type of interconnected qualifying facilities, and the nameplate ratings of such units; and

B. for each qualifying facility type, the total kilowatt-hours delivered per month to the utility, reported by on-peak and off-peak periods to the extent that data is available.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.1600 WHEELING.

The utility must provide a summary of all wheeling activities undertaken with respect to qualifying facilities.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.1700 MAJOR IMPACTS.

The utility may provide a statement of any major impacts that cogeneration or small power production has had on the utility's system.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.1800 EFFECTIVENESS.

The utility may provide a statement of the effectiveness of Minnesota Statutes, section 216B.164 and this chapter in encouraging cogeneration and small power production, as observed by the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## CONDITIONS OF SERVICE

### 7835.1900 REQUIREMENT TO PURCHASE.

The utility must purchase energy and capacity from any qualifying facility which offers to sell energy to the utility and agrees to the conditions in this chapter.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2000 WRITTEN CONTRACT.

A written contract must be executed between the qualifying facility and the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2100 COMPLIANCE WITH NATIONAL ELECTRICAL SAFETY CODE.

The interconnection between the qualifying facility and the utility must comply with the requirements of the National Electrical Safety Code, 1981 edition, issued by the Institute of Electrical and Electronics Engineers as American National Standards Institute Standard C2 (New York, 1980).

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2200 RESPONSIBILITY FOR APPARATUS.

The qualifying facility, without cost to the utility, must furnish, install, operate, and maintain in good order and repair any apparatus the qualifying facility needs in order to operate in accordance with schedule E.



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**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2300 LIABILITY INSURANCE.

A utility or qualifying facility may require proof of coverage or the procurement of a reasonable amount of liability insurance up to \$300,000 as a condition of service.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2400 LEGAL STATUS NOT AFFECTED.

Nothing in this chapter affects the responsibility, liability, or legal rights of any party under applicable law or statutes. No party may require the execution of an indemnity clause or hold harmless clause in the written contract as a condition of service.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2500 PAYMENTS FOR INTERCONNECTION COSTS.

Payments for interconnection costs may be made at the time the costs are incurred, or be made according to any schedule agreed upon by the qualifying facility and the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2600 TYPES OF POWER TO BE OFFERED.

The utility must offer maintenance, interruptible, supplementary, and back-up power to the qualifying facility upon request.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2700 METERING.

The utility must meter the qualifying facility to obtain the data necessary to fulfill its reporting requirements to the commission as specified in parts 7835.1300 to 7835.1800. The qualifying facility must pay for the requisite metering as an interconnection cost.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2800 DISCONTINUING SALES DURING EMERGENCY.

The utility may discontinue sales to the qualifying facility during a system emergency, if the discontinuance and recommencement of service is not discriminatory.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.2900 INTERCONNECTION PLAN.

The utility may require the qualifying facility to submit an interconnection plan not more than 30 days prior to interconnection in order to facilitate interconnection arrangements. If such a plan is required, it must include no more than:

- A. technical specifications of equipment;
- B. proposed date of interconnection; and

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C. projection of net output or consumption by the qualifying facility when available.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### RATES

## 7835.3000 RATES FOR SALES TO BE GOVERNED BY TARIFF.

Except as otherwise provided in part 7835.3100, rates for sales to a qualifying facility must be governed by the applicable tariff for the class of electric utility customers to which the qualifying facility would belong were it not a qualifying facility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3100 PETITION FOR SPECIFIC SALES RATES.

Any qualifying facility or utility may petition the commission for establishment of specific rates for supplementary, maintenance, back-up, or interruptible power.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3200 STANDARD RATES FOR PURCHASES IN GENERAL.

For qualifying facilities with capacity of 100 kilowatts or less, standard rates apply. Qualifying facilities with capacity of more than 100 kilowatts may negotiate contracts with the utility or may be compensated under standard rates if they make commitments to provide firm power. The utility must make available three types of standard rates, described in parts 7835.3300, 7835.3400, and 7835.3500. The qualifying facility with a capacity of 100 kilowatts or less must choose interconnection under one of these rates, and must specify its choice in the written contract required in part 7835.2000. Any net credit to the qualifying facility must, at its option, be credited to its account with the utility or returned by check within 15 days of the billing date. The option chosen must be specified in the written contract required in part 7835.2000. Qualifying facilities remain responsible for any monthly service charges and demand charges specified in the tariff under which they consume electricity from the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3300 NET ENERGY BILLING RATE.

**Subpart 1. Applicability.** The net energy billing rate is available only to qualifying facilities with capacity of less than 40 kilowatts which choose not to offer electric power for sale on either a time-of-day basis or a simultaneous purchase and sale basis.

**Subp. 2. Method of billing.** The utility must bill the qualifying facility for the excess of energy supplied by the utility above energy supplied by the qualifying facility during each billing period according to the utility's applicable retail rate schedule.

**Subp. 3. Additional calculations for billing.** When the energy generated by the qualifying facility exceeds that supplied by the utility during a billing period, the utility must compensate the qualifying facility for the excess energy at the average retail utility energy rate.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

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## 6991 COGENERATION AND SMALL POWER PRODUCTION 7835.3500

### 7835.3400 SIMULTANEOUS PURCHASE AND SALE BILLING RATE.

Subpart 1. **Scope.** The simultaneous purchase and sale rate is available only to qualifying facilities with capacity of less than 40 kilowatts which choose not to offer electric power for sale on a time-of-day basis.

Subp. 2. **Method of billing.** The qualifying facility must be billed for all energy and capacity it consumes during a billing period according to the utility's applicable retail rate schedule.

Subp. 3. **Compensation to qualifying facility.** The utility must purchase all energy and capacity which is made available to it by the qualifying facility. At the option of the qualifying facility, its entire generation must be deemed to be made available to the utility. Compensation to the qualifying facility must be the sum of items A and B.

A. The energy component must be the appropriate system average incremental energy costs shown on schedule A; or if the generating utility has not filed schedule A, the energy component must be the energy rate of the retail rate schedule, applicable to the qualifying facility, filed in lieu of schedules A and B; or if the nongenerating utility has not filed schedule A, the energy component must be the energy rate shown on schedule H;

B. If the qualifying facility provides firm power to the utility, the capacity component must be the utility's net annual avoided capacity cost per kilowatt-hour averaged over all hours shown on schedule B; or if the generating utility has not filed schedule B, the capacity component must be the demand charge per kilowatt, if any, of the retail rate schedule, applicable to the qualifying facility, filed in lieu of schedules A and B, divided by the number of hours in the billing period; or if the nongenerating utility has not filed schedule B, the capacity component must be the capacity cost per kilowatt shown on schedule H, divided by the number of hours in the billing period. If the qualifying facility does not provide firm power to the utility, no capacity component may be included in the compensation paid to the qualifying facility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.3500 TIME-OF-DAY PURCHASE RATES.

Subpart 1. **Applicability.** Time-of-day rates are required for qualifying facilities with capacity of 40 kilowatts or more and less than or equal to 100 kilowatts, and they are optional for qualifying facilities with capacity less than 40 kilowatts. Time-of-day rates are also optional for qualifying facilities with capacity greater than 100 kilowatts if these qualifying facilities provide firm power.

Subp. 2. **Method of billing.** The qualifying facility must be billed for all energy and capacity it consumes during each billing period according to the utility's applicable retail rate schedule. Any utility rate-regulated by the commission may propose time-of-day retail rate tariffs which require qualifying facilities that choose to sell power on a time-of-day basis to also purchase power on a time-of-day basis.

Subp. 3. **Compensation to qualifying facility.** The utility must purchase all energy and capacity which is made available to it by the qualifying facility. Compensation to the qualifying facility must be the sum of items A and B.

A. The energy component must be the appropriate on-peak and off-peak system incremental costs shown on schedule A; or if the generating utility has not filed schedule A, the energy component must be the energy rate of the retail rate schedule, applicable to the qualifying facility, filed in lieu of schedules A and B; or if the nongenerating utility has not filed schedule A, the energy component must be the energy rate shown on schedule H.

B. If the qualifying facility provides firm power to the utility, the capacity component must be the utility's net annual avoided capacity cost per

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kilowatt-hour averaged over the on-peak hours as shown on schedule B; or if the generating utility has not filed schedule B, the capacity component must be the demand charge per kilowatt, if any, of the retail rate schedule, applicable to the qualifying facility, filed in lieu of schedules A and B, divided by the number of on-peak hours in the billing period; or if the nongenerating utility has not filed schedule B, the capacity component must be the capacity cost per kilowatt shown on schedule H, divided by the number of on-peak hours in the billing period. The capacity component applies only to deliveries during on-peak hours. If the qualifying facility does not provide firm power to the utility, no capacity component may be included in the compensation paid to the qualifying facility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3600 CONTRACTS NEGOTIATED BY CUSTOMER.

Except as provided in part 7835.3900, a qualifying facility with capacity greater than 100 kilowatts must negotiate a contract with the utility setting the applicable rates for payments to the customer of avoided capacity and energy costs.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3700 AMOUNT OF CAPACITY PAYMENTS; CONSIDERATIONS.

The qualifying facility which negotiates a contract under part 7835.3600 must be entitled to the full avoided capacity costs of the utility. The amount of capacity payments must be determined through consideration of:

- A. the capacity factor of the qualifying facility;
- B. the cost of the utility's avoidable capacity;
- C. the length of the contract term;
- D. reasonable scheduling of maintenance;
- E. the willingness and ability of the qualifying facility to provide firm power during system emergencies;
- F. the willingness and ability of the qualifying facility to allow the utility to dispatch its generated energy;
- G. the willingness and ability of the qualifying facility to provide firm capacity during system peaks;
- H. the sanctions for noncompliance with any contract term; and
- I. the smaller capacity increments and the shorter lead times available when capacity is added from qualifying facilities.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3800 FULL AVOIDED ENERGY COSTS.

The qualifying facility which negotiates a contract under part 7835.3600 must be entitled to the full avoided energy costs of the utility. The costs must be adjusted as appropriate to reflect line losses.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

## 7835.3900 QUALIFYING FACILITIES OF GREATER THAN 100 KILOWATTS.

Nothing in parts 7835.3600 to 7835.3800 prevents a utility from connecting qualifying facilities of greater than 100 kilowatts under its standard rates.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

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### 7835.4000 UTILITY TREATMENT OF COSTS.

All purchases from qualifying facilities with capacity of 100 kilowatts or less, and purchases of energy from qualifying facilities with capacity of over 100 kilowatts must be considered an energy cost in calculating an electric utility's fuel adjustment clause.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### WHEELING AND EXCHANGE AGREEMENTS

#### 7835.4100 WHEN REQUIRED.

For all qualifying facilities with capacity of 30 kilowatts or greater, the utility, at the qualifying facility's request or with its consent, must provide wheeling or exchange agreements whenever practicable to sell the qualifying facility's output to any other Minnesota utility that anticipates or plans generation expansion in the ensuing ten years. Parts 7835.4200 to 7835.4400 apply unless the qualifying facility and the utility to which it is interconnected agree otherwise.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.4200 INTERUTILITY PAYMENT; WHEELING.

The utility to which the qualifying facility is interconnected must pay any reasonable wheeling charges from other utilities arising from the sale of the qualifying facility's output.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.4300 INTERUTILITY PAYMENT; ENERGY AND CAPACITY.

Within 30 days of receipt, the utility ultimately receiving the qualifying facility's output must pay its resulting full avoided capacity and energy costs by remittance to the utility with which the qualifying facility is interconnected.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.4400 PAYMENT TO QUALIFYING FACILITY.

Within 15 days of receiving payment under part 7835.4300, the utility with which the qualifying facility is interconnected must send the qualifying facility the payment it has received less the total charges it has incurred under part 7835.4200 and its own reasonable wheeling costs.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### DISPUTES

#### 7835.4500 COMMISSION DETERMINATION.

In case of a dispute between a utility and a qualifying facility or an impasse in the negotiations between them, either party may request the commission to determine the issue. When the commission makes the determination, the burden of proof must be on the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

#### 7835.4550 FEES AND COSTS.

In the order resolving the dispute, the commission shall require the prevail-

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ing party's reasonable costs, disbursements, and attorney's fees to be paid by the party against whom the issue or issues were adversely decided, except that a qualifying facility will be required to pay the costs, disbursements, and attorney's fees of the utility only if the commission finds that the claims of the qualifying facility have been made in bad faith or are a sham or frivolous.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### NOTIFICATION TO CUSTOMERS

## 7835.4600 CONTENTS OF WRITTEN NOTICE.

Within 60 days following each annual filing required by parts 7835.0300 to 7835.1200, every utility must furnish written notice to each of its customers that the utility is obligated to interconnect with and purchase electricity from cogenerators and small power producers; that the utility is obligated to provide information to all interested persons free of charge upon request; and that any disputes over interconnection, sales, and purchases are subject to resolution by the commission upon complaint.

The notice must be in language and form approved by the commission.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.4700 AVAILABILITY OF INFORMATION.

Each utility must publish information that must be available to all interested persons free of charge upon request. Such information must include at least the following:

- A. a statement of rates, terms, and conditions of interconnections;
- B. a statement of technical requirements;
- C. a sample contract containing the applicable terms and conditions;
- D. pertinent rate schedules;
- E. the title, address, and telephone number of the department of the utility to which inquiries should be directed; and
- F. the statement: "The Minnesota Public Utilities Commission is available to resolve disputes upon written request," and the address and telephone number of the commission.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

### INTERCONNECTION GUIDELINES

## 7835.4800 DENIAL OF INTERCONNECTION APPLICATION.

Except as hereinafter provided, a utility must interconnect with a qualifying facility that offers to make energy or capacity available to the utility. The utility may refuse to interconnect a qualifying facility with its power system until the qualifying facility has properly applied under part 7835.2900 and has received approval from the utility. The utility must withhold approval only for failure to comply with applicable utility rules not prohibited by this chapter or governmental rules or laws. The utility must be permitted to include in its contract reasonable technical connection and operating specifications for the qualifying facility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.4900 NOTIFICATION OF TELEPHONE UTILITY AND CABLE TELEVISION FIRM.

The electric utility must notify the appropriate telephone utility and cable

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television firm when a qualifying facility is to be interconnected with its system. This notification must be as early as practicable to permit coordinated analysis and testing before interconnection, if considered necessary.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5000 SEPARATE DISTRIBUTION TRANSFORMER.

The utility may require a separate distribution transformer for the qualifying facility if necessary either to protect the safety of employees or the public or to keep service to other customers within prescribed limits.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5100 LIMITING CAPACITY OF SINGLE-PHASE GENERATORS.

If necessary, to avoid the likelihood that a qualifying facility will cause problems with the service of other customers, the utility may limit the capacity and operating characteristics of single-phase generators in a way consistent with the utility limitations for single-phase motors.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5200 ISOLATION OF GENERATOR.

Each qualifying facility must have a lockable, manual disconnect switch capable of isolating the generator from the utility's system readily accessible to the utility.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5300 DISCONTINUING PARALLEL OPERATION.

The utility may require that the qualifying facility discontinue parallel generation operation when necessary for system safety.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5400 PERMITTING ENTRY.

If the particular configuration of the qualifying facility precludes disconnection or testing from the utility side of the interconnection, the qualifying facility must make equipment available and permit electric and communication utility personnel to enter the property at reasonable times to test isolation and protective equipment, to evaluate the quality of power delivered to the utility's system, and to test to determine whether the qualifying facility's generating system is the source of any electric service or communication systems problems. The utility remains responsible for its personnel.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

## 7835.5500 MAINTAINING POWER OUTPUT.

The power output of the qualifying facility must be maintained so that frequency and voltage are compatible with normal utility service and do not cause that service to fall outside the prescribed limits of commission rules and other standard limitations.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** 9 SR 993

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## 7835.5600 COGENERATION AND SMALL POWER PRODUCTION 6996

### 7835.5600 VARYING VOLTAGE LEVELS.

The qualifying facility must be operated so that variations from acceptable voltage levels and other service-impairing disturbances do not adversely affect the service or equipment of other customers, and so that the facility does not produce levels of harmonics which exceed the prescribed limits of commission rules or other levels customarily accepted.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.5700 SAFETY.

The qualifying facility must be responsible for providing protection for the installed equipment and must adhere to all applicable national, state, and local codes.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.5800 RIGHT OF APPEAL FOR EXCESSIVE TECHNICAL REQUIREMENTS.

The qualifying facility has the right of appeal to the commission when it considers individual technical requirements excessive.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.5900 EXISTING CONTRACTS.

Any interconnection contracts executed between a utility and a qualifying facility with installed capacity of less than 40 kilowatts before the effective date of this chapter may be canceled and replaced with the uniform statewide contract at the option of either party by either party giving the other written notice. The notice is effective upon the shortest period permitted under the existing contract for termination, but not less than ten nor more than 30 days.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.6000 CONTRACT LANGUAGE FLEXIBILITY.

Electric utilities organized as cooperatives may substitute "Cooperative" wherever "Utility" appears in the uniform statewide contract in part 7835.9910.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.6100 UNIFORM STATEWIDE CONTRACT.

The form of the uniform statewide contract for use between a utility and a qualifying facility having less than 40 kilowatts of capacity must be as shown in part 7835.9910.

**Statutory Authority:** *MS s 216A.05; 216B.08; 216B.164 subd 6*

**History:** *9 SR 993*

### 7835.9910 UNIFORM STATEWIDE CONTRACT; FORM.

The form for the uniform statewide contract for use between a utility and cogeneration and small power production facilities having less than 40 kilowatts of capacity is as follows:

#### UNIFORM STATEWIDE CONTRACT FOR COGENERATION AND SMALL POWER PRODUCTION FACILITIES





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8. The QF is responsible for the actual, reasonable costs of interconnection which are estimated to be \$\_\_\_\_\_. The QF will pay the Utility in this way:

\_\_\_\_\_

9. The QF will give the Utility reasonable access to its property and electric generating facilities if the configuration of those facilities does not permit disconnection or testing from the Utility's side of the interconnection. If the Utility enters the QF's property, the Utility will remain responsible for its personnel.

10. The Utility may stop providing electricity to the QF during a system emergency. The Utility will not discriminate against the QF when it stops providing electricity or when it resumes providing electricity.

11. The Utility may stop purchasing electricity from the QF when necessary for the Utility to construct, install, maintain, repair, replace, remove, investigate, or inspect any equipment or facilities within its electric system. The Utility will notify the QF before it stops purchasing electricity in this way: \_\_\_\_\_

12. The QF will keep in force liability insurance against personal or property damage due to the installation, interconnection, and operation of its electric generating facilities. The amount of insurance coverage will be \$\_\_\_\_\_ (The utility may not require an amount greater than \$300,000).

13. This contract becomes effective as soon as it is signed by the QF and the Utility. This contract will remain in force until either the QF or the Utility gives written notice to the other that the contract is canceled. This contract will be canceled 30 days after notice is given.

14. This contract contains all the agreements made between the QF and the Utility except that this contract shall at all times be subject to all rules and orders issued by the Public Utilities Commission or other government agency having jurisdiction over the subject matter of this contract. The QF and the Utility are not responsible for any agreements other than those stated in this contract.

THE QF AND THE UTILITY HAVE READ THIS CONTRACT AND AGREE TO BE BOUND BY ITS TERMS. AS EVIDENCE OF THEIR AGREEMENT, THEY HAVE EACH SIGNED THIS CONTRACT BELOW ON THE DATE WRITTEN AT THE BEGINNING OF THIS CONTRACT.

\_\_\_\_\_  
QF  
By: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
UTILITY  
By: \_\_\_\_\_  
\_\_\_\_\_

(Title)

Statutory Authority: *MS s 216A.05; 216B.08; 216B.164 subd 6*  
History: *9 SR 993*