

CHAPTER 7835
PUBLIC UTILITIES COMMISSION
COGENERATION AND SMALL POWER
PRODUCTION

7835.0100	DEFINITIONS.	7835.3300	NET ENERGY BILLING RATE.
7835.0200	SCOPE AND PURPOSE. FILING REQUIREMENTS	7835.3400	SIMULTANEOUS PURCHASE AND SALE BILLING RATE.
7835.0300	FILING DATES.	7835.3500	TIME-OF-DAY PURCHASE RATES.
7835.0400	FILING OPTION.	7835.3600	CONTRACTS NEGOTIATED BY CUSTOMER.
7835.0500	SCHEDULE A.	7835.3700	AMOUNT OF CAPACITY PAYMENTS; CONSIDERATIONS.
7835.0600	SCHEDULE B.	7835.3800	FULL AVOIDED ENERGY COSTS.
7835.0700	SCHEDULE C.	7835.3900	QUALIFYING FACILITIES OF GREATER THAN 100 KILOWATTS.
7835.0800	SCHEDULE D.	7835.4000	UTILITY TREATMENT OF COSTS. WHEELING AND EXCHANGE AGREEMENTS WHEN REQUIRED.
7835.0900	SCHEDULE E.	7835.4200	INTER-UTILITY PAYMENT; WHEELING.
7835.1000	SCHEDULE F.	7835.4300	INTERUTILITY PAYMENT; ENERGY AND CAPACITY.
7835.1100	SCHEDULE G; SPECIAL RULE FOR NONGENERATING UTILITIES.	7835.4400	PAYMENT TO QUALIFYING FACILITY. DISPUTES
7835.1200	AVAILABILITY OF FILINGS. REPORTING REQUIREMENTS	7835.4500	COMMISSIONER'S DETERMINATION. NOTIFICATION TO CUSTOMERS
7835.1300	GENERAL REQUIREMENTS.	7835.4600	CONTENTS OF WRITTEN NOTICE.
7835.1400	NET ENERGY BILLED QUALIFYING FACILITIES.	7835.4700	AVAILABILITY OF INFORMATION. INTERCONNECTION GUIDELINES
7835.1500	OTHER QUALIFYING FACILITIES.	7835.4800	DENIAL OF INTERCONNECTION APPLICATION.
7835.1600	WHEELING.	7835.4900	NOTIFICATION OF TELEPHONE UTILITY AND CABLE TELEVISION FIRM.
7835.1700	MAJOR IMPACTS.	7835.5000	SEPARATE DISTRIBUTION TRANSFORMER.
7835.1800	EFFECTIVENESS. CONDITIONS OF SERVICE	7835.5100	LIMITING CAPACITY OF SINGLE-PHASE GENERATORS.
7835.1900	REQUIREMENT TO PURCHASE.	7835.5200	ISOLATION OF GENERATOR.
7835.2000	WRITTEN CONTRACT.	7835.5300	DISCONTINUING PARALLEL OPERATION.
7835.2100	COMPLIANCE WITH NATIONAL ELECTRICAL SAFETY CODE.	7835.5400	PERMITTING ENTRY.
7835.2200	RESPONSIBILITY FOR APPARATUS.	7835.5500	MAINTAINING POWER OUTPUT.
7835.2300	LIABILITY INSURANCE.	7835.5600	VARYING VOLTAGE LEVELS.
7835.2400	LEGAL STATUS NOT AFFECTED.	7835.5700	SAFETY.
7835.2500	PAYMENTS FOR INTERCONNECTION COSTS.	7835.5800	RIGHT OF APPEAL FOR EXCESSIVE TECHNICAL REQUIREMENTS.
7835.2600	TYPES OF POWER TO BE OFFERED.		
7835.2700	METERING.		
7835.2800	DISCONTINUING SALES DURING EMERGENCY.		
7835.2900	INTERCONNECTION PLAN. RATES		
7835.3000	RATES FOR SALES TO BE GOVERNED BY TARIFF.		
7835.3100	PETITION FOR SPECIFIC SALES RATES.		
7835.3200	STANDARD RATES FOR PURCHASES IN GENERAL.		

7835.0100 DEFINITIONS.

Subpart 1. **Applicability.** For purposes of parts 7835.0100 to 7835.5800, the terms in subparts 2 to 24 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. 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.

MINNESOTA RULES 1983

6177 COGENERATION AND SMALL POWER PRODUCTION 7835.0100

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.

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 shall not prevent the facility from being considered a qualifying facility for the purposes of parts 7835.0100 to 7835.5800 if it otherwise would satisfy 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 any public utility subject to rate regulation by the commission engaged in the generation, transmission, or distribution of electricity in Minnesota, and any cooperative electric association and municipally owned electric utility not subject to rate regulation by the commission which becomes interconnected with a qualifying facility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0200 SCOPE AND PURPOSE.

The purpose of parts 7835.0100 to 7835.5800 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 parts 7835.0100 to 7835.5800 excuses any utility from carrying out its responsibilities under these provisions of state and federal law. Parts 7835.0100 to 7835.5800 shall at all times be applied in accordance with their intent to give the maximum possible encouragement to cogeneration and small power production consistent with protection of the ratepayers and the public.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

FILING REQUIREMENTS

7835.0300 FILING DATES.

Within 60 days after the effective date of parts 7835.0100 to 7835.5800, on January 1, 1984, and every 12 months thereafter, each utility shall file with the commission, for its review and approval, a cogeneration and small power production tariff. The tariff for generating utilities shall contain schedules A through F, except that generating utilities with less than 500,000,000

MINNESOTA RULES 1983

6179 COGENERATION AND SMALL POWER PRODUCTION 7835.0600

kilowatt-hour sales in the calendar year preceeding the filing may substitute their retail rate schedules for schedules A and B. The tariff for nongenerating utilities shall contain schedules C, D, F, and G, 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 subd 1; 216B.164*

7835.0400 FILING OPTION.

If, after the initial filing, there is no 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 would otherwise be due, that there is no change in the tariff. This notification will serve as a substitute for the refiling of the tariff in that year.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0500 SCHEDULE A.

Schedule A shall 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 shall be averaged during system daily peak hours, system daily off-peak hours, and all hours in the season. The energy costs shall be increased by a factor equal to 50 percent of the line losses shown in schedule B. Schedule A shall describe in detail the method used to determine the on-peak and off-peak hours and seasonal periods and shall show the resulting on-peak and off-peak and seasonal hours selected.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0600 SCHEDULE B.

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

Subp. 2. Planned utility generating facility additions. Schedule B shall 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;
- 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 shall 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.

MINNESOTA RULES 1983

7835.0600 COGENERATION AND SMALL POWER PRODUCTION 6180

Subp. 4. **Percentage of line losses.** Schedule B shall 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 shall 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 shall 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, shall 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 shall be used.

B. The dollar amount resulting from the calculation set forth in item A shall 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 shall be the incremental cost of capital.

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

D. The number resulting from the calculation in item C shall 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 shall be multiplied by 1.15 to recognize a reserve margin.

F. The figure determined from the calculation of item E shall 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 shall be determined using the procedure of item B.

G. The figure determined from the calculation of item F shall 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, shall 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 shall 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.

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 shall 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 shall 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, shall 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 shall be the incremental cost of capital.

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

MINNESOTA RULES 1983

6181 COGENERATION AND SMALL POWER PRODUCTION 7835.1200

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 shall be deemed to have no avoidable capacity costs.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0700 SCHEDULE C.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0800 SCHEDULE D.

Schedule D shall 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 shall not be more restrictive than the interconnection guidelines listed in parts 7835.4800 to 7835.5800. The utility may include in schedule D suggested types of equipment to perform the specified functions. No standard or procedure shall be established to discourage cogeneration or small power production.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.0900 SCHEDULE E.

Schedule E shall 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 subd 1; 216B.164*

7835.1000 SCHEDULE F.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.1100 SCHEDULE G; SPECIAL RULE FOR NONGENERATING UTILITIES.

Schedule G shall list the rates at which a nongenerating utility purchases energy and capacity. If the nongenerating utility has more than one wholesale supplier, schedule G shall 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 shall be obtained from that supplier from which purchases may first be avoided.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.1200 AVAILABILITY OF FILINGS.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

REPORTING REQUIREMENTS**7835.1300 GENERAL REQUIREMENTS.**

Each utility which is interconnected with a qualifying facility shall provide the commission with the following information on or before November 1, 1983, on January 1, 1986, and every two years thereafter, and in such form as the commission may require.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.1400 NET ENERGY BILLED QUALIFYING FACILITIES.

For qualifying facilities under net energy billing, the utility shall 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 subd 1; 216B.164*

7835.1500 OTHER QUALIFYING FACILITIES.

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

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 subd 1; 216B.164*

7835.1600 WHEELING.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 subd 1; 216B.164*

7835.1800 EFFECTIVENESS.

The utility may provide a statement of the effectiveness of Minnesota Statutes, section 216B.164 and parts 7835.0100 to 7835.5800 in encouraging cogeneration and small power production, as observed by the utility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

CONDITIONS OF SERVICE**7835.1900 REQUIREMENT TO PURCHASE.**

The utility shall purchase energy and capacity from any qualifying facility which offers to sell energy to the utility and agrees to the conditions set forth in parts 7835.0100 to 7835.5800.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

MINNESOTA RULES 1983

6183 COGENERATION AND SMALL POWER PRODUCTION 7835.2800

7835.2000 WRITTEN CONTRACT.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.2100 COMPLIANCE WITH NATIONAL ELECTRICAL SAFETY CODE.

The interconnection between the qualifying facility and the utility shall 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 subd 1; 216B.164*

7835.2200 RESPONSIBILITY FOR APPARATUS.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 subd 1; 216B.164*

7835.2400 LEGAL STATUS NOT AFFECTED.

Nothing in parts 7835.0100 to 7835.5800 affects the responsibility, liability, or legal rights of any party under applicable law or statutes. No party shall 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 subd 1; 216B.164*

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 subd 1; 216B.164*

7835.2600 TYPES OF POWER TO BE OFFERED.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.2700 METERING.

The utility shall 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 shall pay for the requisite metering as an interconnection cost.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 subd 1; 216B.164*

7835.2900 COGENERATION AND SMALL POWER PRODUCTION 6184**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 shall include no more than:

- A. technical specifications of equipment;
- B. proposed date of interconnection; and
- C. projection of net output or consumption by the qualifying facility when available.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 shall 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 subd 1; 216B.164*

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 subd 1; 216B.164*

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 shall make available three types of standard rates, described in parts 7835.3300, 7835.3400, and 7835.3500. The qualifying facility shall choose interconnection under one of these rates, and shall specify its choice in the written contract required in part 7835.2000. Any net credit to the qualifying facility shall, 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 shall 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 subd 1; 216B.164*

7835.3300 NET ENERGY BILLING RATE.

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

Subp. 2. Method of billing. The utility shall 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 shall compensate the qualifying facility for the excess energy under either item A or B.

A. For a qualifying facility with capacity of 20 kilowatts or less, compensation shall be at the energy rate of the rate schedule applicable to sales to the qualifying facility. If the rate schedule consists of more than one block,

MINNESOTA RULES 1983

6185 COGENERATION AND SMALL POWER PRODUCTION 7835.3500

the lowest per kilowatt-hour rate shall apply. The compensation shall reflect changes to the energy rate due to the operation of the utility's fuel adjustment clause.

B. For a qualifying facility with capacity of more than 20 kilowatts but not greater than 40 kilowatts, compensation shall be as specified under part 7835.3400, subpart 3.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 40 kilowatts or less which choose not to offer electric power for sale on a time-of-day basis.

Subp. 2. **Method of billing.** The qualifying facility shall 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 shall 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 shall be deemed to be made available to the utility. Compensation to the qualifying facility shall be the sum of items A and B.

A. The energy component shall 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 shall 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 shall be the energy rate shown on schedule G;

B. If the qualifying facility provides firm power to the utility, the capacity component shall 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 shall 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 shall be the capacity cost per kilowatt shown on schedule G, 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 shall be included in the compensation paid to the qualifying facility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.3500 TIME-OF-DAY PURCHASE RATES.

Subpart 1. **Applicability.** Time-of-day rates are required for qualifying facilities with capacity greater than 40 kilowatts and less than or equal to 100 kilowatts, and they are optional for qualifying facilities with capacity less than or equal to 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 shall 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 shall purchase all energy and capacity which is made available to it by the qualifying facility. Compensation to the qualifying facility shall be the sum of items A and B.

7835.3500 COGENERATION AND SMALL POWER PRODUCTION 6186

A. The energy component shall 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 shall 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 shall be the energy rate shown on schedule G.

B. If the qualifying facility provides firm power to the utility, the capacity component shall be the utility's net annual avoided capacity cost per 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 shall 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 shall be the capacity cost per kilowatt shown on schedule G, divided by the number of on-peak hours in the billing period. The capacity component shall apply only to deliveries during on-peak hours. If the qualifying facility does not provide firm power to the utility, no capacity component shall be included in the compensation paid to the qualifying facility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.3600 CONTRACTS NEGOTIATED BY CUSTOMER.

Except as provided in part 7835.3900, a qualifying facility with capacity greater than 100 kilowatts shall 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 subd 1; 216B.164*

7835.3700 AMOUNT OF CAPACITY PAYMENTS; CONSIDERATIONS.

The qualifying facility shall be entitled to the full avoided capacity costs of the utility. The amount of capacity payments shall 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 subd 1; 216B.164*

7835.3800 FULL AVOIDED ENERGY COSTS.

The qualifying facility shall be entitled to the full avoided energy costs of the utility. The costs shall be adjusted as appropriate to reflect line losses.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

MINNESOTA RULES 1983

6187 COGENERATION AND SMALL POWER PRODUCTION 7835.4500

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 subd 1; 216B.164*

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 shall be considered an energy cost in calculating an electric utility's fuel adjustment clause.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

WHEELING AND EXCHANGE AGREEMENTS

7835.4100 WHEN REQUIRED.

For all qualifying facilities with capacity of 30 kilowatts or greater, the utility shall, at the qualifying facility's request or with its consent, 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. The provisions in 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 subd 1; 216B.164*

7835.4200 INTER-UTILITY PAYMENT; WHEELING.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.4300 INTERUTILITY PAYMENT; ENERGY AND CAPACITY.

Within 30 days of receipt, the utility ultimately receiving the qualifying facility's output shall 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 subd 1; 216B.164*

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 shall 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 subd 1; 216B.164*

DISPUTES

7835.4500 COMMISSIONER'S 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 shall be on the utility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

MINNESOTA RULES 1983

7835.4600 COGENERATION AND SMALL POWER PRODUCTION 6188

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 shall 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 shall be in language and form approved by the commission.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.4700 AVAILABILITY OF INFORMATION.

Each utility shall publish information that shall be available to all interested persons free of charge upon request. Such information shall 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 subd 1; 216B.164*

INTERCONNECTION GUIDELINES

7835.4800 DENIAL OF INTERCONNECTION APPLICATION.

Except as hereinafter provided, a utility shall 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 shall withhold approval only for failure to comply with applicable utility rules not prohibited by chapter 7830, or governmental rules or laws. The utility shall be permitted to include in its contract reasonable technical connection and operating specifications for the qualifying facility.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.4900 NOTIFICATION OF TELEPHONE UTILITY AND CABLE TELEVISION FIRM.

The electric utility shall notify the appropriate telephone utility and cable television firm when a qualifying facility is to be interconnected with its system. This notification shall be as early as practicable to permit coordinated analysis and testing before interconnection, if considered necessary.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 subd 1; 216B.164*

MINNESOTA RULES 1983

6189 COGENERATION AND SMALL POWER PRODUCTION 7835.5800

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 subd 1; 216B.164*

7835.5200 ISOLATION OF GENERATOR.

Each qualifying facility shall 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 subd 1; 216B.164*

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 subd 1; 216B.164*

7835.5400 PERMITTING ENTRY.

The qualifying facility shall 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.

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

7835.5500 MAINTAINING POWER OUTPUT.

The power output of the qualifying facility shall 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 subd 1; 216B.164*

7835.5600 VARYING VOLTAGE LEVELS.

The qualifying facility shall 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 subd 1; 216B.164*

7835.5700 SAFETY.

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

Statutory Authority: *MS s 216A.05 subd 1; 216B.164*

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 subd 1; 216B.164*